

Towards dissemination, detection and combating misinformation on social media: a literature review

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Abstract

Purpose – Social media is becoming a hub of fake content, be it political news, product reviews, business promotion or any other sociocultural event. This study aims to provide a comprehensive review of the emerging literature to advance an understanding of misinformation on social media platforms, which is a growing concern these days.

Design/methodology/approach – The authors curate and synthesize the dispersed knowledge about misinformation on social media by conducting a systematic literature review based on the preferred reporting items for systematic reviews and meta-analyses framework. The search strategy resulted in 446 research articles, out of which 33 relevant articles were identified for this research.

Findings – Misinformation on social media spreads swiftly and may result in negative consequences. This review identifies 13 intrinsic predictors of the dissemination, 11 detection approaches and 10 ways to combat misinformation on social media.

Originality/value – The study adds to the present knowledge of spread and detection of misinformation on social media. The results of this study will be beneficial for researchers and practitioners and help them in mitigating the harmful consequences of the spread of misinformation.

Keywords Information technology, Communication, Literature review, Social media

Paper type Literature review

1. Introduction

Social media has become a quick and effortless tool to circulate news and the latest trends (Andersson and Wikstrom, 2017). The users of social media often witness a virality of content due to massive information sharing on these platforms (Lashgari *et al.*, 2018). These platforms offer a fertile ground for the diffusion of fake news because of limited barriers to creation and dissemination of information. As a result, a significant volume of unauthenticated and misleading content propagates on social media platforms for financial and political gains (Duffy *et al.*, 2020). The literature shows that false information spreads faster than verified information (Vosoughi *et al.*, 2018; Wang *et al.*, 2021). The widespread dissemination of misinformation and fake news can harm businesses, individuals and society (Zhang and Li, 2019). It has been found that businesses spent \$2.6bn in a year on misinformative news sites [1]. Marketers falsely believe that agencies and partners in the business to business (B2B) supply chain have done all the necessary due diligence so as to inhibit any false information. However, social media algorithms boost misinformation, thus, hindering business's capacity to connect with their clients

because “facts and fiction” may get linked frequently (Lin *et al.*, 2020). The spread of misinformation can not only erode trust but can also divide people, polarize their opinions and promote violent extremism and hate speech (Gupta *et al.*, 2022; Monsees, 2020). Thus, it is vital to comprehend how fake news spreads, create data mining algorithms for efficient and reliable detection of communities through which fake news spreads and intervene to reduce the harmful consequences (Das *et al.*, 2022; Fard and Verma, 2022; Gupta and Deodhar, 2021; Gupta and Kumar, 2016). Early detection of misinformation is critical to limiting its impact and minimizing the damage caused by such misleading information.

There are studies that comprehensively review social media usage for business, industry and entrepreneurship (Alves *et al.*, 2016; Cartwright *et al.*, 2021; Olanrewaju *et al.*, 2020). However, these studies do not consider the misinformation related aspects of social media and how these aspects affect businesses. Moreover, there are several studies on social media misinformation, but they explicitly focus on health context while neglecting a broader perspective on business and industry (Fard and Verma, 2022; Ghai *et al.*, 2021; Huang and Wang, 2020; Li *et al.*, 2022; Schuetz *et al.*, 2021; Talwar *et al.*, 2019, 2020). In addition, a comprehensive knowledge of reasons to disseminate misinformation and techniques to detect and

The current issue and full text archive of this journal is available on Emerald Insight at: <https://www.emerald.com/insight/0885-8624.htm>



Journal of Business & Industrial Marketing
© Emerald Publishing Limited [ISSN 0885-8624]
[DOI 10.1108/JBIM-02-2022-0066]

Received 1 February 2022
Revised 29 June 2022
6 September 2022
18 October 2022
Accepted 20 October 2022

combat misinformation is missing. The present study identified this research gap and followed a multi-disciplinary approach to conduct a systematic literature review (SLR). To the best of our knowledge, this is the first review paper exhibiting an understanding of detection, propagation and countermeasures for misinformation. In light of this, we intend to follow an interdisciplinary approach to compile the literature on misinformation on social media. This SLR attempts to answer the following research questions:

Research questions

- RQ1* What is the current state of research on misinformation on social media?
- RQ1.1* What number of academic studies related to misinformation on social media have been published in Chartered Association of Business Schools (CABS)-ranked journals in the last decade?
- RQ1.2* Which countries and what contexts prioritize research on misinformation on social media?
- RQ2* What methods have been used in research related to misinformation on social media?
- RQ2.1* What research methods and sampling techniques have been used in misinformation on social media studies?
- RQ2.2* What sample size and data analysis techniques have been used in research on misinformation on social media?
- RQ2* How to intervene in dissemination, detection and combating misinformation on social media?
- RQ3.1* What are the factors affecting misinformation dissemination and detection?
- RQ3.2* What are the ways to combat misinformation on social media?

Through this review, we make the following contributions: Firstly, this is one of the earliest attempts towards a systematic review covering all CABS-ranked Scopus and Web of Science listed journals on misinformation on social media. Secondly, it makes theoretical contributions to the existing body of knowledge, identifies research gaps and provides direction for future research in the field of misinformation on social media. Thirdly, it provides a comprehensive list of strategies to detect and combat misinformation. Therefore, this review will guide the scientific community as well as practitioners to understand and control the spread of misinformation on social media.

This paper is organized as follows: Section 2 discusses the theoretical background related to misinformation on social media. Section 3 elaborates on the methodology used to conduct this SLR. Section 4 provides a detailed overview of the studies and key findings. Section 5 discusses the contributions, implications, limitations and future research directions. Finally, in Section 6, the paper ends with a conclusion.

2. Misinformation and social media

Social media has gained tremendous attention of people of various age groups and is widely used for real-time information dissemination. The users of social media are free to spread ideas, opinions and news by liking, tagging, sharing and retweeting. As social media users are exposed to unverified information, which is difficult to authenticate (Apuke and Omar, 2021), there is a growing concern regarding the proliferation of the spread of misinformation on social media. It may take many forms, including deceptive text, photos, videos and other media (Ghai *et al.*, 2021). Logical terminology such as “an expert has claimed”, “based on an experiment” and “following this logic” persuades people to accept biased or incorrect opinions (Goering *et al.*, 2011).

The term “misinformation” is interchangeably used with other terms like disinformation, fake news, malinformation and rumour, but these terms are not the same. There are thin-line differences among all these terms, with many claiming that the word “misinformation” is a “catch-all term” with many definitions (Cummings and Kong, 2019; Meel and Vishwakarma, 2020). Misinformation is an umbrella term that includes incorrect, unverified and unauthorized information. The fundamental difference between misinformation and disinformation is whether the information is intentionally designed to deceive or not. Disinformation refers to the purposeful creation or dissemination of information, while misinformation refers to the unintentional creation or diffusion of information (Qureshi *et al.*, 2022; Fard and Verma, 2022). A review of existing literature in the context of misinformation on social media shows that different types of unauthentic or unverified information are the by-products of the digital communication and have different meanings (Table 1).

Social media aids in resource mobilization for entrepreneurs, driving consumer engagement for marketers, increasing followers for celebrities and gaining public support for politicians (Drummond *et al.*, 2018, 2020; Gupta *et al.*, 2016; Yarchi and Samuel-Azran, 2018). Therefore, fake news originating from social media can have a detrimental impact on the reputation of celebrities, politicians, entrepreneurs, brands, marketers, consumers and various other real-world entities (Kaur and Kumar, 2020, 2021). With the rise in the number of social media users, fake profiles and business accounts have also increased. It has become challenging for the consumers to identify fake sellers and fake products online (Oh, 2021). Consumers tend to lose faith in a brand even if they get exposed to unauthentic negative news about that brand (Chen and Cheng, 2019). In addition, in B2B context, social media misinformation can influence a business’s sales processes and client satisfaction (Nunan *et al.*, 2018). Despite insightful and well-researched news publications, there are social media platforms that peddle misinformation. The brands inadvertently advertising on these bad faith sources can greatly damage their reputation (Lin *et al.*, 2020). Once the reputation is lost, it becomes challenging for the brands to regain it. Prior literature also suggests that the use of misinformation to gain a strategic advantage will widen as social media technologies become increasingly sophisticated (Li *et al.*, 2018). For instance, several firms indulge in writing “fake online reviews” so as to achieve better financial statistics (Hu *et al.*, 2012).

