Disinformation in electoral processes and the credibility of voting systems

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ABSTRACT

Disinformation in electoral processes affects the credibility of voting systems and public trust in democratic institutions. The systematic review showed that the spread of disinformation and trust in electoral systems are interlinked, with consequences for political polarization and electoral participation. Digital platforms play a crucial role in the spread of disinformation, requiring effective strategies to combat it. Proactive and transparent institutional communication is essential to inform and educate voters. The review also identified gaps in the literature, such as the need for studies on the effectiveness of counter strategies in different contexts and the investigation of the potential of "prebunking" as an effective tool.

Keywords: Disinformation, Electoral processes, Voting systems, Credibility, Systematic review, Parsifal, Prebunking.

INTRODUCTION

Disinformation is a phenomenon that has gained increasing attention around the world, especially in the context of electoral processes. The emblematic cases involving "Cambridge Analytica" in electoral processes in different countries (Cadwalladr & Graham-Harrison, 2018) are particularly relevant, since its actions in various electoral processes, including the 2016 US presidential election and the Brexit referendum in the UK, have generated significant debate about the ethics and legality of its practices of collecting and using personal data for political purposes (Cadwalladr & Graham-Harrison, 2018; O'Hagan, 2019).

The proliferation of fake news, the use of bots on social media and the manipulation of information have the potential to influence public opinion and, consequently, electoral results (Allcott & Gentzkow, 2017). In this context, it is crucial to understand the extent and implications of disinformation in the electoral process to ensure the integrity of democracies and public trust in political institutions.

In Brazil, the issue is particularly relevant, given the potential impact of the spread of false or misleading information on the integrity of elections and the quality of democracy. With the advance of communication technologies and the proliferation of social networks, disinformation has become a central

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concern for the actors involved in the electoral process, including authorities, political parties, candidates and voters.

In this scenario, an analysis of the academic literature on disinformation in the Brazilian electoral process is essential to understand the mechanisms, characteristics and consequences of the phenomenon, as well as to identify effective strategies for dealing with it. The systematic review, as a rigorous and transparent methodological approach, makes it possible to synthesize and critically evaluate the state of the art in the field, providing valuable insights for practice and future research.

The aim of this article is to conduct a systematic review of the literature on disinformation in electoral processes, focusing on studies published in the last five years. The review seeks to answer the following research questions:

1. How credible are the electoral systems in the largest democracies?
2. What are the characteristics and impacts of disinformation in elections, considering aspects such as political polarization, trust in institutions and electoral behaviour?
3. What strategies have been proposed and implemented to combat disinformation in electoral processes and how effective are these approaches?
4. What institutional communication techniques can enhance the effectiveness of the population's knowledge of the electoral system?

To answer these questions, the article follows the systematic review methodology, including the search and selection of relevant studies in academic databases, the extraction and analysis of data and the synthesis of results. The review adopts an interdisciplinary approach, including studies from different areas of knowledge, such as public administration, political science, communication, law and sociology.

By offering a comprehensive and up-to-date synthesis of knowledge on disinformation in the Brazilian electoral process, this systematic review contributes to understanding the phenomenon and its implications for democracy and governance. The discussion of the results can guide policymakers, electoral authorities, researchers and other *stakeholders* in the search for effective solutions to address the challenges posed by disinformation in the electoral context.

THEORETICAL FRAMEWORK

The systematic review of the literature on disinformation in electoral processes and the credibility of voting systems reveals a number of important findings and *insights* that can inform future research and policy.

Disinformation is identified as a significant problem in electoral processes, with substantial impacts on voter behaviour, trust in institutions and political polarization (Guess, Nyhan & Reifler, 2020).

The spread of false or misleading information, often facilitated by social media platforms and other digital technologies, can undermine public trust in electoral systems and hinder the effective functioning of democracy (Shao et al., 2018).

The credibility of electoral systems is a central theme in the literature, with studies showing that its perception can vary significantly between different democracies. Factors such as transparency, the reliability of electoral institutions, the effectiveness of the voting system and public knowledge are identified as key determinants of the credibility of these systems.

The literature also highlights a number of strategies that have been proposed and implemented to combat disinformation in electoral processes. These include *fact-checking*, media education, collaboration between social media platforms and electoral institutions, and the implementation of stricter regulations. However, the effectiveness of these strategies is often variable and depends on the specific context in which they are applied.

Effective institutional communication is identified as a crucial tool for increasing public understanding of the electoral system and combating disinformation. Techniques such as proactively disseminating correct and clear information, promoting awareness campaigns and collaborating with trusted organizations and media outlets are suggested as effective ways to improve institutional communication.

