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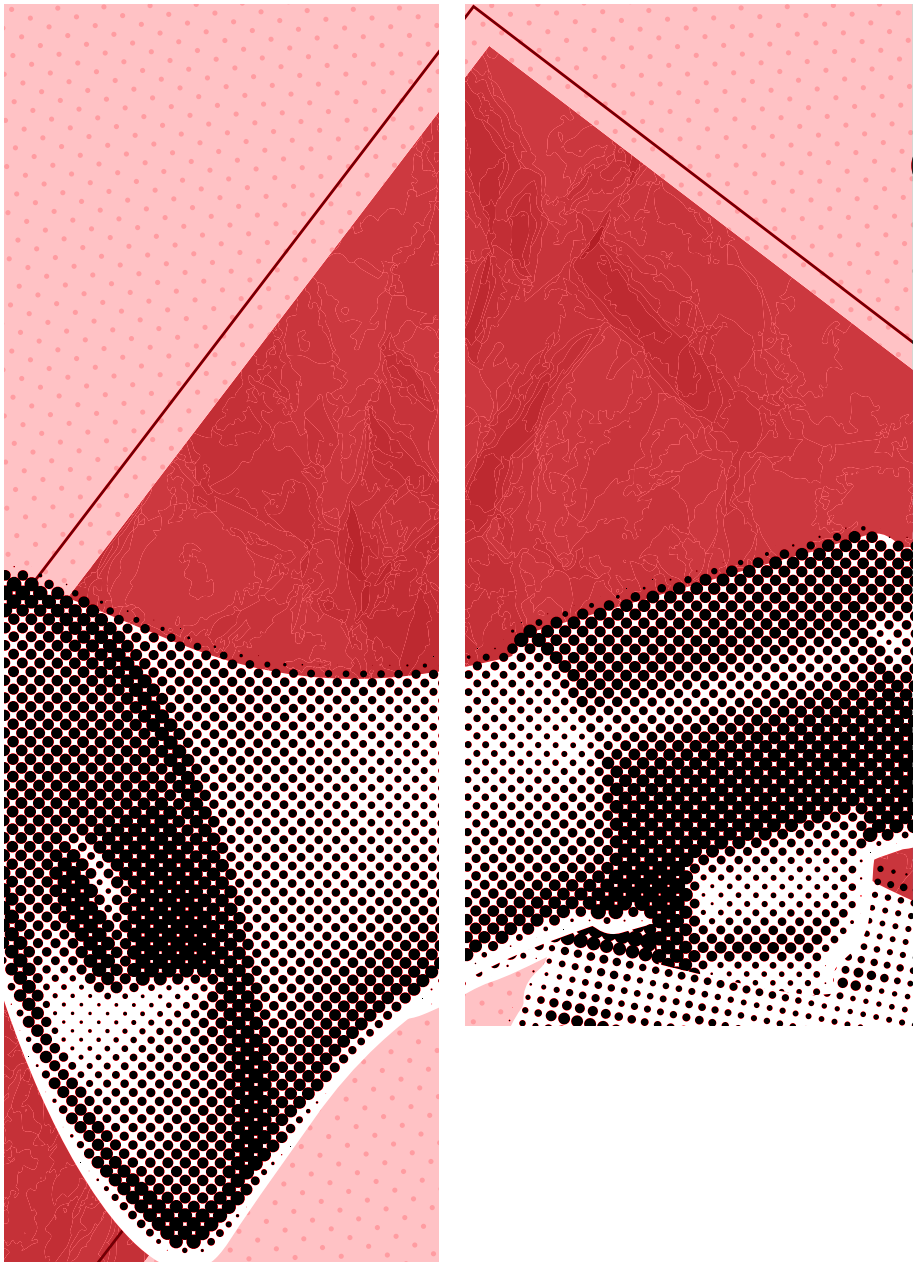

DISINFORMATION IN THE CITY

BRIEF #3: RESPONSES

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Ika Trijsburg, William Ridge, Elise Park, Daniel Pejic, and Paul Costello

This brief is the third in a series of three published as part of the Disinformation in the City project, led by the Melbourne Centre for Cities at the University of Melbourne in partnership with the German Marshall Fund of the United States (GMF).