Table 1 Overview of terminology used for unauthentic and unverified information

S. no.	Terms	Description	Supporting studies
1	Misinformation	It is false information shared by someone who is unaware that the information is incorrect or misleading	Fard and Verma (2022), Meel and Vishwakarma (2020), Cummings and Kong (2019)
2	Disinformation	It is the wilful dissemination of fraudulent or inaccurate information with the intent to mislead or deceive	Meel and Vishwakarma (2020), Cummings and Kong (2019)
3	Mal-information	It is a piece of genuine information shared with the intention of causing harm	Wardle and Derakhshan (2018)
4	Hoax	The use of a fabricated story to disguise the truth, notably through a joke, prank, comedy or deliberate deception to deceive audience	Collins <i>et al.</i> (2021), Meel and Vishwakarma (2020)
5	Spam	It is unsolicited messages sent to a person without their permission	Meel and Vishwakarma (2020)
6	Rumour	Unverified information that is not necessarily wrong; could potentially turn out to be accurate	Fard and Verma (2022), Meel and Vishwakarma (2020), Cummings and Kong (2019)
7	Clickbait	The purposeful use of deceptive headlines to entice users to visit a specific webpage	Collins <i>et al.</i> (2021), Meel and Vishwakarma (2020)
8	Fake news	Articles in the news that are knowingly and verifiably untrue, inauthentic and mislead readers	Fard and Verma (2022), Collins <i>et al.</i> (2021), Molina <i>et al.</i> (2021), Meel and Vishwakarma (2020), Cummings and Kong (2019)
9	Trolling	Focus on encouraging (provoking) controversy and conflict	Meel and Vishwakarma (2020), Posetti (2018)
10	Gossip	It is a group-level phenomenon that solidifies groupings, evaluates people's personal lives and manipulates information for fun	Fard and Verma (2022), Collins <i>et al.</i> (2021)
11	Legend	It is purposely disseminated erroneous information regarding actual local happenings to entertain the public	Fard and Verma (2022)
12	Propaganda	It is biased factual information that hides some information to favour a specific side or viewpoint while influencing public opinion	Fard and Verma (2022), Collins <i>et al.</i> (2021), Molina <i>et al.</i> (2021), Meel and Vishwakarma (2020), Cummings and Kong (2019), Tandoc <i>et al.</i> (2018)
13	Conspiracy theory	Unconfirmed information circulating around the events or incidents that originated for hostile reasons by people working secretly	Fard and Verma (2022), Meel and Vishwakarma (2020)
14	Pseudoscience	It is a deviant doctrine which are mistakenly attributed to scientific methodology but lacks reliability	Fard and Verma (2022)
15	Satire	A fictitious story or exaggeration of the facts in which the host poses as an entertainer instead of a journalist raising awareness	Collins <i>et al.</i> (2021), Molina <i>et al.</i> (2021), Meel and Vishwakarma (2020), Tandoc <i>et al.</i> (2018)
16	Parody	A cooked-up story or non-factual information, often made for entertainment, though many people negligently believe in it	Collins <i>et al.</i> (2021), Molina <i>et al.</i> (2021), Meel and Vishwakarma (2020), Tandoc <i>et al.</i> (2018)
17	Name-theft	Stealing identities, be it a profile or website, to deceive the public and make them believe that the source of information is genuine	Collins <i>et al.</i> (2021)
18	Framing	An attempt to conceal the truth and create misconceptions	Collins <i>et al.</i> (2021), Wardle and Derakhshan (2018)

B2B companies would need to look to ethical leadership in this regards to manage how social media technologies are used, not just for their own advantage but also to consider the interests of society and the environment.

The results of a study by Kumar *et al.* (2021) show that after listening to fake news about the brand, consumers will not only switch to a different brand but also discourage their friends and family from using that brand. Thus, misinformation has the potential to change consumer opinion and adversely affect brand image. Although social media platforms are regulated to take proactive measures to combat the spread of fabricated content, it remains a daunting task to mitigate the harmful consequences of fake news on social media. Many social media platforms allow users to report fake news so that it can be examined, flagged or even removed after a professional check (Collins *et al.*, 2021). Despite recent advancements, spotting misinformation and fake news remains difficult due to its complexity, diversity, multimodality and fact-checking or annotation expenses (Lazer *et al.*, 2018).

3. Research method

An SLR is a comprehensive search of relevant literature from the past while methodically disseminating the research advances emerging in that field (Tranfield *et al.*, 2003; Zamani *et al.*, 2022). It helps provide a better understanding of the research field and helps in identifying the research gaps where a detailed study is required (Kalia *et al.*, 2022; Paul and Criado, 2020; Webster and Watson, 2002). With the objective to gain insights and address the issue of misinformation on social media, we conducted SLR using preferred reporting items for systematic reviews and meta-analyses (PRISMA) framework. This framework includes a checklist of 27-items (Liberati *et al.*, 2009; Moher *et al.*, 2009) and a four-phase flow diagram (identification, screening, eligibility and included). The checklist is modified from time to time to make reporting easy and facilitate implementation (Page *et al.*, 2021). The literature review was conducted following the suggestions of Callahan (2014), Fernandez (2019), Paul and Criado (2020), Singh *et al.* (2022) and Tranfield *et al.* (2003). We also used our

knowledge, judgment and experience to filter the articles required for the review (Paul and Criado, 2020). Relevant literature was extracted using the advanced search option on Scopus and the Web of Science databases with year of publication ranging between 2013 and 2022. A total of 775 articles were retrieved using the string [TI = (Misinformation) OR TI = (fake news) OR TI = (disinformation) AND TI = (social media)]. There were 329 review papers, book chapters and conference proceedings papers that were discarded as we focused only on primary studies. Inclusion and exclusion criteria were set to perform screening on the identified papers. Out of 446 research articles, 51 were published before 2013, and 9 were in language other than English. Furthermore, the exclusion of articles published in non-CABS-ranked journals and nine duplicate research articles resulted in 67 articles published in CABS-ranked journals. These articles were screened based on titles and abstracts. Eighteen articles did not explicitly focus on the research topic. Finally, 49 full-text articles were analysed in detail out of which sixteen papers were beyond the scope of the study. A final selection of 33 research articles was made to conduct this study and was extensively reviewed for further analysis. The detailed literature selection process is shown in Figure 1.

The details of the 33 selected research articles, including the name of the author(s), year of publication, journal name, country from where data was collected and findings, are shown in Table 2. All these factors, along with few others are comprehensively analysed in the next section to address the research questions, identify research gaps, examine methodological issues (if any) and provide a roadmap for future research.

4. Synthesis of results

This section presents the results from the analysis of the 33 primary studies based on the previously indicated research questions. The results reflect the current status of research on

misinformation on social media from 2013 to 2022. There are 5 single-author studies, 10 dual-author studies and 18 studies with more than 2 authors. The articles are published in 19 journals in developed and developing countries using various research methods.

4.1 What is the current state of research on misinformation on social media?

To understand the current state of research on misinformation on social media, two specific research questions need to be addressed. The first is regarding academic studies published in the given time frame, and the second is regarding the context and country where the research was conducted. The following subsections answer these research questions.

4.1.1 What number of academic studies related to misinformation on social media have been published in Chartered Association of Business Schools-ranked journals in the last decade?