In addition, the systematic literature review highlights the importance of "prebunking" as a proactive strategy to protect voters from fake news about the electoral system.

Prebunking involves anticipating disinformation and presenting correct information to the public before they are exposed to fake news. This approach can increase voters' resilience to disinformation by helping them recognize and reject false information when they encounter it.

The effectiveness of pre-bunking depends on effective institutional communication and collaboration between social media platforms, electoral institutions and trusted media outlets. Therefore, the successful implementation of "prebunking" can be a valuable tool for preserving the integrity of electoral processes and public trust in voting systems.

In this way, the systematic literature review provides a comprehensive overview of the issues related to disinformation in electoral processes and the credibility of voting systems. The findings of this research allow for the formulation of policies, institutional practices and future research on the subject.

METHODOLOGICAL PROCEDURES

This systematic literature review was conducted based on the guidelines proposed by Kitchenham and Charters (2007) and the systematic review methodology suggested by Petersen et al. (2015). The

process included formulating the research question, defining inclusion and exclusion criteria, searching the selected databases, extracting and analyzing the data and synthesizing the information.

SEARCH STRATEGY

The systematic literature review was conducted using the method proposed in the Parsifal virtual environment (2021), which includes steps to formulate research questions, select databases and article sources, define search terms, apply practical and methodological screening criteria, conduct the review and synthesize the results. The indexed databases used were *Scopus* and *Web of Science*. These databases were chosen because of their wide coverage of academic publications and ability to provide access to articles relevant to the topic.

The search covered the period from January 2018 to April 2023 and was restricted to academic articles published in English. The search terms were applied to abstracts, keywords and titles, considering only journal articles. The search *string* used was ("democracy" OR "election" OR "electoral process" OR "voting system") AND ("countermeasures" OR "crisis communication" OR "debunking" OR "disinformation" OR "fact-checking" OR "fake news" OR "institutional communication" OR "misinformation" OR "political polarization" OR "prebunking") AND ("credibility" OR "electoral trust" OR "trust in institutions" OR "voter behavior"). The search resulted in 194 articles; after applying the eligibility and quality criteria, 18 articles were selected.

In addition, the *snowballing* technique was applied to identify additional relevant studies from the references of the articles found**.**

Figure 1 - Flowchart for selecting articles from the portfolio
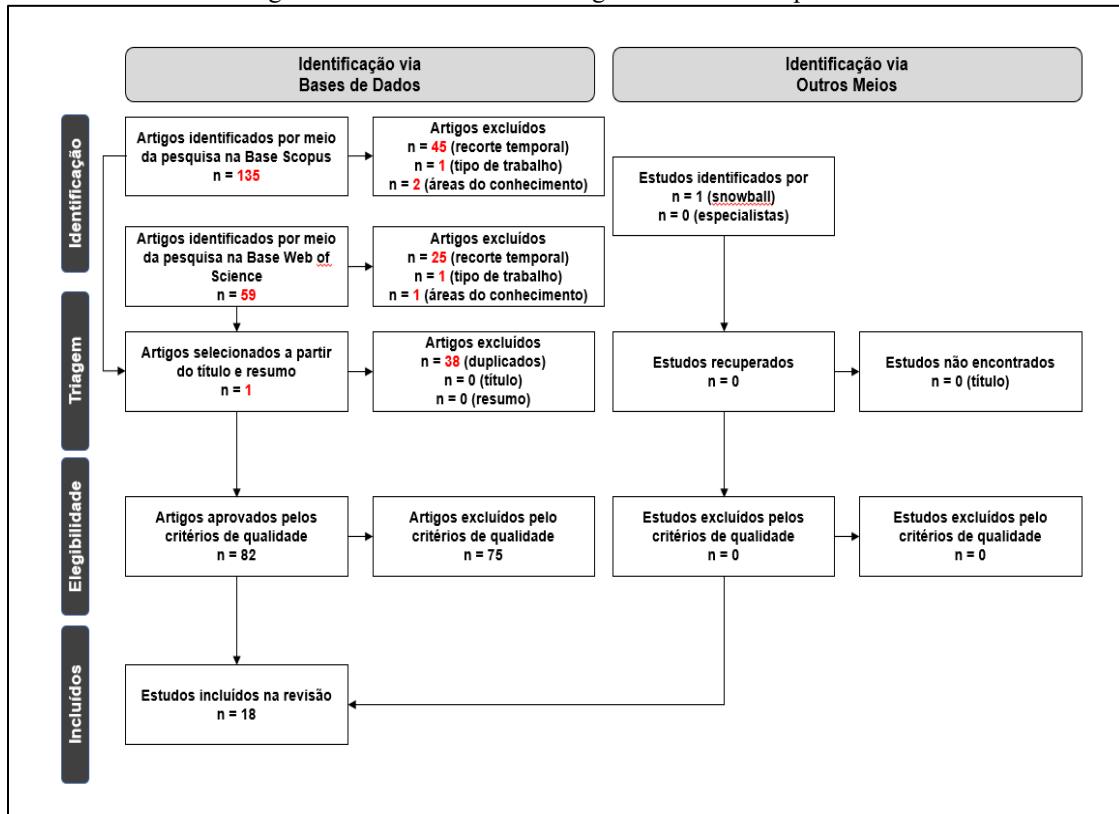
Source: Authors

