

COVID-19 and information – introduction to the special issue

The editors are delighted to present this special issue of Online Information Review devoted to COVID-19 and information. In early 2020, we invited research articles and reflections on the relationship between the pandemic and information and communication studies to be part of this special issue. In the almost year and a half since the onset of the pandemic, critical and scholarly attention to information and communication in all their manifestations has exploded and are more important than ever. When we began soliciting articles for this issue, we were all trying to make sense of a world where many of our countries were locked down, with universities, schools, businesses and even playgrounds closed. As with so many disasters, the elderly, people of color, women and the poor were disproportionately harmed and public services and infrastructures were stretched to their limits, while many companies and wealthy individuals were able to rake in record profits.

Almost a year later, even as highly effective vaccines against COVID-19 have been developed and deployed, the pandemic continues to throw into high relief the many disparities among people and communities that exist in all societies and across the planet. Since early 2020, we have witnessed vaccine denial, violent protests and inequitable vaccine distribution, with online platforms and social media in the thick of it. In short, COVID-19 has not been just a health crisis; it has precipitated and exacerbated economic, political, technological ones well.

At the same time, we have observed an astonishing mobilization in the development, deployment and adoption of digital applications for remote working, for education, for shopping, in short for most of the areas of life that were disrupted by the pandemic and associated protracted periods of lockdown. This deployment was unprecedented but also uneven and disruptive, with unexpected consequences. Nevertheless, the process presented us with the opportunity to identify some of the possibilities of new information and communication systems to connect, sustain and create communities. It seems like a new Pandora's box has been opened: we have seen the many possibilities and potential of new digital systems coming out of the pandemic, but we have also seen enough to be very concerned about our digital futures: children left behind because their digital connections were inadequate; proctoring systems that discriminated against people with darker skin; misinformation widely distributed unchecked; online bullying and hate speech reaching unprecedented levels and shared across a wide variety of online tools; contact tracing apps violating basic principles of privacy; and AI touted as both a panacea and the source of new evils.

How can we approach the great questions, dilemmas and tensions in the creation, design, deployment and use of new digital systems in the midst of the pandemic? Our responses are not only important for understanding the current situation but also in developing ways for addressing future crises. In this special issue, authors from around the world use a variety of methods to make sense of the pandemic. The focus has been on different kinds of communication, from citizen communication, to institutional, scientific and government communication all competing in an environment that has aptly been described as an "infodemic".

Not surprisingly, academics have turned their attention to understanding how the pandemic impacted their institutions, their teaching and research practices and the response of university management to the crisis. Slagle *et al.* present us with a case study of one university in the southern US and its management of information and communication during the early days of the pandemic and resulting economic crisis. They reflect on lessons for the



“new normal” as higher education globally will face economic contraction, a hardening of managerialism and a testing of institutional resilience.

Crisis communication is of course central to other organizations as well. Syn looks at information dissemination and communication strategies on social media by an organization that was central in health information: the United States Centers for Disease Control (CDC). Syn’s study uses the Facebook API to examine the CDC’s Facebook page and how the public engaged the CDC during the early days of the pandemic (and how disinformation could just as easily result from missteps in government information sources).

Obviously, social media has not been the only platform for information during the pandemic. The astonishing rapidity with which scientific publications and data were reviewed and disseminated and the sharing of information resulted in a large body of the literature that turned out to be crucial in tackling the pandemic (even as the pandemic exposed numerous problems in the scholarly communication process). As Bayram *et al.* write, “The COVID-19 pandemic sparked a remarkable volume of research literature, and scientists are increasingly in need of intelligent tools to cut through the noise and uncover relevant research directions.” They use predictive modeling and Natural Language Processing to develop a semantic graph model that could assist scientists in analyzing the text of a large corpus of publications and understand emerging trends in the literature.