In this brief, we refer to disinformation as shorthand for various kinds of information manipulation, acknowledging that such campaigns often contain elements of misrepresented truth (mal-information) and may reach wider audiences where groups or individuals unknowingly—and without intent to harm—share false information (misinformation).

About the authors:

Ika Trijsburg is a visiting fellow with GMF. She is head of democracy and diplomacy at the Municipal Association of Victoria and director of urban analytics at the Institute for Infrastructure in Society at the Australian National University, where she leads the Disinformation in the City project.

William Ridge is a PhD candidate at the University of Melbourne and a research assistant working on the Disinformation in the City project.

Elise Park is a research assistant working on the Disinformation in the City project. She has a background in engineering consulting and has provided security advice and design services for infrastructure projects in the defense, telecommunications, and transport sectors across the Asia-Pacific region. She is currently completing her PhD at Monash Sustainable Development Institute.

Daniel Pejic is a research fellow in the Melbourne Centre for Cities at the University of Melbourne, where he leads the City Diplomacy research and education portfolio. His research explores the role of cities in global affairs, particularly focusing on city diplomacy, cities in multilateral systems, and the governance of global challenges such as migration and climate change.

Paul Costello is a senior program manager for the GMF Cities program and is based in the organization's Berlin office. He leads the program's work on city international engagement, democracy, and migration, and is closely involved in the team's work on climate displacement and the sustainable rebuilding of Ukrainian cities.

Disinformation impacts cities. In extraordinary times of rapid information-sharing, distrust, and disruption, cities are on the front line. Local authorities are the level of government most accessible to the people, and are tasked with leading communities through ever more complex societal and global challenges.

The rise of disinformation is a complicated challenge for cities globally. As the disinformation landscape evolves, cities must evolve along with it. This will require innovation, information-sharing, and deployment of response solutions at every stage of the disinformation lifecycle. Using technology, collaboration, and community engagement, cities can, and increasingly do, curtail the harmful impacts of disinformation.

Disinformation is information and media content meant to deliberately mislead or evoke an emotional response in a target audience.[1] Disinformation is sometimes also called "fake news" or propaganda.[2] The intent of content creators is relevant, and it distinguishes disinformation from misinformation. Misinformation is simply false or misleading information, which might be created or shared due to unconscious bias or accident.[3] The creation and propagation of disinformation, in contrast, is always purposeful and calculated to achieve a particular goal or outcome.

Cities are increasingly impacted by disinformation. In the following sections, various strategies related to cities' responses to this growing issue are explored. "Disinformation response" refers to a suite of activities before, during, and after disinformation has been disseminated. These activities may be seen as different response phases that include preemption and early detection; spread prevention and pre-bunking; and debunking and recovery.

PREEMPTION AND EARLY DETECTION

Halting the creation of all disinformation is likely to prove practically, legally, and ethically challenging for cities,[4] but several initiatives for preemption and early detection exist.

The use of algorithmic and AI-assisted methodologies can help cities detect disinformation when it emerges. These systems include large language, network, and sentiment analyses of social media posts, and automated and human-assisted fact-checking of media content.[5] Researchers from Carnegie Mellon University undertook a multifaceted algorithmic analysis of Twitter disinformation on the COVID-19 pandemic in the US state of Pennsylvania.[6] Through the use of algorithmic detection with the aid of keywords such as "Pfizer", "Moderna", and "vaccine", locally dominant disinformation narratives were isolated. This methodology can also be used to aid governmental and health care professionals when they address the public to combat disinformation and try to prevent further dissemination of false narratives.

