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COVID-19: Large-scale collective action, government intervention, and the importance of trust

Niklas Harring, Sverker C. Jagers, Åsa Löfgren

Centre for Collective Action Research, Department of Political Science, University of Gothenburg, Sweden

Centre for Collective Action Research, Department of Economics, University of Gothenburg, Sweden

In this article we apply a large-scale collective action framework on the spread of the COVID-19 virus. We compare the pandemic with other large-scale collective action problems – such as climate change, antimicrobial resistance and biodiversity loss – which are identified by the number of actors involved (the more actors, the larger the scale); the problem’s complexity; and the spatial and temporal distance between the actors causing and being affected by the problem. The greater the extent of these characteristics, the larger the scale of the collective action problem and the smaller the probability of spontaneous collective action. We argue that by unpacking the social dilemma logic underlying the spread of the COVID-19 virus, we can better understand the great variation in policy responses worldwide, e.g., why some countries are adopting harsher policies and enforcing them, while others tend to rely more on recommendations. We claim that one key factor is trust and, more precisely, reciprocal trust, both horizontally among people and also vertically between people and their governments – and vice versa. Citizens must trust that the recommendations they receive from the public authorities are correct, that these are in their (or the collective’s) best interest, and that most others will follow the recommendations. Simultaneously, government authorities must trust that their citizens will transform the recommendations into collective action. When this situation is present, we argue that governments enjoy a large degree of collective action capital, which potentially open up for a wider palette of policy options.

1. Introduction

COVID-19 spreads rapidly through human interaction, and societies all over the world are trying to limit the spread to avoid catastrophic consequences. A striking feature widely discussed is the variation in governments’ responses to the pandemic. Regulations and restrictions vary substantially in degrees of coerciveness and scope (Hale et al., 2020). Political commentators have been intrigued by the intrusive policies introduced in many Western democracies (Cohen & Kupferschmidt, 2020) but also surprised by what is described as the “light touch” Swedish approach (Henley, 2020) and upset by more repressive police action, such as in Kenya (Olewe, 2020). To understand the variation in responses, we argue that it can help to unpack the social dilemma logic underlying the spread of the virus and study the role of trust, both horizontally among people and vertically between people and their governments.

To control the spread of the COVID-19 virus, the involved actors (i.e., people all over the world) have to make sacrifices for the collective good. The corona pandemic is thus a typical collective action problem, or social dilemma—that is, a situation in which the group members have an incentive to choose to pursue individual gain, rather than behave in the whole group’s best long-term interest, thus resulting in a collective loss (Dawes, 1980). Sometimes the needed sacrifices to cope with COVID-19 are demanding (e.g., individuals have to isolate). According to the social dilemma logic, most people are not ready to make such sacrifices, since they are unwilling to accept personal costs for benefits that are mainly collective.

Nonetheless, we see examples during this crisis where people are prepared to cooperate and act altruistically (Lynch & Khoo, 2020), which is also backed by research, both on real-world problems and in laboratory settings. Individuals do not typically act as pure rational egoists in line with the zero-contribution hypothesis—the very epicenter of social dilemma theory (Ostrom, 2000). In many situations, actors are prepared to cooperate if others coop-
erate too, known as conditional cooperation. Simply put, actors tend to reciprocate other actors’ actions (Gächter & Herrmann, 2009). To understand why this is the case, researchers have identified a number of facilitators that promote cooperation among individuals in social dilemma situations, such as the presence of communication between actors (Jagers et al., 2020). However, an important factor to consider, not the least to understand the responses to the COVID-19 pandemic, is scale. Many of the facilitators are weakened the larger the scale of the problem.

2. Large-scale collective action problems

A large-scale collective action problem can be identified by the following characteristics: the large number of actors involved (the more actors, the larger the scale); the problem’s complexity; and the spatial and temporal distance between the actors causing and being affected by the problem (Jagers et al., 2020). The greater the extent of these characteristics, the larger the scale of the collective action problem and the smaller the probability of spontaneous collective action. The potential for a facilitator, such as direct communication, to catalyze collective action is weakened when more actors are involved and the spatial or temporal distance between these actors is large. Fig. 1 illustrates how COVID-19 and three other difficult collective action problems facing the present generations—climate change, biodiversity loss, and antimicrobial resistance—load on all these central characteristics, but to different degrees.

These characteristics, in turn, give rise to stressors that work against the prospects for collective action, including anonymity (a large number of people and actors are involved, scattered over the world and sometimes over generations); lack of accountability (the larger the scale, the more difficult it is to hold individual actors accountable for their actions); heterogeneity (the actors might not share the same culture or understanding of the problem); risk and uncertainty (the actors have difficulty knowing and foreseeing the consequences of a lack of cooperation); and emotional and cognitive limitations (the actors have a harder time relating to people with whom they have no personal relations) (Jagers et al., 2020).

Clearly, the COVID-19 pandemic shares many important features of a large-scale collective action problem. The pandemic involves a particularly large number of actors, both those contributing to the problem and those being affected by it. With global spread of the virus, the spatial distance is large. Yet in contrast to many other large-scale collective action problems, such as antimicrobial resistance, biodiversity loss, or climate change—which in the end might have far worse consequences in terms of human deaths and suffering—the COVID-19 pandemic is an immediate crisis. Thus the temporal distance between action and effect is very small (see Fig. 1). This is likely a key explanation for the prompt and forceful actions we have seen from governments dealing with COVID-19. It is the incumbent governments that will suffer the
consequences of inaction or failed actions in response to the pandemic. When it comes to complexity, it is difficult for governments to know beforehand whether collective action will be achieved, given the uncertainty about how people will respond to recommendations and restrictions. Even though there is a lot more to learn concerning the spread of COVID-19, the problem is less complex than climate change, as greenhouse gas emissions are diffuse, temporally uncertain, and a consequence of almost all decisions regarding the production and consumption of goods.