INCLUSION AND EXCLUSION CRITERIA

Inclusion and exclusion criteria were established to ensure that the selected studies were relevant to the research question and maintained a high standard of quality. The inclusion criteria were: (1) studies on crisis communication, (2) studies on the credibility of electoral systems, (3) studies on disinformation, (4) studies on *prebunking* and *debunking*, (5) studies on electronic ballot boxes, (6) indication of the supervisor and (7) *snowball* references.

The exclusion criteria were: (1) articles with unavailable PDFs, (2) studies with unaligned content, (3) studies before 2018, (4) duplicate studies, (5) gray literature, (6) studies with a time frame, (7) studies with unaligned abstracts and (8) studies with unaligned titles.

SELECTION OF STUDIES AND DATA EXTRACTION

The studies identified in the databases were evaluated based on the inclusion and exclusion criteria. After applying the criteria, the selected studies were subjected to a more detailed analysis, and data was extracted to answer the research questions. The data extracted included information on the methodology used, the main findings, the limitations of the studies and the implications adhering to the theme.

ASSESSING THE QUALITY AND SYNTHESIS OF INFORMATION

Assessing the quality of the selected studies is a crucial step in the systematic review process, as it aims to ensure that only high-quality research is included in the final analysis. In this study, we applied strict criteria to assess the methodological quality and relevance of the selected articles to answer our research questions.

We systematized the study with the following questions:

1. Does the research address aspects of crisis communication, including techniques and strategies that can improve the public's knowledge of the electoral system, or does it deal with disinformation?

2. Does the study take into account possible biases, limitations and methodological flaws?

3. The conclusions and recommendations are based on the results and provide information on the credibility of electoral systems, the impact of disinformation and strategies to combat it?

4. Is the study sample representative and of adequate size to answer the research questions?

5. Does the article have a significant number of citations?

6. Has the article been published in a prestigious and relevant journal?

7. Does the article adhere specifically to the research questions?

8. Is the article from the last two years (2022, 2023)?

9. Does the article talk about *prebunking*?

To measure the quality assessment of the articles according to the questions asked, three answers were given, with different scores: 2.0 (two) points if the answer is YES, 1.0 (one) point if the answer is "partially" and 0.0 (zero) points if the answer is NO. The maximum score is 18.0 (eighteen) and the cut-off score is 12.0 (twelve).

After careful individual evaluation of the articles initially accepted, only 18 (eighteen) obtained a score of 12.0 (twelve) or higher, leaving them qualified to obtain the intended results.

We then checked whether the articles had a solid methodology and were rigorous in their data collection and analysis. We then assessed the clarity and objectivity with which the results were presented and discussed. We also considered the relevance of the articles in relation to the issue of disinformation in electoral processes and the credibility of voting systems.

After the quality assessment, the selected articles were submitted to an information synthesis. This stage involved extracting and grouping relevant information, such as year of publication, journal published, authors, research objective, citations, results and conclusions of each study. We used a thematic approach to categorize and analyze the results, identifying patterns and emerging trends.

The synthesis of the information allowed for an in-depth understanding of the characteristics and impacts of disinformation in electoral processes, as well as the strategies and approaches used to combat

this issue. In addition, the synthesis provided valuable *insights* into the credibility of electoral systems in the largest democracies and the institutional communication techniques that can enhance the effectiveness of the population's knowledge of the electoral system.

This systematic and rigorous approach to assessing the quality and synthesis of information ensured that our literature review was based on solid and reliable evidence, providing a secure basis for future research and practice in the field of disinformation in electoral processes and the credibility of voting systems.