Zeng and Chan also turn their attention to the scholarly and scientific literature by using novel bibliometric and altmetric tools to learn more about misinformation across languages and national contexts. Their work makes some interesting contributions to the role of bibliometrics in understanding misinformation (not just health related) across political contexts. Scientific communication in the context of several Latin America is also examined in the Pamplona da Costa *et al.* article. Using altmetric and citation analysis, the article highlights the somewhat slow and limited response by the scientific communities in these countries and identifies factors contributing to the visibility of relevant articles. The visibility of scientific articles is at the center of Teixeira da Silva’s commentary on retracted or withdrawn preprints. Throughout the pandemic, the scientific community mobilized to produce and publish original research; the urgent need for more information on the virus and responses around it intensified the pressures and did not match the typical publication process for scientific research. This led to a number of non-peer reviewed preprints taken at face value as published work, cited by the media and circulating the public sphere. Teixeira da Silva’s commentary addresses this problem and proposes an ethical framework to be followed by authors.

Duberry and Hamidi take a different tack by using content analysis to examine how newspapers in Europe and the US portrayed the use of artificial intelligence (though not defined) during the early days of the pandemic. They make the argument that the mainstream media portrayal and its optimism or pessimism followed the outbreak of the pandemic and its spread across Europe and the US. This study sets a solid agenda and foundation for following the portrayal of new and emergent technologies more broadly.

As we have learned throughout the last year and a half, COVID-19 has required a collective response and civic engagement. Public media campaigns to stay home, “flatten the curve”, support health care and other front line workers have spoken to these efforts. In their contribution, Waeterloos *et al.* examine how the multiplicity of media sources available contributed to civic participation in tackling the pandemic. They used data from an online survey in Flanders (i.e. the Dutch-speaking part of Belgium) in early May 2020 to examine news/media consumption, political participation and civic engagement among respondents and positive correlations with social integration.

This approach to COVID-19 information and communication “from below” is followed by Fedtke *et al.* in their analysis of one of the first texts to emerge from the lockdowns, Fang Fang’s Wuhan diary. Fedtke *et al.*’s analysis reveals a pattern of sousveillance and solidarity

that has important implications for understanding the social dynamics that emerged during the pandemic. While sousveillance is a citizen tactic to observe, and to an extent, hold accountable, officials, institutions and other citizens, other forms of surveillance emerged during the pandemic. In her article, Lee describes the dataveillance that contact tracing apps made possible, enabling users to observe, record and reflect upon their own biometric data. The use of contact tracing apps for the collection and sharing of such intimate data ultimately contributes to the intensification of processes of datafication, as Lee observes.

A key informational issue throughout the pandemic has been the spread of misinformation. How did citizens, officials and media manage this, will be at the center of research in information and communication in the years to come. Two of the articles in this special issue tackle misinformation: Cifuentes-Faura's commentary develops a set of useful guidelines for addressing what is known as "fake news", highlighting the role of the media and citizens themselves in identifying, verifying and combating the spread of misinformation. One question that Cifuentes-Faura raises in his commentary concerns the susceptibility of people to misinformation. But who exactly is susceptible? Cheng and Luo conducted a survey to find out what people in the US think about misinformation. Using the third person effect model, they report that respondents perceived misinformation as affecting others more than themselves and that this led to support for restrictive and corrective measures against misinformation. At the same time, those who were exposed to misinformation and engaged with it, were more likely to experience negative emotions.

Last but not least, Buchanan and Hunter's commentary focuses on the role of libraries and the dual challenge of shifting toward providing digital services and dealing with systemic failures in terms of racism and cultural diversity in the context of the US. Despite these issues, Buchanan and Hunter emphasize the crucial role of libraries in providing a much needed anchor in the context of informational uncertainties and the depletion of trust in public institutions.

All in all, these articles and commentaries approach the intersection of the pandemic with information and communication from multiple perspectives, identifying tensions, providing critical analysis and suggesting concrete measures for improving and potentially rethinking scientific, mediated, institutional and citizen communication.

Eugenia Siapera and Kalpana Shankar