It is worth noting that researchers at Pennsylvania State University undertook similar algorithmic analysis in comparatively low-resource counties and cities on Caribbean islands.[7] In these locations, where English is less commonly used as an everyday language, the success of the algorithmic methods to detect disinformation on social media was significantly reduced. The research underscores the importance of tailoring algorithmic detection methods to the location, language, and culture to which it is applied. Simply put, the same algorithm used to detect disinformation in Philadelphia, Pennsylvania, will not prove as useful in Santo Domingo, Dominican Republic.

Another important tactic that cities can employ to identify and combat disinformation involves public- and private-sector collaboration. Following several cyberattacks that interrupted Estonian banking, government, and media services in 2016, The European Committee of the Regions created a disinformation handbook.[8] The handbook outlined several actionable steps that citizens and organizations could take if they felt they were being targeted by a disinformation campaign. These steps were:

- assess the threat
- issue a public statement
- proactively communicate with key stakeholders who are likely to be most impacted
- retaliate by, for example, ignoring the threat, deleting the relevant content, uncovering the perpetrator, and/or contacting the police

In addition to the handbook, training sessions and courses with government employees were also provided and made available to the public.

Copenhagen, Denmark, where mistrust of journalists and politicians had been identified as key factor in the creation, spread, and acceptance of disinformation, undertook a related program.[9] In this initiative, the key goal was to reestablish trust and facilitate productive collaboration among journalists, politicians, and the public. A series of

structured meetings was held with moderated debates among people with differing viewpoints.[10] Attendees were given green and red cards that were used to signal support or disapproval of an argument or proposal made during the debate. These meetings became spaces to discuss contentious local issues ranging from city budget allocations to building construction. The meetings proved popular, attracting approximately 2,000 high-school students and 2,000 adults.

Organizers highlighted the need for openness, patience, and a collective willingness to internalize lessons and results as critical for the meetings' success. The program was simple to implement and low-cost, and could be an effective model for detecting disinformation trends early and minimizing their impact.

Other preemptive and early detection initiatives could provide support for local journalism. Newspapers, radio stations, and broadcasting networks have seen consistent declines in revenue, leading to widespread layoffs and less reliable local reporting.[11] In the absence of legitimate and healthy local journalism, false and misleading information can take root. Some researchers have consequently highlighted that declining advertising revenue contributes to the spread of disinformation in cities.[12] Recognizing the need for factual and dependable local reporting, cities might consider support, including financial, for local journalists. Programs of this nature are already underway in the United States and the United Kingdom. The New Jersey Civic Information Consortium raises funds from local benefactors and the state government to fund quality journalism that promotes the spread of civic information.[13] In the United Kingdom, one initiative provides tax exemptions for journalistic endeavors that benefit the public.

Common Approaches

- AI-assisted and algorithmic detection: the suite of artificial intelligence (AI) and technological tools used to scrape social media platforms and identify emergent disinformation trends.
- public-private collaboration: cross-sector engagement and collaboration can be an important tool for ensuring a whole-of-society approach to the threat of disinformation. Collaborations might include shared programs, resources, and information.
- moderated meetings: the use of public spaces for discussing opposing viewpoints with respect and open-mindedness.
- support for local journalism: supporting a healthy local media environment by funding local journalism or other means.

Further Reading

A European Committee of the Regions report offers a detailed look at the Estonian and Danish efforts cited above. https://cor.europa.eu/en/engage/studies/Documents/Developing%20a%20handbook%20on%20%20good%20practice%20in%20countering%20%20disinformation%20at%20local%20%20and%20regional%20level/Online-disinformation_full%20study.pdf

Julie Gonsard, writing for aidóni, reflects on the unique disinformation challenges that the Latino community faces. Gonsard explores the aforementioned difficulties with algorithmic detection of disinformation in non-English -speaking communities. https://aidoni.org/articles/minorities-are-more-affected-by-misinformation-and-disinformation-with-the-latinx-community-at-the-forefront

A policy guide from the Carnegie Endowment for International Peace provides guidance and case studies on support for local journalists and other initiatives to combat disinformation. https://carnegieendowment.org/files/Carnegie_Countering_Disinformation_Effectively.pdf

SPREAD PREVENTION AND PRE-BUNKING

The second stage of the disinformation response lifecycle relates to dissemination and propagation. Here, cities can employ strategies to slow the spread of disinformation and minimize its effectiveness when consumed by local audiences.

