

Chapter 2: Conducting Research During a Pandemic

When the COVID-19 outbreak began, scientists were unsure of how the disease spread, how to protect against it, what its symptoms were, and which members of our population were most vulnerable. By making observations in community settings, labs, and hospitals, experts developed hypotheses, which lead to theories they could test. One theory was that sunlight might slow the spread of the disease (sparking the interest of [US president Donald Trump](#), much to the chagrin of his medical advisors). This [proved false](#) upon testing. Another theory posited that respiratory droplets were a key mode of transmission and that being outside (instead of enclosed spaces) and wearing masks (which was not, in many countries, an initial recommendation) significantly diminished transmission of the virus. This [proved true](#). We experienced the scientific method, with its starts, stops, turns, and twists, in real time.

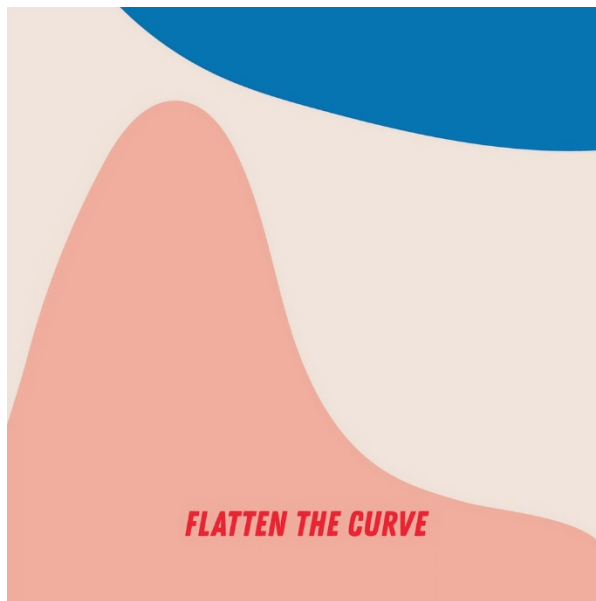


Illustration by Lauren Mitchell on Unsplash

Those early days included a deluge of statistics. Numbers of cases. Numbers of deaths. Numbers of hospital emergency room beds available in individual cities. In media, there was the omnipresent exponential growth curve we hoped to “flatten” through social distancing and rigorous hand washing. While important, the limitations of these statistics quickly became clear. [Asymptomatic people were not represented](#). There were too few tests, so [doctors chose not to test some patients](#) who seemed to obviously have the disease. And then there was the fact that, as of June, the main coronavirus test still produced [false negatives 20% of the time](#). We all learned to appreciate the importance of statistics, but also to share sociologists’ healthy scepticism of them!

As the virus spread, social scientists used a wide range of research types and methodologies to study

its effects on society. They examined the [rise of social media conspiracy theories](#); [who responds best in times of crisis and why](#); [how the public feels and behaves during a pandemic](#); and [many other topics](#), including transmission in prisons and how children and seniors dealt with isolation. This vital [work](#) will continue long after the pandemic is over.

As you read the chapter, consider the following questions:

- In the case of the global pandemic, many sociologists focused on topics that either affected them personally or were in an area where they had specific expertise from prior research. How do you think having an insider perspective may have affected their work?
- If you wanted to conduct a sociological study on the impacts of COVID-19 on different geographic locations/neighbourhoods in your town or city, would you use a quantitative research method, a qualitative research method, or mixed-methods approach? What role would narratives play in your study, if any? Explain your answer.
- What might you choose as a topic for a content analysis or discourse analysis related to COVID-19, and what sort of information do you think your study would impart? (For example, you might choose to study the signs that businesses put on their doors when they closed. A content analysis might focus on common information that was shared in these messages. A discourse analysis might give information on how businesses wanted to represent themselves in a difficult time: for example, with humour, regret, hope, despair, or even anger at having been asked to close.)
- By April 2020, it became clear that many of the countries having the most success at containing the crisis—Taiwan, New Zealand, Germany, Denmark, Finland, Iceland, and Norway—had something in common: [their leaders were women](#). Articles about what made female leaders particularly successful at managing the crisis proliferated on the internet and in social media. In this case, do you think the correlation people identified—between successful management of the virus and women in positions of leadership—indicated causation? In other words, do you think these countries were successful in managing the virus because they had women in charge? Or do you think other factors were involved? Explain.



Additional online resources

This article describes the scientific method and process required to produce a vaccine for COVID-19.

- Chung, E. (2020, May 25). [Here's what needs to happen before we can all get vaccinated for COVID-19](#). CBC News.

Using the example of a study on the gendered impacts of COVID-19 in Columbia, this article makes the case for why qualitative data is important to contextualize quantitative data.

- Cookson, T. P., & Fuentes, L. (2020). [Qualitative data is key to ensuring no one gets left behind by the coronavirus response](#). Reliefweb.

This radio show episode illustrates some of the challenges with coming up with definitive scientific answers during an ongoing crisis. While the show focuses on scientists working on understanding the virus and disease, how might similar issues affect sociologists studying COVID-19?

- Quirks & Quarks. (2020, May 15). [COVID-19 and scientific confusion — What we don't know and why we don't know it](#). CBC Radio.

This article points to the flaws in coronavirus-related statistics such as job losses and economic impact. How might these flaws particularly affect sociologists trying to understand the societal impacts of the pandemic?

- Thompson, D. (2020, March 26). [All the coronavirus statistics are flawed](#). The Atlantic.