PORTFOLIO

The number of previously classified articles was submitted to qualification. The purpose of this qualification is to select which articles can answer important questions for the research by means of 9 questions on disinformation and the electoral process. The 18 articles that obtained a final score above the cut-off (12 points) were selected, filed and had their information tabulated. Table 1 shows a sample of which articles exceeded the cut-off score, how many times they were cited in the indexed databases and the purpose of this text for the research and how it can add knowledge.

Table 1 - Results of article qualification

Articles	Authors	Quotes	Score	Abstract
Assessment of Factors Impacting the Perception of Online Content Trustworthiness by Age, Education and Gender	Straub et al. (2022)	4	13	It evaluates the impact of the characteristics of online articles and their authors, publishers and sponsors on perceived trustworthiness in order to determine how Americans make trust decisions regarding online articles.
Impact of Artificial Intelligence News Source Credibility Identification System on Effectiveness of Media Literacy Education	Chiang et al. (2022)	1	14	This study developed a highly efficient method of message discrimination using new technology with the use of artificial intelligence and big data information processing containing general news data and content farm messages in approximately 938,000 articles.
Exposure to untrustworthy websites in the 2016 US election	Guess et al. (2020)	132	13	While commentators often warn about echo chambers, little is known about the volume or bias of political disinformation that people consume online, the effects of social media and fact-checking on exposure, or the effects of political disinformation on behavior. Here, these issues were assessed for websites that publish factually dubious content, often described as fake news. Polling and web traffic data from the 2016 US presidential campaign show that Donald Trump supporters were the most likely to visit these sites, which often spread through Facebook. However, these sites

Articles	Authors	Quotes	Score	Abstract
				represented a small portion of the average person's information diet and were largely consumed by a subset of Americans with strong preferences for pro-attitude information. These results suggest that widespread speculation about the prevalence of exposure to untrustworthy sites has been exaggerated.
Fake news and its electoral consequences: a survey experiment on Mexico	Lida et al. (2022)	-	13	This study examined the effect of fake news on electoral outcomes. Using post-election surveys, previous studies have found associations between exposure to fake news and voting behavior, although these observational studies failed to demonstrate that these changes were actually caused by fake news. To examine whether fake news really affects voting behavior, we need to experimentally manipulate voters' exposure to fake news in real elections and see if voters regret their voting choice when they learn that the information was false. To this end, the study focused on Mexico's 2018 presidential election, which provided an ideal environment. During the campaign, false information about a scandal allegedly involving Ricardo Anaya, candidate of the National Action Party, was widely disseminated. However, his innocence was officially recognized after the election. Using this correction of the fake news as a treatment, we tested a sample of 1,561 individuals to assess whether the retraction of the fake news caused changes in voting behavior.
Examining characteristics of prebunking strategies to overcome PR disinformation attacks	Boman, Courtney D. (2021)	3	14	In 2020, Twitter launched a new strategy called 'prebunking', in the hope of pre-emptively combating false information about postal voting and election results. Prebunking was presented as a potential solution; however, little empirical research has tested the strategy to examine its effectiveness in relation to PR-based disinformation. Exploring PR-based disinformation attacks as a paracrisis, the aim of this online quasi-experimental design study (N = 965) was to investigate the effects of an attack and how prebunking strategies, grounded in inoculation theory, can protect organizational outcomes (i.e., reputation and credibility) by intertwining positive psychology. In addition to examining the effects on attitudinal components, this study also analyzed social amplification dimensions to determine whether prebunking messages can prevent the spread of misinformation via Facebook. The results provide insights to advance the conceptual framework of proactive response to misinformation.