A key spread-prevention strategy is the promotion of critical thinking and improved media literacy. Citizens who critically reflect and identify disinformation are presumed to be less likely to fall under its influence.[14] Some cities are already engaging media-literacy and critical-thinking strategies in their spread-prevention toolkit. The city of Albuquerque in the US state of New Mexico has produced a documentary to dispel myths about vaccines and their safety.[15] A key aspect of this process is building trust with medical practitioners and scientists, some of whom appear in the program and explain the history of vaccines clearly and simply.

In another initiative led by Birmingham City University, media literacy training is provided to up-and-coming journalists in the "Global South", especially Lebanon, Syria, and Egypt.[16] The Check program, launched in 2014, is centered around three core interventions: online training to burgeoning citizen journalists; fostering networks and collaborations among those working on similar issues in different cities; and the development of free, open-access verification and fact-checking tools. To date, the program has assisted more than 7,000 activists, student journalists, and archivists to develop media-literacy skills that are key to the fight against disinformation in the developing world.

Another spread-prevention tactic involves de-platforming disinformation creators online or choosing not to provide platforms at in-person events. In Brisbane, Australia, Germaine Greer, a prominent feminist, and Robert Carr, a former premier of New South Wales, were removed as speakers from the city's 2018 writers' festival.[17] The decision sprang from concerns that each would use the event as a platform to discuss their controversial viewpoints, which many consider dangerous and hateful disinformation.[18] De-platforming is not without controversy, however. Critics argue that the practice undermines the democratic ideal of, or right to, free speech. There is also evidence to suggest that de-platforming can further radicalize extremists and inculcate extreme views. Indeed, as computer scientist Gianluca Stringhini notes,

> [Those with extremist views] don't go away, they just move somewhere else. These communities, they migrate, they create their own servers, and their own websites after they are suspended—but only a fraction of the members of these communities will migrate, because those are only the ones that are very committed to the cause. Those who do migrate become more active, they become more toxic. And, potentially, they come back and organize aggression attacks against their original community. [19]

De-platforming, therefore, may have mixed results for cities attempting to combat disinformation. On the one hand, it may help to reduce the spread of content. On the other, it may also further entrench extremist views held by people who feel that they are being unjustly persecuted.[20]

Pre-bunking strategies, which can be similar to media-literacy initiatives, may also be effective in combating the spread and acceptance of disinformation in cities.[21] However, pre-bunking goes beyond media literacy and aims to

undermine common disinformation themes and arguments before citizens are likely to be exposed to them. In the lead-up to the 2022 US midterm elections, several states and city governments undertook pre-bunking programs involving advertising and social media posts to inform citizens of the electoral ballot-counting process. This was the case in Maricopa County, Arizona, which, following the 2020 presidential election was an epicenter of electoral fraud disinformation.[22] Officials reported mixed success from the program, though some ongoing disinformation discourse was attributed to electronic ballot machine failures on election day.

A key challenge of pre-bunking initiatives is knowing the subject of a disinformation campaign before it arises. City-led pre-bunking activities may be most useful in advance of events that predictably unleash a wave of disinformation, such as an upcoming election.