Researchers have been working on misinformation context for decades, but during the COVID pandemic, its intensity increased a lot. COVID-19 not only proved to be a global pandemic but also an infodemic. Both academic and industry primary focus on detecting and controlling the diffusion of misinformation as early as possible. As a result, the research on misinformation and fake news on social media increased drastically post-COVID. These findings are clearly demonstrated in this review. Maximum articles were published in 2021 ($N = 14$), followed by 2022 ($N = 6$) and 2020 ($N = 6$). Five articles were published in 2019 and one article each in 2018 and 2017. There were articles published even before 2017, but they do not meet the inclusion criteria. Hence, none of the articles on misinformation in social media was published in the CABS-ranked journal prior to 2017. The review covered research articles till May 2022. It is expected that the total number of research articles published by the end of 2022 will cross the number of publications in 2021. Figure 2 shows the publication trend between 2013 and 2022.

Figure 1 Literature selection using PRISMA guidelines

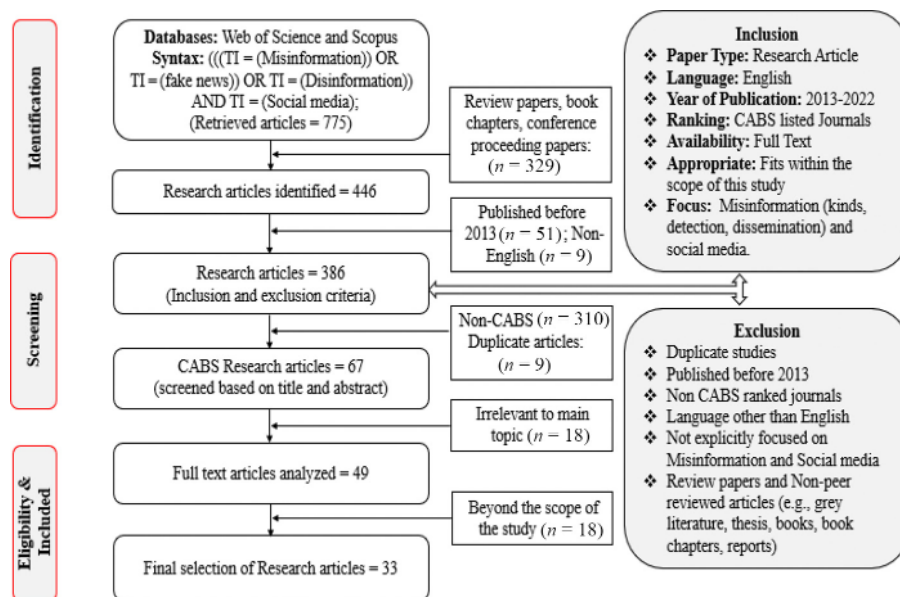


Table 2 Summary of reviewed articles

Sr. no.	Author (s)	Journal	Country	Keywords	Findings
1	Li et al. (2022)	Information Processing and Management	China	Health information behaviour, health misinformation, social media	Health misinformation on WeChat is a severe concern. Grammatical features (problematic punctuation, typos and grammatical errors) and peripheral characteristics (Language/tone issue, mismatch content and lack of source information) are less significant markers of health misinformation than semantic ones (overstatements and incomplete data)
2	Sampat and Raj (2022)	Aslib Journal of Information Management	India	Fake news, uses and gratification theory, big five personality trait theory, stimulus-organism response, WhatsApp, Facebook	WhatsApp is quicker in sharing information compared to Facebook. Agreeableness and conscientiousness personality traits lead to new genuineness, whereas extraversion, openness and neuroticism promote instance sharing. Gratification to disseminate misinformation includes social interaction, passing time, information seeking and sharing
3	Soetekouw and Angelopoulos (2022)	Information Systems Frontiers	–	Fake news, misinformation, fake news detection, social media, scepticism	Training protocol positively and significantly influences the ability to detect fake news. Age and education level makes it easier to spot fake news, but scepticism does not make a difference
4	Steinfeld (2022)	Online Information Review	Israel	Fake news, disinformation, misinformation, engagement, social media, political activism, digital activism	High education and high self-assessment are related to identifying misinformation and inducing the intention to combat it, whereas low education is linked to sharing misinformation
5	Thero and Vincent (2022)	Information Processing and Management	–	Misinformation, content moderation, algorithmic transparency, Facebook, fact checking, social media analysis	The repeat offender policy of Facebook tends to reduce the spread of misinformation. The finding shows that this policy applies only to Facebook pages, not accounts. Facebook groups remain unaffected. It does not affect Facebook groups, with no decrease in engagement per post
6	Znec et al. (2022)	Journal of Economic Perspectives	European countries	Fake news, misinformation, information quality, big-five personality traits, fake news detection, case study	IQ-based systems may successfully detect fake news. Domain experts, subject experts and a person's conscientiousness all make it easier to spot fake news and tell the difference between counterfeit and genuine comments
7	Arayankalam and Krishnan (2021)	Technological Forecasting and Social Change	Cross-countries	Foreign disinformation, domestic media fractionalization, offline violence, Government's control of cyberspace, social media, agenda building	Foreign misinformation spread via social media enhances social media-induced offline violence in a nation by increasing local online media fragmentation. In addition, the relationships between foreign misinformation via social media, social media-induced offline violence and domestic online media fragmentation in a nation depend on the government's involvement in governing cyberspace

(continued)

Table 2

Sr. no.	Author (s)	Journal	Country	Keywords	Findings
8	Barakat <i>et al.</i> (2021)	Online Information Review	Lebanon	Fake news, trust, social media, information identification behaviour	Identification of fake news depends upon trust and verification behaviour. The verification behaviour improves the identification of fake news, while the trust in information reduces the need for identification. Communication and social-emotional abilities necessary for social media usage also enhance verification behaviour and fake news detection
9	Choudrie <i>et al.</i> (2021)	Computers in Human Behaviour	–	AI, machine learning techniques, COVID-19 pandemic, older adult, interview, information-misinformation	Humans and machines think and work differently. Machine learning methods can differentiate between COVID-19 preventative and treatment information from disinformation, while humans cannot. Older persons prefer conventional media to digital media for COVID-19 information seeking and are resilient to internet deception
10	Di Domenico <i>et al.</i> (2021)	Psychology and Marketing	–	Deceptive intent, fake news, free speech, Information primacy, misinformation, social media, trust, willingness to share	When misinformation is presented in a source-primacy manner, consumers are less inclined to spread it because they have less faith in the message and are more suspicious of deception. It happens only when the person who spreads the false news has a poor interpersonal relationship with the recipient
11	Gaozhao (2021)	Government Information Quarterly	USA	Fake news, fact-checking, experiment, critical thinking	Flags strongly influence people's opinions that participants have complete faith in them, even if the flag assessments are incorrect. Furthermore, expert fact-checker flag ratings and crowdsourcing are equally significant in shaping trust
12	Gimpel <i>et al.</i> (2021)	Journal of Management Information Systems	Germany	Fake news, social norms, Online reporting behaviour, social media, Injunctive norms, Descriptive norms	Social norms are an effective socio-technical countermeasure against false news. People tend to highly report fake news if most of the public already reports it as fake
13	Hajli <i>et al.</i> (2021)	British Journal of Management	–	AI, social bots, actor–network theory, machine learning, deep learning, infodemic, fake news disinformation	Social bots have effectively expedited the transmission of both genuine and false news via social media; in fact, incorrect information has spread more rapidly since it is more probable that robots are behind it. The dissemination of disinformation boosts the activity of social bots designed to distribute false information and may damage a company's reputation
14	Horner <i>et al.</i> (2021)	Journal of Management Information Systems	USA	Fake news, false headlines, online misinformation, online emotions, social media, information sharing, echo chambers	Beliefs and emotions associated with misleading headlines correlate with reaction behaviours such as liking, sharing and commenting – the greater the intensity of the emotional reaction, the more robust the behavioural response intentions

(continued)