Title	Author			Abstract
Mistrust, Disinforming News, and Vote Choice: A Panel Survey on the Origins and Consequences of Believing Disinformation in the 2017 German Parliamentary Election	**Zimmermann et al. (2020)**	**68**	**14**	In this article, we address the question of whether the dissemination of disinformative news online has the power to alter the prevailing political circumstances during an election campaign. We highlighted factors that have so far received little attention for belief in disinformation, namely trust in the news media and trust in politics. A panel survey in the context of the 2017 German parliamentary elections (N = 989) shows that believing disinformative news had a specific impact on vote choice, alienating voters from the main governing party (i.e. CDU/CSU) and driving them into the arms of right-wing populists (i.e. AfD). Furthermore, we demonstrated that the less someone trusts the news media and politics, the more they believe online disinformation. Therefore, empirical evidence has been provided for the notion of a disinformation order, as proposed by Bennett and Livingston, which forms in opposition to the established information system to disrupt democracy.
Responding to "Fake News": Journalistic Perceptions of and Reactions to a Delegitimizing Force	Schapals et al. (2022)	1	15	The phenomenon of "fake news" has permeated academic research and popular debate since the 2016 US presidential election. Much has been written about the circulation of "fake news" and other forms of disinformation online. Despite their continued proliferation, less effort has been made to better understand the work of those involved in the daily production of news - the journalists themselves. Funded by the Australian Research Council's Journalism Beyond the Crisis project, this study investigates how journalists perceive and respond to this phenomenon at a time when the industry has come under significant attack and trust in the news media has plummeted globally. To do so, it draws on in-depth interviews with journalists in Australia and the UK, providing relevant *insights* into their perceptions and reactions to this deeply delegitimizing force. While on the one hand our findings show that journalists express significant concern about the rise of "fake news", they also proactively seek out - and in some cases embrace - strategies and approaches to combat this phenomenon and preserve the integrity of journalism.
Less critical and less informed: undecided voters' media (dis)engagement during Israel's April 2019 elections	Samuel Azran et al. (2022)	4	13	The growing number of undecided voters has aroused much interest due to their important role in determining election results. Many studies have looked at undecided voters' media consumption, but few have examined the role of undecided voters' attitudes towards the institution of the media. This article is innovative in its attempt to address the question of the role of trust in the media in media engagement by undecided voters compared to decided voters, based on a survey (N = 1427) followed by a multivariate analysis during the April 2019 election campaign in Israel. The analysis revealed that while decided voters have more doubts about the accuracy of the news media, they still consume more news from more diverse

				sources, highlighting the decided as more critical and simultaneously more informed than the undecided. A parallel experiment (N = 121) found that undecided voters tended to consider a fake news story shared by one of their Facebook friends to be credible more often than decided voters, demonstrating undecideds' lower confidence in identifying disinformation.
Critical Literacy in the Post-Truth Media Landscape	Barton, Colin C (2019)	9	13	In the post-truth era, information is harder to trust than ever. News has become more about entertainment than information, and consumers now subscribe to media to have their views reinforced rather than challenged. The media environment has become more tribal, defining the people who consume it. In addition to this environment, the plague of fake news has descended on the internet, making truth a relative, rather than scientific, concept. Navigating the media and finding the truth in current events has become a confusing process. After the major events of 2016 - Brexit and the US elections, two events that were defined by misinformation, lies and fake news - post-truth has emerged as a political term to define the era we now live in. It's an era in which truth has little value and people give in to the politics of emotions rather than facts. This creates a dangerous situation for democracy and threatens to undermine any future major democratic process. To resolve this issue, critical media education is needed. Students need to be given the tools to critically analyse the media, as well as understand the power structures behind media organizations, what their goals are and who they serve. By doing so, fake news can lose much of its power and the truth can emerge.
Debunking political disinformation through journalists' perceptions: An analysis of colombia's fact-checking news practices	Rodríguez-Pérez et al. (2021)	7	13	Fact-checking alliances have emerged worldwide to debunk political disinformation in electoral contexts due to social concerns related to the authenticity of information. This study, therefore, included the Latin American context in studies of fact-checking journalism as a journalistic practice to combat political disinformation. Through the analysis of RedCheq, the first fact-checking journalism alliance in a regional electoral context led by Colombiacheck, 11 in-depth interviews were conducted to identify the perceptions of regional fact-checkers about the usefulness of this journalistic practice, its achievements and the key aspects for incorporating fact-checking into the regional media ecosystem. The results of the study revealed that RedCheq has achieved its objective of combating disinformation and that fact-checking has developed into a transformative lever for the regional media.

