

VIEWPOINT

Rethinking editorial management and productivity in the COVID-19 pandemic

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Abstract

The indirect costs of the COVID-19 pandemic, specifically extended work absenteeism and possible loss of productivity, are discussed focusing on the research community and its publishing. We suggest that the community should learn strategic and innovative decision-making as well as crisis management from business management to think ahead, especially about working effectively and being productive in times of crisis. The main challenges are:

- 1) communicating scientific and credible information about the pandemic,
- 2) focusing on being productive to provide some certainty, and
- 3) adopting a new mindset and being open to unexpected opportunities.

Keywords: COVID-19; pandemic; loss of productivity; editorial management

When the first pandemic, known as the swine flu or H1N1 pandemic, of the twenty-first century struck in 2009/10, it claimed nearly 19,000 lives in 214 countries.¹ Yet, it did not turn the world upside down as the second pandemic of the century did, namely the 2019 coronavirus disease (COVID-19). Many of the responses to COVID-19 today are unprecedented: lock-downs in major cities and restrictions or outright ban on travel imposed by governments, social distancing, schools and colleges shut down and moved online, and many companies temporarily closed or having employees work from home. The coronavirus outbreak, which is estimated to cost the global economy at least 1 trillion dollars,² has created insoluble dilemmas, such as health-care workers in Italy having to leave the very old to die³ or the global polio vaccination campaigns suspended for the first time in three decades.⁴ In the light of this, it is worthwhile to ask how the scientific community has been affected: What is the decision-making process and what are the solutions to the problems of managing projects and personnel during the pandemic?

Patients carrying the influenza virus may not be necessarily tested or diagnosed correctly, which makes it difficult to estimate the economic impact of the influenza in general.⁵ In fact,

the global economic impact of the H1N1 pandemic remains unknown,⁶ compounded by the fact that it occurred soon after the financial crisis of 2007/08. Nonetheless, there are direct and indirect economic costs that researchers have tried to break down. In particular, whereas health-care costs constitute the direct economic cost of a pandemic, work absenteeism and loss of productivity are often counted as indirect costs. As can be seen in Table 1, the estimated impact of the COVID-19 pandemic is already more severe than that of the H1N1 pandemic despite the shorter period of assessment. Notably, the estimated rates of workplace absenteeism in COVID-19 are lower because of the availability of the option of working remotely, which was rare in 2009. Researchers have noted that employees, especially in non-healthcare sectors, take more time off owing to the pandemic virus strain than is typical for seasonal influenza.⁷ A large number of these studies use data from the 2009 H1N1 pandemic or general inter-pandemic influenzas, both of which are known to affect children more, which means greater absenteeism in school and more work hours lost for parents of affected children.⁸ Additionally, a decline in productivity is noted even after employees return to work because it takes time to attain the pre-pandemic level of performance.^{5,9}

Table 1. Impacts of 2009 H1N1 pandemic and COVID-19 pandemic compared (incomplete data, aggregated by authors from multiple sources^{1,7,10-15})

Variable	H1N1 pandemic	COVID-19 (As of 22 Sept 2020)
Time	Jan 2009 – Aug 2010	Dec 2019 – Sept 2020
Number of affected countries	214	188
Number of confirmed cases	491,382	31,328,661
Deaths	18,449	964,844
Global GDP	-2.12% (May 2009) ^{12*}	-4.36% (May 2020) ¹²
Rate of workplace absenteeism	13.4% (May 2009 – Apr. 2010 in Canada) ^{7*}	2.4% (Jan – Apr 2020 in USA) ¹³
Rate of unemployment	9.1% (2009–2010 in USA) ^{15*}	10.2% (July 2020 in USA) ¹⁴
*The situation in 2009 was also affected by the financial crisis of 2007/08; therefore, the true impact of the 2009 H1N1 pandemic is yet open to discussion.		

If seasonal influenza and the last swine pandemic have already taken such a heavy toll, one can only imagine the devastating costs of the COVID-19 pandemic. In academia, with the lock-down and researchers working from home,¹⁶ many research projects are in limbo, manuscripts are stuck as the backlog in journals mounts or are forgotten by reviewers. The productivity of scientists is conventionally measured by their publications, participation in conferences, grants obtained, and public engagement, and the global uncertainty created by COVID-19 has disrupted many of these activities. Grant reviews are likely being stopped, large conferences postponed or cancelled, and peer reviews delayed either because the journals are short of staff or because reviewers need more time than usual.