Table 2

Sr. no.	Author (s)	Journal	Country	Keywords	Findings
15	King and Wang (2021)	International Journal of Information Management	–	Misinformation, information virality, information veracity, Twitter, hurricane	Environment-related tweets are less likely to become viral than religious news. Similarly, actual social news tweets' virality is higher than inaccurate social news tweets. Furthermore, suspicious information and unique and harmful tweets go viral quickly on social media
16	Pundir <i>et al.</i> (2021)	Management Research Review	India	Social networking, theory of planned behaviour, general management, perceived behavioural control, fake news, FoMO, sadism	Awareness and knowledge, perceived behavioural control, attitudes towards news verification and FoMO are important predictors of intention to check news before sharing
17	Schuetz <i>et al.</i> (2021)	European Journal of Information Systems	USA	Fake news, social media, fact checking, awareness, active use, passive use, homophily, Covid-19, echo chamber	Fact-checking plays a crucial role in the fight against COVID-19 misinformation and assists in identifying appropriate remedies. It assists users in identifying reliable information on how to protect themselves from COVID-19, as opposed to erroneous and frequently damaging statements on social media
18	Yang and Tian (2021)	Computers in Human Behaviour	USA	Third-person perception, fake news, social media, COVID-19	Engagement with social media increases third-person perspective, indicating that social media's potential damage is not confined to a rumour mill that promotes false information but may also extend to an echo chamber that fosters a minor conviction
19	Zhou <i>et al.</i> (2021a)	Information Processing and Management	China	Misinformation dissemination, linguistic characteristics, information richness, social media	On social media networks, persuasive and ambiguous words are more likely to be shared. It develops trust to repost the content
20	Zhou <i>et al.</i> (2021b)	Information Processing and Management	China	Misinformation dissemination during health emergencies, health caution and advice misinformation, health help-seeking misinformation, emotional support, misinformation ambiguity, misinformation richness	Health advice and caution falsehoods written with a little more ambiguity are more likely to spread on social media. Emotional support further increases confidence in the misinformation and encourages the dissemination of health misinformation
21	Huang and Wang (2020)	Information, Communication and Society	–	Narrative persuasion, misinformation correction, attitude change, transportation, message credibility	Narratives may not produce the desired persuasive effects immediately following exposure to misinformation, and their results depend on their delivery. Due to lower impressions of trustworthiness, the narrative was less compelling than the non-narrative corrective when prompted by social correction; however, it may have use when advised by algorithms due to improved conveyance
22	Islam <i>et al.</i> (2020)	Technological Forecasting and Social Change	Bangladesh	COVID-19, pandemic, social media, fatigue, fake news, misinformation	People who are motivated by self-promotion and amusement, as well as those with poor self-control, are more likely to distribute unsubstantiated material

(continued)

Table 2

Sr. no.	Author (s)	Journal	Country	Keywords	Findings
23	Lee (2020)	Behaviour and Information Technology	USA	Misinformation, Web add-on correction, narrative correction, motivations for using social media, illusory truth effect, mental model	Narrative correction only works for those who primarily use social media for social interaction. The results indicated that narrative correction reduces the credibility of misinformation among social media users with high levels of social interaction. The Web add-on correction, which marked false information as false, helped reduce the spread of misinformation
24	Talwar et al. (2020)	Journal of Retailing and Consumer Services	Developing countries	Fake News, Fake-news sharing behaviour, Honeycomb framework, Mixed-method research, social media, Third- person effect	The study extends the use of the honeycomb framework and TPE theory beyond traditional media to understand how fake news spreads through social media platforms. The findings suggest that instantaneous news sharing to raise awareness is beneficial. However, validating content before sharing did not affect sharing fake news due to a shortage of time and religiosity
25	Vafeiadis et al. (2020)	Journal of Product and Brand Management	USA	Fake news, crisis response strategies, crisis management, social media, ELM, Information processing, brand image, reputation, consumer privacy	As a crisis response, addressing the source of fake news undermines the message's credibility more than denial. In addition, highly active individuals are more likely to centrally absorb knowledge and produce positive, supporting sentiments towards the affected non-profit brand. An attack reply message increased the credibility of negative rumours among uninvolved parties
26	Wang and Song (2020)	Internet Research	Non-western countries	Rumour, genetically modified organism, echo chamber, Chinese social media, comments	Out of 345 selected posts, 103 true rumours, 227 false rumours and 15 unclear rumours, there are three types of rumours. Accordingly, users' sentiments were categorized as supportive, hostile and ambiguous
27	Barfar (2019)	Computers in Human Behaviour	USA	Political disinformation, polarization, echo chamber, text analysis, social media, Facebook	Facebook users responded less analytically to political disinformation compared to factual information. However, responses to political misinformation were characterized by more wrath, hatred and intolerance
28	Chen and Cheng (2019)	Journal of Product and Brand Management	USA	Brand trust, social media, self-efficacy, persuasion knowledge, fake news	Self-efficacy and trust are the significant determinants of consumers' persuasive awareness of fake news on Facebook posts. Furthermore, Consumers' perceptions of the diagnostic of fake news and their subsequent brand trust are heavily influenced by persuasion knowledge
29	Colliander (2019)	Computers in Human Behaviour	USA	Fake news, online disinformation, conformity, self-concept, Disclaimers	People's attitudes regarding disinformation and their intentions to comment on and disseminate fake news are significantly affected by the actions of other users in the comment section of fake news articles

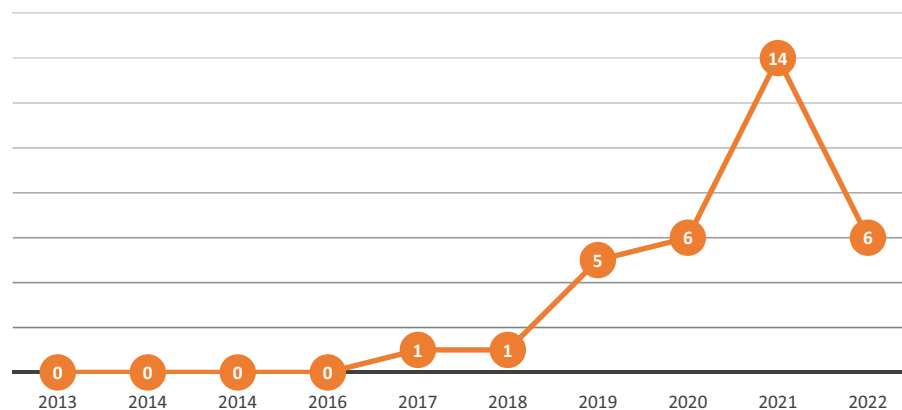
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Table 2

Sr. no.	Author (s)	Journal	Country	Keywords	Findings
30	Kim et al. (2019)	Journal of Management Information Systems	USA	Fake news, online misinformation, social media, combating fake news, online article rating, online source rating, online expert rating, online user rating, fact checking	Source ratings affected social media users' perceptions about articles, which further influenced content engagement in reading, liking, commenting and sharing behaviour. Low ratings indicate that the traditional perpetrators of disseminating fake news had more substantial consequences than high ratings
31	Talwar et al. (2019)	Journal of Retailing and Consumer Services	Pakistan	Cross-sectional study, FoMO, self-disclosure, social comparison, social media fatigue, trust	The sharing of fake news is positively connected with online trust, self-disclosure, FoMo and social media fatigue, whereas negatively with social comparison
32	Shin et al. (2018)	Computers in Human Behaviour	USA	Misinformation, rumour, social media, diffusion, Partisan, Election, Fake news	Political misinformation and false rumours were repeated and disseminated on social media with different storylines each time, whereas true rumours did not. Social media users increase the exposure of rumour content by sharing the links with their near and dear ones
33	Allcott and Gentzkow (2017)	Journal of Economic Perspectives	USA	[No keywords]	The typical user spends 66 min per day reading, watching or listening to election news, of which 25 min are spent alone on social media. Overall, 13.8% of election-related news is consumed via social media