Russian Meddling in U.S. Elections: How News of Disinformation's Impact Can Affect Trust in Electoral Outcomes and Satisfaction with Democracy	Ross et al. (2022)	-	13	The Russian Internet Research Agency (R-IRA) has been a central focus of disinformation research due to its attempts to use social media to influence the outcome of the 2016 US presidential election. However, questions remain about the extent to which news coverage of the R-IRA's efforts may have shaped public perceptions of democracy in the United States. To assess its impact, we conducted an experiment involving US social media users (N = 916). We tested whether reading news reports about the R-IRA's activities increased perceptions that the R-IRA influenced the public's voting choices and whether this influence, in turn, reduced confidence in the results of the 2016 and 2020 elections and broader satisfaction with democracy. Specifically, we tested whether these indirect effects differed depending on whether R-IRA activity was presented through news frames conveying certainty or uncertainty about the impact of the R-IRA on the behavior of the U.S. public.
Anatomy of an online misinformation network	Shao et al. (2018)	138	14	Large amounts of fake news and conspiratorial content spread across social media before and after the 2016 US presidential election, despite intensive fact-checking efforts. How do the spread of disinformation and fact-checking compete with each other? What are the structural and dynamic characteristics of the core of the disinformation dissemination network and who are its main disseminators? How can the overall amount of disinformation be reduced? To explore these questions, we developed Hoaxy, an open platform that enables large-scale systematic studies of how disinformation and fact-checking spread and compete on Twitter. Hoaxy captures public tweets that include links to articles from low-credibility and fact-checking sources. We performed a k-core decomposition on a diffusion network obtained from two million retweets produced by hundreds of thousands of accounts in the six months prior to the elections.
Perceived Exposure and Concern for Misinformation in Different Political Contexts: Evidence From 27 European Countries	Vegetti et al. (2022)	-	13	Political disinformation is becoming an increasingly central issue in both public and academic debate. The main normative concern is that the spread of fake political news can lead to distorted perceptions of social and political reality. In fact, existing research focuses mainly on the determinants of public disinformation and the spread of fake news. However, simply knowing about the spread of fake news can have important implications, reducing public trust in the information environment. This study aims to explain contextual variation in citizens' perceptions of exposure to false information and their concerns about the impact of this false information on society and democracy. We focus on two properties of the context: party polarization, as a proxy for the degree of political conflict, and media accuracy.
Measuring the effect of political alignment,	Stachofsky et al. (2023)	-	14	Fake news, propagated on social media platforms, is regularly used as a tool to influence political beliefs. In this article, we investigate the impact of

platforms, and fake news consumption on voter concern for election processes				fake news on perceptions of electoral processes, based on the theory of motivated reasoning. We use survey data on partisan alignment, news consumption habits and voting methods collected before and after the 2020 US general election. Our pre-election results indicated that a voter's political alignment and type of news consumption influence their perceptions of trust in electoral processes. These findings were replicated in the post-election results. We also found that Facebook users were more likely to consume fake and hyper-partisan news, while people who directly access news sites mainly consume conventional news sources. Implications for research and policy are discussed, along with opportunities for future research on the impacts of fake news.
Journalistic ethics and persuasive communication in the face of post-truth: credibility in the face of the challenges of Social Networks [Deontología periodística y comunicación persuasiva frente a la posverdad: credibilidad ante los retos de las RRSS].	Ballesteros-Aguayo et al. (2022)	-	14	The work of journalists is essential to ensure the establishment of democratic societies and free citizens through their commitment to the truth of the facts. The processes carried out by certain political actors, such as Putin in the war in Ukraine in 2022, Trump in the US elections in 2020 and the multiplication of destabilizing messages related to COVID-19 coming from countries such as Turkey or China, promote the urgency of rethinking the deontology of journalism professionals in today's information society. This work brings together the latest research on the work of journalists in today's information landscape, especially on social media, and allows us to delimit phenomena that are transcendent for the development of quality journalism, such as post-truth, false information and disinformation, all in relation to persuasive communication.
A Survey of Fake News: Fundamental Theories, Detection Methods, and Opportunities	Zhou, X. and Zafarani, R.	342	14	The explosive growth of fake news and its erosion of democracy, justice and public trust has increased the demand for fake news detection and intervention. This research reviews and evaluates methods that can detect fake news from four perspectives: the false knowledge it carries, its writing style, propagation patterns and the credibility of its source. The research also highlights some potential research tasks based on the review. In particular, we identify and detail related fundamental theories across disciplines to encourage interdisciplinary research on fake news. We hope that this research can facilitate collaborative efforts between experts in computer and information sciences, social sciences, political science and journalism to research fake news, where such efforts can lead to the detection of fake news that is not only efficient but, more importantly, explainable.

The spread of low-credibility content by social bots	Shao et al. (2018)	458	14	The mass dissemination of digital disinformation has been identified as a major threat to democracies. Communication, cognition, social and computer scientists are studying the complex causes of the viral spread of disinformation, while online platforms are beginning to implement countermeasures. Little systematic data-based evidence has been published to guide these efforts. Here we analyze 14 million messages that spread 400,000 articles on Twitter over ten months in 2016 and 2017. We found evidence that social bots played a disproportionate role in spreading articles from low-credibility sources. Bots amplify this content in the first moments of dissemination, before an article goes viral. They also target users with large followings through replies and mentions. Humans are vulnerable to this manipulation, re-sharing content posted by bots. Successful low-credibility sources are strongly supported by social bots. These results suggest that restricting social bots can be an effective strategy to combat the spread of disinformation.
The Effects of Corrective Communication and Employee Backup on the Effectiveness of Fighting Crisis Misinformation	Jin et al. (2020)	30	14	Faced with threats of misinformation in crises that often aim to create misperceptions among the public, the effectiveness of an organization's corrective communication efforts can be evaluated based on key outcomes of crisis communication (e.g. Coombs, 2010; Coombs & Holladay, 1996), among which are crisis accountability and organizational reputation (Coombs, 2007). In a complex and conflict-ridden media environment, both misinformation and corrective information about a crisis can easily reach the public through various channels, influencing the public's assessment of whether an accused organization is actually responsible for the crisis and the extent to which reputational damage can be minimized by the accused organization's corrective communication regarding the accusatory information. Therefore, this study focuses on two key communication outcome measures of organizational responses to misinformation in crises, namely crisis accountability and organizational reputation.