To help slow the spread of disinformation, cities can advocate for "accuracy primes" on social media platforms to subtly dissuade users from sharing misleading or false content.[23] Accuracy primes are features on such platforms that prod viewers to consider the truthfulness of what they view and to reconsider their interaction with the content. This may involve a direct message to the user to ask them to consider if a headline reflects the truth (for example, "To the best of your knowledge, is the above headline accurate?"), or a message asking the user to confirm a request to share a news article. Several empirical investigations have found these forms of intervention reduce the spread of online disinformation.[24]

Cities can also work to cultivate social norms of acceptable behavior that limit the online and in-person sharing of disinformation.[25] The City of Perth, Australia, promoted water conservation and sustainability by shifting social norms about household gardening. This proved highly effective.[26] A similar tactic has been employed in South African cities to promote gender equality and target the prevalence of violence against women and girls.[27]

Establishing sustainable social expectations and reinforcing desired outcomes can be effective in curtailing the spread of disinformation in cities.

Common Approaches

- media-literacy education: the provision of targeted training to increase individuals' abilities to engage critically with media and information (usually provided by third-party organizations).
- de-platforming creators: the practice of preventing extremists from contributing to public debate, usually by blocking a social media profile or banning disinformers from speaking in public forums.
- pre-bunking: a technique for targeting anticipated disinformation by addressing its content before it reaches a wider audience.

- reinforcing social expectations: the process of communicating and exemplifying social practices for ethical and critical engagement with information, including opposing viewpoints.

- advocating for accuracy primes: encouraging social media platforms to incorporate accuracy primes into false or misleading content.

Further Reading

The Disinformation in the City Response Playbook was co-created with 40 experts across sectors. This playbook provides guidance and examples for cities and local governments about understanding and responding to disinformation. https://www.gmfus.org/news/disinformation-city-response-playbook

Writing for Tech Policy, Louis Davison provides an introduction to and review of "Disinformation in the Global South", an anthology addressing the history and responses to disinformation in the developing world. https://www.techpolicy.press/addressing-disinformation-in-the-global-south/

The Rand Corporation has compiled a list of online tools and resources that citizens can use to protect themselves against disinformation. The list includes ad-block extensions, fact-checking websites, and news-rating resources. https://www.rand.org/research/projects/truth-decay/fighting-disinformation/search.html

A report by Cambridge University, BBC Media Action, and Google's Jigsaw team offers a range of methods for pre-bunking disinformation. https://interventions.withgoogle.com/static/pdf/A_Practical_Guide_to_Prebunking_Misinformation.pdf

A UNICEF report looks at methods that allow cities to harness social norms to prevent the spread of disinformation. https://www.unicef.org/mena/media/4716/file/MENA-C4DReport-May2019.pdf.pdf

DEBUNKING AND RECOVERY

The final stage of the disinformation response lifecycle concerns the consumption and uptake of deliberately misleading media. Once local audiences are exposed to—and engage with— disinformation, cities can adopt several strategies to reduce its effectiveness and prevent further spread.

One tried approach is content labelling and recontextualization of disinformation.[28] The EU has recently introduced new laws to regulate large technology companies such as Google, Facebook, and Twitter,[29] and require them to add content labelling and fact-checking services to viral social media posts. They can do this by using algorithmic detection and human-assisted moderation. Posts on X (formerly Twitter) that contain disinformation about vaccine safety or election practices are now routinely accompanied by messages that provide context and, in some cases, contradict the content of the post.[30]

Because disinformation spreads predominantly via social media,[31] cities are driven to collaborate with other cities, federal governments, and large technology platforms to combat false and harmful narratives. Technological innovation is progressing rapidly, and while this is often a positive development for local communities and cities, it also poses new challenges. AI-generated images and videos can realistically depict events that never occurred, such as the well-known likeness of Pope Francis wearing a white puffer jacket.[32] While this doctored image may have been created for fun, its spread and confusion about its legitimacy reflect the power of AI-generated falsehoods. Technological advances will only further complicate the disinformation landscape. Cities must work constructively with social media platforms to identify and label harmful and misleading disinformation.