Note: IQ = Intelligence quotient

Figure 2 Year-wise publication trend



Our analysis reveals that 19 journals published 33 research articles on misinformation and fake news in the context of social media (Table 3). The majority of research articles were published in *Computers in Human Behaviour* ($N = 5$), followed by *Information Processing and Management* ($N = 4$) and *Journal of Management Information Systems* ($N = 3$). Furthermore, *Journal of Economic Perspectives*, *Journal of Product and Brand Management*,

Journal of Retailing and Consumer Services, *Online Information Review and Technological Forecasting and Social Change* each have two publications. The remaining journals, namely, *Aslib Journal of Information Management*, *Behaviour and Information Technology*, *British Journal of Management*, *European Journal of Information Systems*, *Government Information Quarterly*, *Information Systems Frontiers*, *Information, Communication and Society*, *International*

Table 3 Distribution of studies across journals

S. no.	Name of journal	No. of published articles
1	Computers in Human Behaviour	5
2	Information Processing and Management	4
3	Journal of Management Information Systems	3
4	Technological Forecasting and Social Change	2
5	Online Information Review	2
6	Journal of Retailing and Consumer Services	2
7	Journal of Product and Brand Management	2
8	Journal of Economic Perspectives	2
9	Psychology and Marketing	1
10	Management Research Review	1
11	Internet Research	1
12	International Journal of Information Management	1
13	Information, Communication and Society	1
14	Information Systems Frontiers	1
15	Government Information Quarterly	1
16	European Journal of Information systems	1
17	British Journal of Management	1
18	Behaviour and Information Technology	1
19	Aslib Journal of Information Management	1

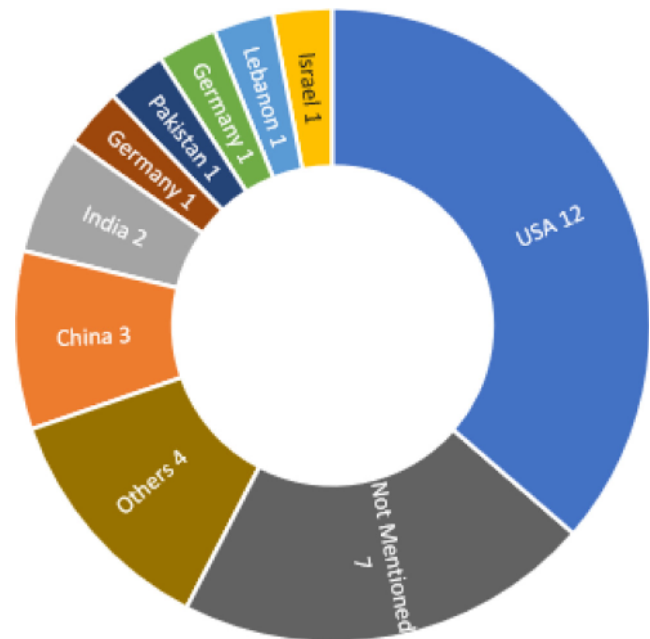
Journal of Information Management, Internet Research, Management Research Review and *Psychology and Marketing*, have one publication each.

4.1.2 Which countries and what contexts prioritize research on misinformation on social media?

Upon further evaluation of the review articles, it was found that the majority of studies were conducted in the USA ($N = 12$), followed by China ($N = 3$). All of the other developed and developing countries have one or two publications each. Developed countries include Germany, Israel and European countries, whereas developing countries include India, Pakistan, Bangladesh and Lebanon. There was one study focusing on non-Western countries and one cross-country study. Figure 3 depicts the studies conducted on misinformation across different countries.

Contextual setting includes the sector or domain across which the research was conducted. The majority of studies focused on sociocultural context ($N = 12$), followed by health misinformation ($N = 6$). After a detailed analysis of research papers, it was found that four papers were exclusively focused on COVID-related health misinformation. There were six papers about general misinformation without any sector-specific focus, five articles focused on political misinformation, three were consumer-focused and one paper was related to business. It is quite evident that there is a dearth of studies investigating the causes, symptoms and consequences of misinformation in the context of business and industries (especially B2B). We found only a couple of papers in the literature which tangentially discuss the impact of misinformation on business (Lin *et al.*, 2020; Zhang and Li, 2019). However, these papers have paved the way for investigating the role of misinformation on customer loyalty and ethical leadership, which, in turn, affect firm performance. Table 4 shows the details of the studies related to each category.

Figure 3 Distribution of misinformation studies across countries



4.2 What methods have been used in research related to misinformation on social media?

We evaluated each of the studies in terms of research method, sampling technique, sample size and data analysis technique used. Table 5 presents these details for each of the 33 studies.

4.2.1 What research methods and sampling techniques have been used in misinformation on social media studies?

The analysis of misinformation on social media research revealed that most studies focused on quantitative analysis

Table 4 Domain of misinformation studies

Political 5 Studies	Health 6 Studies	Socio-cultural 12 Studies	Consumers 3 Studies	Business 1 Study	Others 6 Studies
Steinfeld (2022), Horner et al. (2021), Barfar (2019), Shin et al. (2018), Allcott and Gentzkow (2017)	Li et al. (2022), Huang and Wang (2020); COVID focused Choudrie et al. (2021), Schuetz et al. (2021), Zhou et al. (2021b), Islam et al. (2020)	Sampat and Raj (2022), Thero and Vincent (2022), Zrnec et al. (2022), Arayankalam and Krishnan (2021), Gimpel et al. (2021); King and Wang (2021), Pundir et al. (2021), Yang and Tian (2021), Zhou et al. (2021a), Talwar et al. (2020), Wang and Song (2020), Talwar et al. (2019)	Gaozhao (2021), Vafeiadis et al. (2020), Chen and Cheng (2019)	Hajli et al. (2021)	Soetekouw and Angelopoulos (2022), Barakat et al. (2021), Di Domenico et al. (2021), Lee (2020), Colliander (2019), Kim et al. (2019)

($N = 27$), whereas only six studies used mixed-method analysis ($N = 6$), a combination of qualitative and quantitative analysis. However, there is no study which exclusively uses a qualitative approach, thus, indicating an apparent dearth of qualitative methodologies for the study of misinformation on social media. There were experimental and survey-based investigations. Most of the research articles used data from social media. Except for mixed-method research, there was not even a single exclusive qualitative study. Figure 4 shows the percentage of studies using quantitative and mixed-method analysis.

The analysis of sampling techniques reveals that the majority of studies used non-probability sampling for data collection ($N = 28$). Further, it is also found that out of non-probability sampling techniques, the convenience sampling method is widely used ($N = 13$), followed by purposive sampling ($N = 6$). There was one study which used a combination of two sampling techniques, namely, convenience and snowball and one study used non-random sampling. Five studies used random sampling, which is one kind of probability sampling technique. Remaining seven studies used social media data and are silent about sampling technique. Thus, the non-probability sampling technique is quite popular in studies related to misinformation on social media. Figure 5 shows the pictorial representation of sampling techniques used in the selected studies for review.

4.2.2 What sample size and data analysis techniques have been used in research on misinformation on social media?

The samples used in the studies include social media users, accounts, posts, tweets, rumours, news claims, essays and textual data. The smallest sample size was 17 political rumours, whereas the largest was 30,000 tweets. To analyse the samples, we created five categories of sample size. There were seven studies with a sample size of less than 250, nine studies with a sample size between 250 and 500, three studies with a sample size between 500 and 750, five studies with a sample size between 750 and 1,000 and nine studies with a sample size of more than 1,000 as shown in Figure 6.