Source: Prepared by the authors

RESULTS

The results show that disinformation in electoral processes has a significant impact on voter behavior, trust in institutions and political polarization. Institutional communication strategies and actions to combat disinformation have been proposed and implemented with varying degrees of success.

The analysis of the articles selected in the systematic review provided significant insights into disinformation in electoral processes and the credibility of voting systems. The results were categorized into four main themes, aligned with the previously established research questions.

CREDIBILITY OF ELECTORAL SYSTEMS IN THE LARGEST DEMOCRACIES

The studies analyzed have shown that the credibility of electoral systems varies between democracies. Factors such as transparency, the reliability of electoral institutions, the effectiveness of the voting system and public perception are key to the credibility of electoral systems. Most of the countries analyzed have electoral systems with a high degree of credibility, although they still face challenges in the fight against disinformation.

CHARACTERISTICS AND IMPACTS OF DISINFORMATION IN ELECTIONS

The articles indicated that disinformation in electoral processes can take various forms, such as fake news, disinformation campaigns and information manipulation. Disinformation can affect political polarization, trust in institutions and electoral behaviour, hindering the democratic process. In addition, social media and other digital platforms have emerged as important channels for the spread of disinformation.

STRATEGIES TO COMBAT DISINFORMATION IN ELECTORAL PROCESSES

Various approaches have been proposed and implemented to tackle disinformation in electoral processes. These include *fact-checking,* media education, collaboration between social media platforms and electoral institutions and the application of stricter regulations. However, the effectiveness of these strategies varies and often depends on the specific context in which they are applied.

INSTITUTIONAL COMMUNICATION TECHNIQUES TO INCREASE PUBLIC AWARENESS OF THE ELECTORAL SYSTEM

The studies reviewed highlighted the importance of effective institutional communication to increase understanding of the electoral system and combat disinformation. Some suggested techniques include the proactive dissemination of correct and clear information, the promotion of awareness campaigns and collaboration with credible organizations and media outlets, as well as lectures and citizenship actions.

In short, the results of this systematic review provide a comprehensive overview of the issues related to disinformation in electoral processes and the credibility of voting systems. These insights can be useful for guiding public policies, institutional practices and future research on the topic.

DISCUSSION

The discussion addresses the main findings of the review, highlighting the factors that contribute to the spread of disinformation and the effectiveness of strategies to combat it. The importance of transparent and efficient institutional communication is emphasized, as well as the need for greater cooperation between the actors involved in the electoral process.

The discussion of the results of the systematic review highlights the complexity of the phenomenon of disinformation in electoral processes and the importance of addressing it in order to guarantee the credibility of voting systems. Based on the results obtained, we have identified some main points that deserve attention and reflection.

INTERDEPENDENCE BETWEEN THE CREDIBILITY OF ELECTORAL SYSTEMS AND DISINFORMATION:

The credibility of electoral systems and the spread of disinformation are closely related. Trust in the integrity of the electoral process is essential for the proper functioning of democracies. However, disinformation can undermine this trust, which in turn can lead to increased political polarization and lower voter turnout.

THE ROLE OF DIGITAL PLATFORMS IN SPREADING DISINFORMATION:

Digital platforms such as social networks play a key role in the spread of disinformation. While these platforms can be an important vehicle for political participation and the dissemination of information, they can also be exploited by malicious actors to manipulate the electoral process. It is therefore crucial to address disinformation on these platforms.

CHALLENGES IN EVALUATING THE EFFECTIVENESS OF STRATEGIES TO COMBAT DISINFORMATION

The results showed that although various strategies have been proposed and implemented to combat disinformation, the effectiveness of these approaches is variable and contextual. This highlights the need to continually evaluate the effectiveness of the strategies adopted and adapt them to changes in the disinformation landscape.