Another strategy that cities can use to address disinformation following audience consumption is debunking and fact-checking. Like content labelling, debunking is the process of providing a counternarrative to disinformation to undermine its effectiveness and believability. A 2016 flood in the US state of Louisiana also swamped social media platforms with disinformation that exaggerated the extent of the crisis, fomented fear, and undermined confidence in local emergency service providers by portraying them as incompetent and disorganized.[33] Fortunately, the Red Cross acted swiftly to coordinate influential stakeholders and present a unified message to the public via social media platforms, including Facebook and X. The Red Cross Social Engagement team created informational videos, provided frequent public updates, and engaged with local reporters to become the reliable authority on the latest information. In effect, the Red Cross became a key actor in combating and debunking disinformation narratives. It is not easy to achieve this, but the importance of becoming a trusted authority that can counter disinformation cannot be overstated.[34]

Researchers also emphasize the importance of providing credible counter-information as opposed to simply labelling disinformation as false. Some have even argued that providing a counternarrative can be a more effective debunking strategy than simply presenting facts. Counternarratives are more personalized and can make audiences feel more connected to accurate content.[35]

Effectively providing counter-information and counternarratives requires, of course, trust. Community outreach is important in building trust and is an effective tool for combating disinformation campaigns, particularly in underrepresented and marginalized communities that typically have less trust in politicians and authorities.[36] One

such initiative in the US state of Tennessee sought to increase vaccination rates among Hispanic and low-income rural residents. The program, led by Tennessee Tech University and funded by local and state governments, allowed nurses and health care professionals to meet with vulnerable community members to discuss their concerns about vaccinations and alleviate fears. Meetings occurred in churches, schools, and community centers, and were advertised extensively on local television and radio stations, and on social media platforms. Its success can be attributed, at least in part, to employing Spanish-speaking nursing students, which facilitated information-sharing with community members.[37] The students and participating health care professionals were also trained over a 15-week period on responding constructively to disinformation-fueled medical skepticism. They acknowledged community concerns as legitimate and offered counternarratives based on facts, thereby fostering the trust of those most hesitant to be vaccinated.[38]

Common Approaches

- advocating for content-labeling: flagging false or misleading online information with warning labels, and providing additional context, to make social media users less likely to accept and share false information. Cities can work with technology companies to advocate for such measures.
- providing counter-information: correcting disinformation with facts
- providing counternarratives: using counter-information while engaging people through storytelling and personalization
- community outreach programs: having program teams speak candidly with communities about their concerns
- communications training: equipping city officials and their staffs with the knowledge and tools to engage with disinformed citizens effectively and to offer counternarratives

Further Reading

The Technology and Social Change Project, funded by the Harvard Kennedy School, published The Media Manipulation Casebook, which offers case studies of media manipulation and disinformation events between 2019 and 2023. https://mediamanipulation.org/

The US Department of Homeland Security's science and technology division released a report on the disinformation linked to the flooding in Louisiana. It also offers several other case studies on disinformation and natural disasters. https://www.dhs.gov/sites/default/files/publications/SMWG_Countering-False-Info-Social-Media-Disasters-Emergencies_Mar2018-508.pdf

The Association of Southeast Asian Nations (ASEAN) has produced an extensive report on several of the aforementioned topics as they relate to regional challenges. https://asean.org/wp-content/uploads/2023/11/Guideline-on-Management-of-Government-Information_adopted.pdf

Endnotes

[1] Don Fallis, "The Varieties of Disinformation", The Philosophy of Information Quality, 2014; Don Fallis, "What is Disinformation", Library Trends, 2015.

[2] Ali Khan, Kathryn Brohman, and Shamel Addas, "The Anatomy of 'Fake News': Studying False Messages as Digital Objects", Journal of Information Technology, 37, No. 2 (2022), pp. 122-143.

[3] James H. Fetzer, "Disinformation: The Use of False Information", Minds and Machines, 14, No. 2 (2004), pp. 231–240; Andrew Chadwick, and James Stanyer, "Deception as a Bridging Concept in the Study of Disinformation, Misinformation, and Misperceptions: Toward a Holistic Framework", Communication Theory, February 1, 2022.

