

Effect of Social Networking on Real-World Events

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The articles in this special issue focus on the emerging effects that social media can have on the real world. Social media has quickly become not just ubiquitous, but also integral to society. A large portion of social media's quick ascent was due to its modeling of real-world relationships, meaning the offline world informed the development and adoption of the online world. Recently, however, it has become apparent that this effect is not a one-way street. For example, the spread of mis- and disinformation, the spread of conspiracy theories, and the rise of extremism can all be attributed, in part, to social media. Most previous research has studied the real world and social media in isolation. However, these worlds are interconnected with each world having a substantial impact and influence on the other. For instance, hateful rhetoric disseminated via social media can encourage physical meetings that can quickly transform rhetoric into violent actions. Overall, it is of paramount importance, as a research community, to devote research resources into understanding and analyzing the exogenic effects of social media to the real world with the goal to further improve our lives.

Social media has firmly established itself as core societal infrastructure. It has become crucial to our daily lives, allowing us to maintain relationships and working collaborations over vast distances, build scalable social movements, and share our lives with others. Social media has not, however, been a panacea. On the contrary, social media has enabled real-world harm in unforeseen ways. While more "personal" concerns like cyberbullying and toxic behavior have been studied for quite some time, it was not until social media began being used in mis- and disinformation campaigns and mass events like the January 6th storming of the US Capitol and the COVID-19 pandemic that society felt the full effects of exploiting social media for harm.

Over the past decade, and accurately since 2016, social media has been used to organize protests. While this has clear benefits for burgeoning social

movements, it has also been exploited by nefarious actors, like state-sponsored "trolls" and violent extremists. This has left government agencies in a position of playing catch up in a world where hostile actors never have to set foot within their jurisdiction. While state-sponsored Russian trolls pioneered disruptive techniques like attempting to schedule opposing protests to happen in close proximity to each other, less deceptive use of social media by extremist groups themselves has resulted in numerous deaths across the world.

The COVID-19 pandemic has further crystalized social media's role in spreading harmful disinformation that has not only directly caused harm and lead to violence committed by those that are taken in by conspiracies, but also indirectly caused deaths by thwarting public health mitigation efforts. At the beginning of the pandemic, COVID was often dismissed as "just a flu" or even a hoax. As the pandemic progressed, misinformation related to cures (e.g., Hydroxychloroquine, Ivermectin, and even bleach) resulted in deaths. Eventually, COVID conspiracies about vaccines (e.g., that they are a vector for 5G microchips) developed and were further incorporated

into super conspiracies like QAnon, whose adherents have staged worldwide protests.

The research community has been quick to focus on these topics, but unfortunately, most empirical studies have been oriented toward the US or Western Europe. In large part, this makes sense from the perspective of research: data about US and Western Europe is abundant, and a meaningful chunk of research dollars and researchers themselves are invested in those socio-political regions. But, the scientific community is well aware of this bias and the gaps it leaves in our understanding of the problem domain and efforts to mitigate it. To this end, we feature papers that focus on regions of the world that are generally underrepresented in the existing body of research. In addition to being meaningful contributions in and of themselves, these papers are significant in filling a gap in our knowledge that affects hundreds of millions of people.

The first article unpacks COVID-related misinformation in Pakistan. Pakistan is a low-income country with a population not too far off from the US, and much larger than any individual country in Western Europe, but one that we also lack data about, especially when it comes to emerging problems like mis- and disinformation. The results from this study indicate there are commonalities between what is seen in the US and Western Europe with respect to COVID misinformation (e.g., equating COVID with the common flu for low income- and education-level respondents and belief that the government was exaggerating case numbers) but also meaningfully different (e.g., belief that the government was exaggerating case numbers to acquire foreign funding).

The second article explores how social media analysis can be used to glean insights into threatening trends.

Using a system developed in collaboration with the Colombian Army, this article demonstrates how social media analysis can be applied to characterize a national crisis. In 2021, Twitter was, as has become common, used to drive discussion and organize protests, some of which turned violent. From the perspective of real-world harm, this article provides a potential path forward and an empirical use case of data science focused on the particulars of the Global South.

The simple fact of the matter is that the Internet has been successful in shrinking the world. Although there are clearly differences, harmful effects of social media on the real world exist across socio-economic boundaries. While worrying at a micro level, the shrunken world means that we must greatly increase our focus on relatively understudied regions of the world. If a few Macedonian misinformation websites can affect the US elections, then surely Colombia (with a population greater than Spain) and Pakistan (with a population greater than Russia) have very real effects on the world. Overall, this special issue demonstrates how our understanding of harms enabled by social media is still in its infancy, and makes progress towards a better understanding of the underserved, but crucially important Global South role in the modern information ecosystem.

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