Various techniques were used to analyse the data depending on research problems. In terms of data analysis methods, structural equation modelling (SEM) ($N = 9$) is the most commonly used method of data analysis in the field of misinformation on social

media. There were five studies on covariance-based (CB) SEM and four studies on partial-least square (PLS) SEM. The second most used technique for data analysis is regression analysis ($N = 7$) and parametric tests [t test and analysis of variance (ANOVA)] used in seven studies ($N = 7$). Text analytics and machine learning techniques have been also gaining popularity and six studies used this method for data analysis ($N = 6$). Non-parametric tests such as Mann–Whitney test, multivariate analysis of variance (MANOVA), multivariate analysis of covariance (MANCOVA) and K-means cluster analysis were used in two studies ($N = 2$). Furthermore, two studies used content analysis ($N = 2$). Other data analysis techniques used within these studies are time series analysis, analysis of covariance (ANCOVA), network analysis and econometric modelling. The bar graph entails the techniques used for data analysis (Figure 7).

4.3 How to intervene in dissemination, detection and combating misinformation on social media?

Misinformation is an expanding field of study in academics, business and industrial contexts. Misinformation and misleading news on social media are growing problems, especially considering the ease of access to such sources and the lack of awareness regarding their presence. Humans, machines or a combination of the two can create deceptive material in a variety of ways for entertainment and commercial benefits (Choudrie et al., 2021). This study explores the various factors affecting the detection and dissemination of misinformation and ways to combat it. An in-depth analysis of selected papers reveals that there are 15 studies on disseminating misinformation with different terminology, including diffusion, propagation, spread and share. Eight studies focus on identifying and detecting misinformation, and 13 are related to strategies and responses to control or combat misinformation. Table 6 exhibits the supporting studies pertaining to dissemination, detection and combating of misinformation and Table 7 summarizes the corresponding findings.

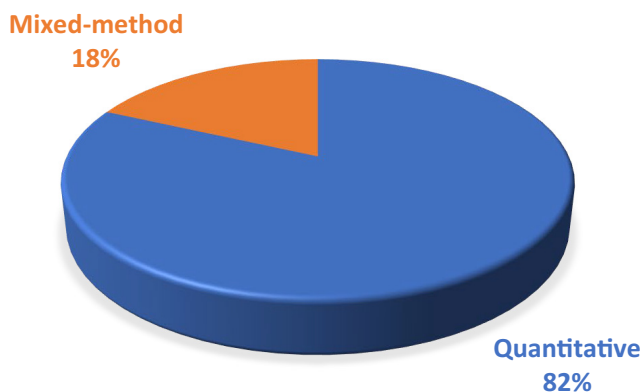
4.3.1 What are the factors affecting misinformation dissemination and detection?

Generation, consumption and dissemination of misinformation are serious concerns for society. Specifically, researchers have observed that amidst the crisis situations such as the

Table 5 Overview of research method, sample size, sampling and data analysis technique

S. No.	Research method and sampling technique	Sample size	Data analysis technique
1	Mixed method; Purposive	482 posts; 82 participants	Content analysis and chi-square test
2	Quantitative; convenience and snowball	221 social media users	PLS-SEM
3	Quantitative; Convenience	417 respondents	Correlation and independent samples <i>t</i> test
4	Quantitative; random	502 internet users	Regression and factor analysis
5	Quantitative; social media data	810 fb accounts and 83 fb pages	Time-series analysis
6	Quantitative; Convenience	1,123 participants	Mann–Whitney tests
7	Quantitative; Purposive	179 countries	PLS-SEM
8	Quantitative; random	211 social media users	CB-SEM
9	Mixed method; Non-random	143 social media claims; 20 old adults	Machine learning and thematic analysis
10	Quantitative; Random	Exp.1: 214 participants; Exp.2: 277 participants	One-way ANOVA
11	Quantitative; Purposive	717 participants	Two-way ANOVA and post hoc tests
12	Quantitative; Purposive	Exp.1: 320 participants; Exp.2: 157 participants	Logistic regression
13	Quantitative; social media data	30,000 tweets	Text mining, machine learning
14	Mixed method; Convenience	879 participants	MANOVA, MANCOVA, K-means cluster analysis
15	Quantitative; social media data	3,589 tweets	Text mining, machine learning and econometrics model
16	Quantitative; Convenience	400 respondents	PLS-SEM
17	Quantitative; Convenience	461 participants	Hierarchical regression analysis
18	Quantitative; Convenience	871 social media users	CB-SEM
19	Quantitative; social media data	9,631 posts	Regression analysis
20	Quantitative; social media data	12,101 textual data	Regression analysis
21	Quantitative; Convenience	235 participants	Two-way ANCOVA
22	Quantitative; Convenience	433 respondents	PLS-SEM and neural network techniques
23	Quantitative; Convenience	171 participants	One-way ANOVA
24	Mixed method; Purposive	58 essays and cross-sectional surveys with 471 and 374 WhatsApp users	CB-SEM
25	Quantitative; Convenience	468 participants	<i>t</i> Test and two-way ANOVA
26	Quantitative; social media data	345 posts	Network analysis and content analysis
27	Quantitative; social media data	2,100 political posts	Text analysis and multivariate analysis of variance
28	Quantitative; Convenience	468 (consumers)	CB-SEM
29	Quantitative; random	1,670 Facebook users	One-way ANOVA
30	Quantitative; Convenience	590 participants; 299 participants	Regression analysis
31	Mixed method; Convenience	1,022 WhatsApp users	CB-SEM
32	Mixed method; Purposive	17 political rumours	Text analysis based on time series
33	Quantitative; random	1,208 adults	Regression analysis

Figure 4 Research methods used for studying misinformation on social media



COVID-19 outbreak, there is an excessive spread of fake news (Talwar *et al.*, 2020; Vafeiadis *et al.*, 2020; Wang and Song, 2020). Information sharing and socialization promote instant sharing (Apuke and Omar, 2021; Sampat and Raj, 2022), whereas personality traits (extraversion, neuroticism and openness) support sharing behaviour (Sampat and Raj, 2022). Information seeking and passing the time are also linked with the diffusion of misinformation (Apuke and Omar, 2021). Trust in the source of information (Shin *et al.*, 2018) and trust in the sharer, including influencers, celebrities, friends and relatives, allows the public to believe in such information (Chen and Cheng, 2019; Di Domenico *et al.*, 2021; Talwar *et al.*, 2020). Fatigue users are less likely to authenticate news before sharing it, and therefore, the propensity to commit errors increases (Islam *et al.*, 2020; Talwar *et al.*, 2019). Information overload and lack of social media experience fuel