[4] João Marecos, Ethan Shattock, Oliver Bartlett, Francisco Goiana-da-Silva, Hendramoorthy Maheswaran, Hutan Ashrafian, and Ara Darzi, "Health Misinformation and Freedom of Expression: Considerations for Policymakers", Health Economics, Policy and Law, 2023.

[5] Fátima C. Carrilho Santos, F.C.C., "Artificial Intelligence in Automated Detection of Disinformation: A Thematic Analysis", Journal. Media, 4, No. 2 (2023), pp. 679-687.

[6] Iuliia Alieva, Dawn Robertson, and Kathleen M. Carley, "Localizing COVID-19 Misinformation", Journal of Health Communication, June 30, 2023.

[7] Jason Lucas, Limeng Cui, Thai Le, Dongwon Lee, "Detecting False Claims in Low-Resource Regions", Proceedings of the Workshop on Combating Online Hostile Posts in Regional Languages during Emergency Situations, May 2022, Dublin, Ireland.

[8] Tony Zamparutti, Matthew Jones, Tugce Tugran, Laura Vona, Leïla Navas, Katarzyna W. Sidło, Angiezka Kulesa, and Oskar Chmiel, "Developing a Handbook on Good Practice in Countering Disinformation at Local and Regional Level" European Committee of the Regions, 2022.

[9] Jessica Jaiswal, Camilla LoSchiavo, and David C. Perlman, "Disinformation, Misinformation and Inequality-Driven Mistrust in the Time of COVID-19: Lessons Unlearned from AIDS Denialism", AIDS and Behavior, 24 (2020), pp. 2776–2780; Cristian Vaccari and Andrew Chadwick, "Deepfakes and Disinformation: Exploring the Impact of Synthetic Political Video on Deception, Uncertainty, and Trust in News", Social Media + Society, January-March 2020, pp. 1–13.

[10] Zamparutti, "Developing a Handbook on Good Practice in Countering Disinformation at Local and Regional Level"

[11] Penelope Muse Abernathy, "News Deserts and Ghost Newspapers", The Expanding News Desert, 2020.

[12] Ángeles Fernández-Barrero, Rubén Rivas-de-Roca, and Concha Pérez-Curiel, "Disinformation and local Media in the Iberian Context: how to protect news credibility", Journalism and Media 5, January 2024.

[13] Jon Bateman, and Dean Jackson, "Countering Disinformation Effectively: An Evidence-Based Policy Guide: Case Study 1", Carnegie Endowment for International Peace, January 31, 2024.

[14] Anastasia Kozyreva, Sam Wineburg, Stephan Lewandowsky, and Ralph Hertwig, "Critical Ignoring as a Core Competence for Digital Citizens", Psychological Science, 31, No. 1 (2020), pp. 3-15

[15] City of Albuquerque, Environmental Health Department, "City Premiers 'Vaccination from the Misinformation Virus' Documentary", July 21, 2021.

[16] Dima Saber, "Developing a Digital Literacy and Verification Network in the Global South" Birmingham City University, 2023.

[17] Stephanie Convery, "Brisbane Writers' Festival under Fire after Germaine Greer and Bob Carr 'Disinvited'", The Guardian, July 25, 2018.

[18] Laura Bates, "Germaine Greer's Comments on Rape Are Dangerous and Damaging", The Guardian, May 31, 2018.

[19] Molly Callahan, "Inside the Mind of an Internet-Safety Vanguard", The Brink, July 26, 2023.

[20] Melissa Zimdars, "Alt-health influencers and the threat of social media deplatforming" Journal of the Association for Information Science and Technology, 2024.

[21] Shannon Bond, "False Information is Everywhere. 'Pre-Bunking' Tries to Head It off Early", NPR, October 28, 2022.

[22] Matt Vasilogambros, "State and Local Govs Prepare for 2024 Misinformation Fight", Governing, March 3, 2023.