As the research process has changed drastically within just three months of this pandemic, editors would do well to learn from the business community. First, business management literature has a wealth of studies on decision-making and the management of uncertainty in uncertain times. What we are looking at is a crisis (from Latinized Greek *krisis*, meaning a critical point or time for decision-making). In business, a crisis calls for new decisions, referred to as 'strategic choices',¹⁷ which may lead to fundamental structural changes.¹⁸ As the survival of a business in a crisis hinges on the early discovery of, and adaptation to, unexplored market terrains, the existing business structure is called into question, opening up opportunities for innovative strategic decision-making.¹⁸

Adopting this line of thinking during the pandemic, editors should be willing to embrace new forms of working, whether they be telecommuting, taking on more tasks alone, or working irregular hours at home. As the conventional academic setting has changed, one could even call into question the existing structure of academic publishing.

In particular, researchers may not necessarily have to wait for peer reviews before publishing their work, thanks to the availability of preprint servers. There were nearly 900 papers, preprints, and preliminary reports on the coronavirus disease between late December 2019 and 12 March 2020.¹⁹ Meanwhile, it should be noted that even prestigious journals are also under tremendous pressure and probably letting in errors more frequently.²⁰ Clearly, during COVID-19, researchers can actively turn to different platforms to claim priority for their work and relieve some pressure on editors and reviewers.

Second, the business community has much to offer on managing organizational crises.²¹ Researchers have highlighted the importance of early planning and preparation in handling a crisis. More important, in this age of computational entrepreneurship, technological complexity, and multinational operations, many organizations have called for aligning crisis management planning with business strategy from inception.^{21,22} Specifically, it is only by understanding how the process of learning is driven by culture, communications, structures, and reward systems that organizations can turn knowledge into changed behaviour.²²

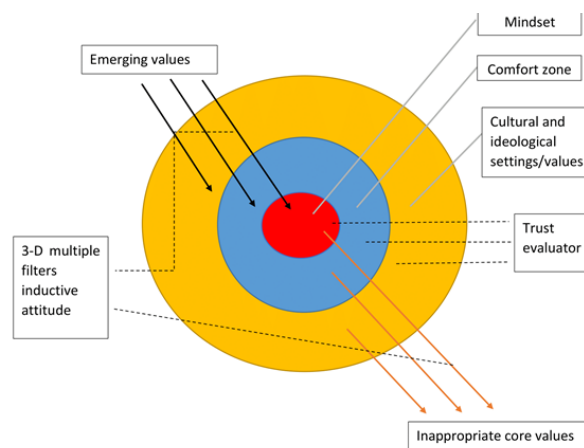


Figure 1. The 'mindsponge' mechanism, recreated from Vuong and Napier (2015)²³

Having said that, we want to introduce two other concepts in drawing the connection between the business world and the academic world, namely the 'mindsponge' principle²³ and the 'serendipity' principle.²⁴ The mindsponge mechanism (Figure 1), describes flexibility in thinking, working, and adapting to new and strange sets of values, whereas serendipity emphasizes one's ability to track and act on opportunities others may miss. For instance, Dr Alexander Fleming stumbled upon the fungus *Penicillium notatum* while cleaning Petri dishes.²⁵ Both the concepts complement the systems approach proposed by business management scholars in the sense that we, editors, need to re-examine our drivers for publishing in these uncertain times. Are we working merely to get things done or to produce meaningful and memorable products? Are we flexible enough in our thinking and adaptation to the new normal? There are no simple answers, because each task is carried out in a different environment and culture. Nonetheless, learning from crises requires being more communicative, more mindful, more strategizing, and more counterintuitive.

During the COVID-19 pandemic, information overload, digital outrage, and anxiety are all too familiar. However, this is precisely why society needs editors to stay positive, focused, and productive during this crisis. First, during any crisis, it is all too easy to forget the important scientific discoveries that are being made now: staying sane during these times also means that editors need to spread the good news about these breakthroughs and continue to help researchers to progress towards solutions to their own problems. Second, being able to stay focused and productive might be the only source of certainty for editors right now. Many tasks can be undertaken from home, and we must think ahead and proactively. More than ever, the academic community needs preparedness and creativity. Understandably, everyone must juggle multiple tasks including care of children and the elderly, housework, and demands of the job. Yet, adapting one's schedule and working style to a new reality should be viewed as a welcome challenge. One must settle in one's own corner of the world to be steady when confronted with a tumultuous world once the pandemic is over.

Competing interests

The authors declare that there is no conflict of interest.

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