Figure 5 Sampling techniques used for studying misinformation on social media

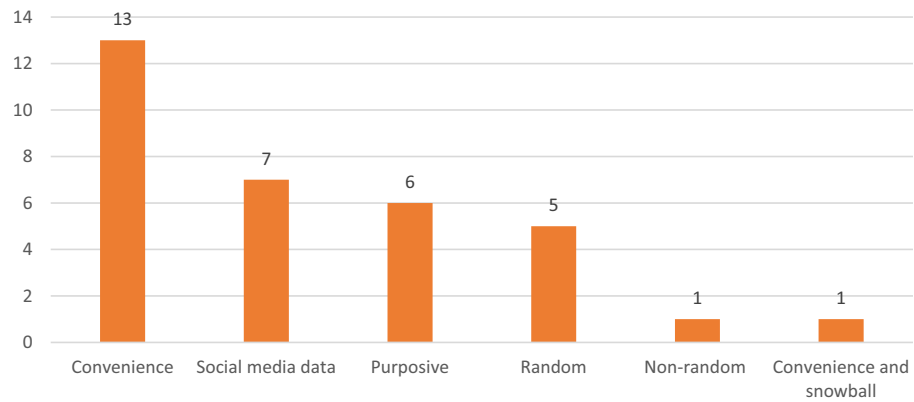


Figure 6 Sample size used in studies on misinformation on social media

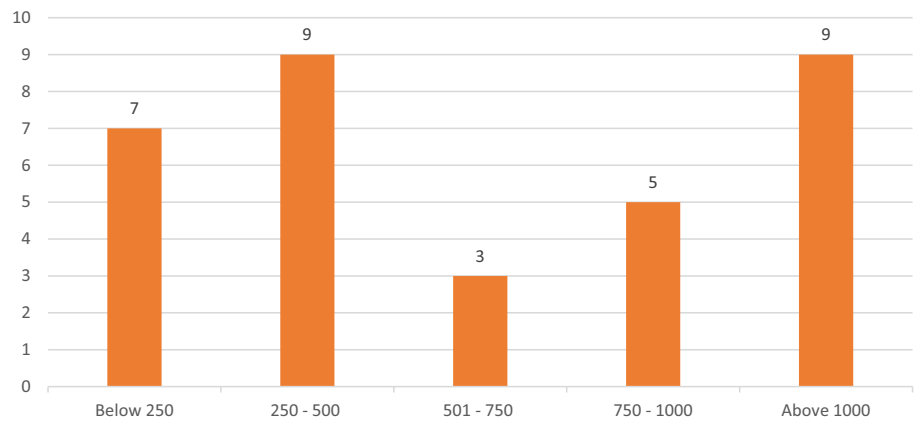


Figure 7 Data analysis techniques used across studies on misinformation on social media

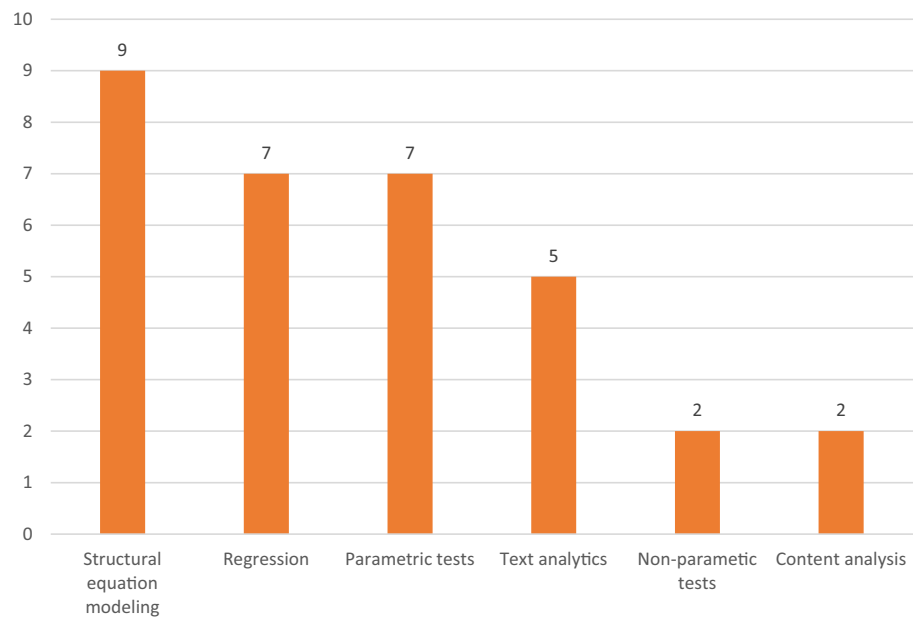


Table 6 Overview of studies related to dissemination, detection and combating misinformation

Dissemination	Detection	Combating
15 Studies Sampat and Raj (2022); Steinfeld (2022); Di Domenico <i>et al.</i> (2021); Hajli <i>et al.</i> (2021); Horner <i>et al.</i> (2021); King and Wang (2021); Pundir <i>et al.</i> (2021); Zhou <i>et al.</i> (2021a); Zhou <i>et al.</i> (2021b); Islam <i>et al.</i> (2020); Talwar <i>et al.</i> (2020); Wang and Song (2020); Colliander (2019); Talwar <i>et al.</i> (2019); Shin <i>et al.</i> (2018)	8 Studies Li <i>et al.</i> (2022), Soetekouw and Angelopoulos (2022); Zrnec <i>et al.</i> (2022), Barakat <i>et al.</i> (2021); Choudrie <i>et al.</i> (2021), Gaozhao (2021); Gimpel <i>et al.</i> (2021), Hajli <i>et al.</i> (2021)	13 Studies Steinfeld (2022), Thero and Vincent (2022); Arayankalam and Krishnan (2021), Gimpel <i>et al.</i> (2021); Schuetz <i>et al.</i> (2021), Yang and Tian (2021); Huang and Wang (2020), Lee (2020); Vafeiadis <i>et al.</i> (2020), Barfar (2019); Chen and Cheng (2019), Kim <i>et al.</i> (2019); Allcott and Gentzkow (2017)

Table 7 Factors helping in intervention of dissemination, detection and combating misinformation

Dissemination	Detection	Combating
Social media fatigue	Fact checking flags	Flags
Fear of missing out	Scepticism	Source rating
Lack of social media experience	Training protocol	Offender policy
Lack of content authentication skills	Age	Persuasion knowledge
Information overload	Education Level	Awareness campaigns
Laziness	Domain Knowledge	Correction strategies
Emotions	Conscientiousness	Fact-checking applications
Primacy	Verification behaviour	Crowdsourcing
Trust on the source	Social media interface	Social bots
Socialization	AI tools	Government control over cyberspace
Information sharing	Machine learning techniques	
Information seeking		
Pass time		

misinformation sharing behaviour (Delpechitre *et al.*, 2019; Talwar *et al.*, 2019). Neuroticism, which is one of the big-five personality traits, is one of the reasons to increase the use of social media (Hughes *et al.*, 2012). These people feel alone in society and show different personalities in the virtual world. They tend to share information more often on social media than in the physical world (Sampat and Raj, 2022). The fear of missing out (FoMo) is the feeling of loneliness that pushes users to use social media and influence information-sharing behaviour (Pundir *et al.*, 2021; Talwar *et al.*, 2019). Emotions are linked with negative and religious news that fuels misinformation dissemination (Horner *et al.*, 2021; King and Wang, 2021). Working for a political party and participating in illegal or violent activities correlates with the intentional diffusion of disinformation (Steinfeld, 2022). Religious news, novel information and harmful content tend to go viral, and the user's emotional level can fuel sharing behaviour (Horner *et al.*, 2021). Source-primacy may limit disinformation spread as it prioritizes the source of the false information rather than blindly sharing the news (Di Domenico *et al.*, 2021). Thus, the factors responsible for diffusion of misinformation include social media fatigue; FoMo; lack of social media experience; lack of content authentication skills; information overload; laziness; emotions; primacy; trust on source; socialization; information sharing; information seeking; and pass time.

This study identifies that most misinformation is consumed out of ignorance. Lazy reasoning and motivated reasoning act as a barrier to identifying fake news. With the introduction of fact-checking flags, critical thinking is stimulated while

reducing laziness (Gaozhao, 2021). This critical thinking, also called scepticism, helps to detect fake news. Similarly, the level of education, age and training protocol also assist identification of fake news (Soetekouw and Angelopoulos, 2022). Education of domain knowledge and conscientiousness significantly contribute to identifying misinformation and fake news (Zrnec *et al.*, 2022). Further, as social media interface (Gimpel *et al.*, 2021) and the application of machine learning techniques can categorize internet content as either information or disinformation (Choudrie *et al.*, 2021), it can also help in recognition of misleading content on social media. Artificial intelligence (AI) tools can aid in early detection of false information through social bots (Hajli *et al.*, 2021). One of the crucial factors that reduce fake news detection is trust (Barakat *et al.*, 2021). Social credibility promotes trust in social media, reduces verification activities and decreases the chances of detecting fake news. On the contrary, expertise in digital abilities and information-seeking behaviour increases verification behaviour and the possibility of noticing fraudulent information (Barakat *et al.*, 2021). In summary, fact-checking flags; scepticism; training protocol; age; education level; domain knowledge; conscientiousness; verification behaviour; social media interface; AI tools; and machine learning techniques significantly support detection of fake news.