[23] Gordon Pennycook, Jonathon McPhetres, Yunhao Zhang, Jackson G. Lu, and David G. Rand, "Fighting COVID-19 Misinformation on Social Media", Psychological Science, 31, No. 7 (2020), pp. 770-780.

[24] Jon Roozenbeek, Alexandra L. J. Freeman, and Sander van der Linden, "How Accurate Are Accuracy-Nudge Interventions?", Psychological Science, 32, No. 7 (2021), pp. 1169-1178.

[25] Henner Gimpel, Sebastian Heger, Christian Olenberger, and Lena Utz. "The effectiveness of social norms in fighting fake news on social media", Journal of Management Information Systems 38, January, 2021.

[26] Hannah V. Uren, Peta L. Dzidic, and Brian J. Bishop, "Exploring Social and Cultural Norms to Promote Ecologically Sensitive Residential Garden Design", Landscape and Urban Planning, 137 (2015), pp. 76-84.

[27] Rachel Jewkes, Michael Flood, and James Lang, "From Work with Men and Boys to Changes of Social Norms and Reduction of Inequities in Gender Relations", The Lancet, 385 (2015): 1580–1589; Rachel Jewkes, Erin Stern, and Leane Ramsoomar, "Community Activism Approaches to Shift Harmful Gender Attitudes, Roles and Social Norms", Evidence Review, September 2019.

[28] Garrett Morrow, Briony Swire-Thompson, Jessica Polny, Matthew Kopec, and John Wihbey, "The Emerging Science of Content Labeling", SSRN, December 3, 2020.

[29] Lisa O'Carroll, "Google and Facebook Urged by EU to Label AI-Generated Content", The Guardian, July 10, 2023.

[30] Taylor Lorenz, Will Oremus, and Jeremy B. Merrill, "How Twitter's Contentious New Fact-Checking Project Really Works", The Washington Post, October 6, 2023.

[31] Sijing Chen, Lu Xiao, and Akit Kumar, "Spread of misinformation on social media: What contributes to it and how to combat it", Computers in Human Behavior, April 2023.

[32] Kelvin Chan, "Is it real or made by AI? Europe wants a label for that as it fights disinformation", AP News, June 5, 2023.

[33] Homeland Security, "Countering False Information on Social Media in Disasters and Emergencies", March 28, 2018.

[34] Anna-Katharina Jung, Björn Ross, and Stefan Stieglitz, "Caution: Rumors ahead—A case study on the debunking of false information on Twitter", Big Data & Society, 7.2 (2020).

[35] Rubén Arcos, Manuel Gertrudix, Cristina Arribas, and Monica Cardarilli, "Responses to digital disinformation as part of hybrid threats", Open Res Europe, Jan 2022.

[36] Janet Kemei, Dominic A. Alaazi, Mia Tulli, Megan Kennedy, Modupe Tunde-Byass, Paul Bailey, Ato Sekyi-Otu, Sharon Murdoch, Habiba Mohamud, Jeanne Lehman, and Bukola Salami, "A Scoping Review of COVID-19 Online Mis/Disinformation in Black Communities", Journal of Global Health, 12 (2022); Mohsen Bazargan, Sharon Cobb, and Shervin Assari, "Discrimination and Medical Mistrust in a Racially and Ethnically Diverse Sample of California Adults", Annals of Family Medicine, 19, No. 1 (2021): 4-15; Amelia M. Jamison, Sandra Crouse Quinn, and Vicki S. Freimuth, "'You Don't Trust a Government Vaccine': Narratives of Institutional Trust and Influenza Vaccination among African American and White Adults", Social Science & Medicine, 193 (2017), pp. 70-99.

[37] Melissa J. Geist, Jennifer L. Mabry, and Tai G. Hintz. "Combat healthcare untruths with community outreach: Connect with the public where they live to help dispel misinformation and disinformation" American Nurse Journal 19, February, 2024.

[38] Geist, "Combat healthcare untruths with community outreach: Connect with the public where they live to help dispel misinformation and disinformation"