THE IMPORTANCE OF EFFECTIVE INSTITUTIONAL COMMUNICATION:

Effective institutional communication is key to increasing the public's understanding of the electoral system and mitigating the impact of misinformation. Electoral institutions should engage in

proactive and transparent communication campaigns to inform and educate voters about the electoral process.

The systematic review also revealed gaps in the existing literature. For example, more research is needed to better understand the effects of disinformation on electoral behavior and how different cultural and political contexts can influence the effectiveness of strategies to combat disinformation. In addition, the literature could benefit from longitudinal studies that track changes in disinformation and the credibility of electoral systems over time.

After all, as Guess, Nyhan and Reifler (2020) have said, exposure to untrustworthy websites can have a significant impact on public perception and trust in electoral processes. It is therefore crucial that researchers, practitioners and decision-makers continue to explore and implement effective approaches to mitigate the spread of disinformation and ensure the integrity of voting systems.

LIMITATIONS AND FUTURE RESEARCH

While this systematic review has provided valuable *insights* into disinformation in electoral processes and the credibility of voting systems, it is not without its limitations.

First, because the performance measure used in this study, focused mainly on the spread and impact of disinformation, may not fully capture the complexity of the phenomenon (Netra, Sørensen & Nejstgaard, 2022). Other indicators, such as the effectiveness of strategies to combat disinformation and public perception of the credibility of electoral systems, could be considered in future research.

In addition, the study did not focus on the Brazilian context, which may limit the generalizability of the results to the national context. Other variables that can influence the spread of disinformation and the credibility of electoral systems, such as the leadership style of managers, political culture, and voter motivation, were not addressed in this review. Therefore, these limitations should be taken into account when interpreting the results of this study.

CONCLUSION

The systematic review reveals that disinformation is a relevant problem in electoral processes, affecting the credibility of voting systems and citizens' trust in institutions. Effective institutional communication strategies and actions to combat disinformation are essential to guarantee the integrity of elections and public trust. There are, however, gaps in knowledge that require future research, such as the effectiveness of different approaches and the adaptation of strategies to specific contexts.

The systematic review of the literature on disinformation in electoral processes and the credibility of voting systems revealed the complexity and importance of the issue.

This is because social media and other digital platforms have emerged as important channels for spreading disinformation (GUESS; NYHAN; REIFLER, 2020).

In this context, it was possible to identify a direct relationship between the spread of disinformation and the impact on the credibility of electoral systems, with potentially damaging consequences for the stability of democracies.

The study by Shao et al. (2018) offers a detailed analysis of the structure and functioning of online disinformation networks, highlighting the need for a deeper understanding of these networks in order to develop effective strategies to combat disinformation in electoral processes.

The discussion of the results pointed to the need for effective institutional communication strategies to inform and educate voters about the electoral process, as well as the importance of addressing disinformation on digital platforms. In addition, the need for continuous evaluation and adaptation of strategies to combat disinformation was highlighted, including the importance of "prebunking" as a proactive approach to preventing the spread of false information and promoting voter resilience in the face of disinformation.

The gaps in the literature identified during the review suggest promising areas for future research, such as studying the effects of disinformation on electoral behavior and analyzing the effectiveness of strategies to combat disinformation in different cultural and political contexts, including the potential of "prebunking" as an effective tool.

This is because in a recent study, Boman (2021) explored the concept of 'prebunking' as a proactive strategy to combat disinformation attacks in public relations. The study suggests that prebunking, when grounded in inoculation theory and intertwined with positive psychology, can protect organizational outcomes, such as reputation and credibility, from disinformation attacks.

This systematic literature review is of great relevance to professionals, researchers and decision-makers in the field of electoral processes and institutional communication. It provides a comprehensive and up-to-date analysis of the phenomenon of disinformation, highlighting its impact on the credibility of voting systems and public trust in democratic institutions. By identifying gaps in current knowledge, the review can guide future research and help define priorities for academic investigation.

In addition, the systematic review offers valuable *insights* for the formulation of effective policies and practices to combat disinformation. By highlighting the importance of "prebunking" as a proactive approach and the need for effective institutional communication strategies, the review can inform the development of communication interventions and campaigns. For decision-makers, the review provides a solid evidence base to inform the formulation of policies and strategies to ensure the integrity of electoral processes and public trust in democratic institutions.

Therefore, this systematic review contributes to the understanding of the main issues related to disinformation in electoral processes and the credibility of voting systems. The results of this review can help legislators, electoral institutions and researchers to develop and implement effective policies and practices to mitigate the negative effects of disinformation, including the use of "prebunking", and ensure integrity and trust in the electoral process.

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