4.3.2 What are the ways to combat misinformation on social media?

Sharing and combating misinformation are closely linked with each other (Steinfeld, 2022). It is challenging to identify and

combat fake news; therefore, researchers and data analysts are continuously working to develop countermeasures to prevent the spread of fake news. Flags proved extremely useful to combat misinformation and could be a potential strategy (Gaozhao, 2021), but checking the posts manually is time-consuming. Therefore, researchers developed automated social bots (Hajli *et al.*, 2021) to fasten up the prevention of fake news. Social media companies are also working on their end to respond to the spread of misinformation. Facebook follows a “repeat offender” policy to combat misinformation (Thero and Vincent, 2022). According to this policy, those Facebook pages that continuously share misinformation get a notification from Facebook and the user engagement rate decreases. These companies have also started working with third-party fact-checking companies to timely identify suspicious information and authenticate it (Gimpel *et al.*, 2021). Literature suggests using crowdsourcing over professional fact-checkers when reviewing vast amounts of information on social media. The crowdsourcing strategy can also encourage public participation by drawing media consumers’ attention to the veracity of the news. However, if in case the crowdsourcing approach fails to produce accurate results concerning news authenticity, social media users will continue to fall prey to fake news (Gaozhao, 2021). Efforts should be made to timely correct the misinformation (Huang and Wang, 2020) using correction strategies (Lee, 2020), and strict actions must be taken against those who intentionally spread false information. Persuasion knowledge has a considerable impact on diagnosing false news (Chen and Cheng, 2019). Organizing awareness campaigns to persuade knowledge can be a valuable strategy to prevent misinformation sharing (Schuetz *et al.*, 2021). Further, source ratings and their mechanism affect users’ perceptions and the rating mechanism. Low ratings reduce confidence in the source and prevent the spread of fake news (Kim *et al.*, 2019). In summary, there are ample ways to combat misinformation and fake news, including flags; source rating; offender policy; persuasion knowledge; awareness campaigns; correction strategies; fact-checking applications; crowdsourcing; social bots; and government control over cyberspace.

5. Discussion

5.1 Contribution and implications

This review contributes to an existing body of knowledge related to misinformation on social media. The main contribution of this study is the detailed investigation of factors affecting the propagation of misinformation on social media and ways to mitigate it. The findings of this study will help in coming up with scientific advances in the field of misinformation on social media and protect social media users and businesses from the harmful effects of misinformation. Millions of social media pages with fake, untrustworthy and misleading information are created by malicious social bots with the intention of hurting brands. Therefore, one of the implications of this study is that an early detection of these malicious bots is an important task for building trust for businesses (especially B2B companies). By offering a more comprehensive knowledge of fake news, this research will indirectly aid policymakers in developing strategies to combat harmful consequences of the spread of misinformation.

This study will also indirectly help marketing professionals to evaluate the impact of online misinformation on their businesses and devise suitable marketing strategies. Furthermore, it will guide customers not to trust or distrust any brand simply on the basis of social media content. Businesses and marketers have a moral obligation to prohibit the spread of false information, as well as a legal obligation to prevent the misuse of advertising funds to harm a company’s reputation.

5.2 Limitations

This study is not devoid of limitations. Firstly, this review focuses on articles published in CABS journals. Other rankings criteria like Australian Business Deans Council, Impact factor and SCImago Journal Rank were not considered. Secondly, the scope of this study is limited to misinformation and fake news on social media and does not consider other digital platforms (such as blogs and review platforms) where unverified content is shared on a large scale. Thirdly, all the studies considered in this study are in English. These limitations can provide a roadmap for future research to consider other criteria and improve article selection quality. Increasing the scope of this study might provide better opportunities to develop novel findings.

5.3 Current Issues and future research directions

The critical review of the selected papers provides directions for future research. There are a few issues that future researchers can address. We found that all of the studies were cross-sectional in nature. Future researchers can conduct longitudinal studies or studies using panel data. Also, in light of emerging challenges, focusing on multi-dimensional research questions can provide a holistic view regarding the diffusion and detection of misinformation on social media. Based on our understanding of the phenomena, we highlight the following questions for future researchers to address:

- Q1.* How to develop and test new frameworks and theories for curtailing the detrimental consequences of spread of misinformation on social media?

As present social media platforms evolve with new features and more social media platforms emerge, the existing set of theories and methods may not be generalizable to investigate and curtail the misinformation phenomena. The algorithms fuelling the curation of (mis)information on these platforms need to be customized based on the affordances and functionalities of a platform. As such, researchers, practitioners and platforms owners should strive to develop appropriate empirical and theoretical methodologies to deal with misinformation effectively:

- Q2.* What communication processes should be implemented in B2B/industrial marketing field so as to mitigate the harmful effects of misinformation on social media?

On social media, enigmatic statements are susceptible to multiple social interpretations, which might undermine the main goal of industrial communication (Naeem and Ozuem, 2021). To avoid contradictory information and establish integrated communication, industrial collaboration and coordination are required. Therefore, future research should focus on lucid and cohesive communication strategies across

different media channels among B2B firms. This can help in reducing inconclusive communication and avoiding misinformation that arises through social perceptions:

Q3. What is the role of AI and big data technologies in minimizing the polarization induced due to misinformation on social media?

Misinformation on social media may lead to polarization of opinions. Manual intervention to minimize social media misinformation-induced polarization is a challenging task; therefore, researchers should work towards developing automated tools to reduce polarization arising due to spread of misinformation on social media. Therefore, researchers should particularly focus on investigating how AI and big data technologies are driving user engagement on social media while giving rise to polarization:

Q4. What opportunities are there to conduct qualitative studies in the social media context for researchers to better understand the nuances of misinformation creation, dissemination and spread?

The analysis of literature in the field of misinformation on social media reveals an absence of qualitative studies, as highlighted in Section 4.2.1. Given the blurring of online-offline world, qualitative research methodologies such as netnography (Kozinets, 2002) have the potential to help in exploring the intrinsic aspects and behaviours behind misinformation. Moreover, social media discourse could also be examined through methods such as thematic analysis (Braun and Clarke, 2006), narrative analysis (Franzosi, 1998), ethnographic content analysis (Drummond *et al.*, 2020) and semiotic analysis (Fiol, 1989) to determine the drivers of beliefs in conspiracy theories, misinformation and fake news:

Q5. What vital configurations of characteristics such as ethnicity, race, location and sociocultural status lead to generation, consumption and dissemination of misinformation on social media?

There is a large diversity in mutable and immutable characteristics of social media users. Therefore, users' attitudes towards social media content are expected to differ and might influence information generation and sharing behaviour. The investigation of configurations which are more vulnerable to misinformation propagation can aid in devising interventional strategies for social media use:

Q6. What is the real impact of spread of misinformation on social media on the offline world?

Misinformation spreads more rapidly through online channels and has affected both the online and offline world. An investigation to understand the real impact of misinformation on social media across different geographies and socio-economic strata can help in regulating social media use and take proactive measures against the spread of misinformation.

6. Conclusion

Social media is a fast communication and information dissemination platform, with millions of people interacting

every second, generating massive amount of data. The legitimacy of content spreading on social media platforms is questionable due to the liberty in content creation and sharing. As such, social media platforms have come under scrutiny for their involvement in disseminating misinformation. This study endeavours to critically understand the tenets of misinformation on social media through a SLR. A total of 33 research articles on misinformation on social media, published in CABS-ranked Scopus or Web of Science journals in the last decade, were examined thoroughly to identify research gaps and provide directions for future research. This study provides novel insights regarding the factors affecting re-sharing behaviour and detection of misinformation on social media while identifying the ways to combat it. The study also provides publication trends, publication outlets along with the details of contextual setting, research methods, sample size, sampling and data analysis techniques. We believe that this study will guide future research in the domain of misinformation and fake news on social media.

Note

1 Why Are Brands Funding Misinformation? – Forrester.

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