3. Third-party intervention to achieve collective action

Large-scale collective action problems generate a demand for intervention by third parties (which in most cases will be governments through public authorities) with power to enforce decisions that will either weaken the collective stressors or reinforce the facilitators, or to potentially introduce policies that will alter the dilemma situation altogether. For example, it can be costly for parents to stay home with their sick children, as they might risk losing their jobs; therefore, parents may send their children to school even when they have mild symptoms and, furthermore, even if the parents know their children might spread the virus. However, if schools are closed, this dilemma is no longer present. While governments vary in their responses and degrees of coerciveness, governments around the globe have imposed curfews or restrictions on social interactions (Cohen & Kupferschmidt, 2020; Hale et al., 2020). Yet the role of the state as a promoter of facilitators potentially fostering collective action on a larger scale may be just as important. One key factor to understanding the variation in the demand for such interventions is trust.

In regard to COVID-19, an intriguing observation is that governments have been able to impose, and find public support for, restrictive policies even in countries where trust in government is low (Freeman et al., 2020; Sabat et al., 2020). A similar pattern has also been found in previous research on public demand for other types of regulations (Aghion et al., 2010). A suggested mechanism is that people in some countries not only have low trust in their governments but also low trust in other actors, generating a demand for intervention. Generally, people disapprove when other actors deceive, or actively avoid contributing their share to the collective good, and are typically even willing to accept personal costs in order to punish the deceivers (Fehr & Gächter, 2002) and demand stricter regulation, even from governments they do not trust (Aghion et al., 2010).

Various policies can be implemented to overcome collective action problems. Yet choosing to comply with any such policy is, in a sense, a collective action problem in itself. The regulations and recommendations will have no effect if the citizens abstain from complying. If the authorities do not trust the citizens and people do not trust each other, countries have to rely on hard monitoring and enforcement of regulations (e.g., armed forces enforcing the curfew). In countries where generalized trust is high, governments can instead rely on policies where there is potentially a large risk of defection (e.g., paid sick days). People are less willing to accept the latter form of policies if they do not trust others and instead believe that others are cheaters (e.g., that others will potentially use the paid sick days even though they are not sick) (cf. Charron, Harring, & Lapuente, 2020; Rothstein, Samanini, & Teorell, 2012). Similarly, “light touch” policies, such as recommending social distancing and hand washing, urging people not to visit the elderly, and asking that they limit their travel, presuppose a reciprocal trust relationship to be effective. Citizens must trust that the recommendations they receive from the public authorities are correct, that these are in their (or the collective’s) best interest, and that most others will follow the recommendations. Simultaneously, government authorities must trust that their citizens will transform the recommendations into collective action.

4. Policy implications and concluding remarks

A multiplicity of factors explain why different countries and governments have adopted varied strategies to combat COVID-19. Since reliable data are not yet available, it is difficult to specify exactly what factors have determined the different governmental responses to the COVID-19 pandemic. Also, policy advice will always be based on uncertainties and normative understandings, and even with available data, scientific models may not be able to adequately predict future implications of policies in this type of decision context (Ravetz, 1999; Saltelli et al., 2020). However, some policy insights can be gained by understanding COVID-19 as a large-scale collective problem and recognizing that policy compliance itself can be viewed as a form of collective action problem.

Well-functioning political institutions can foster trust and social norms that in turn can facilitate cooperation, and with what we call high “collective action capital,” states have a wider range of tools in their policy toolbox than just restrictions and militarization. This is important when some behaviors are extremely hard to regulate or monitor (e.g., washing hands). Furthermore, overly restrictive policies can backfire or crowd out existing norms (Gneezy et al., 2011). In addition, if people start breaking the rules, there is a high risk that increasingly harsher policies enacted in response will have negative effects on the levels of trust, thus becoming a vicious circle, as trust is hard to build but rather easy to ruin. Hence governments need to deal with this crisis by being responsive to the demands of different groups in society. There are already indications of polarization on the issue of COVID-19 response in some countries (Lempinen, 2020). Learning from climate policy, we know that polarization can undermine the potential for policy intervention (McCright & Dunlap, 2011).

Future research will help us gain more knowledge about why some countries are handling the COVID-19 pandemic more successfully than others. Besides demographic explanations (a country’s age distribution), one also must consider other potential explanatory variables, such as institutional (e.g., health care capacity) and cultural parameters (e.g., intergenerational interaction) (Walker et al., 2020). Using the knowledge from collective action research, we offer a plausible understanding of why some countries have adopted and are enforcing harsh policies, while others are relying primarily on recommendations. As we see it, part of the answer is trust. This is because reciprocal trust, both horizontally among people and also vertically between governments and citizens, is a key component in building collective action capital. Such capital allows for a wider palette of policies to combat COVID-19.

CRediT authorship contribution statement

Niklas Harring: Conceptualization, Writing - original draft. Sverker C. Jagers: Conceptualization, Writing - original draft. Åsa Löfgren: Conceptualization, Writing - original draft.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.
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References

Aghion, P., Algan, Y., Cahuc, P., & Shleifer, A. (2010). Regulation and distrust. Quarterly Journal of Economics, 125(3), 1015–1049.

Charron, N., Harring, N., & Lapuente, V. (2020). Trust, regulation, and redistribution: Why some governments overregulate and under-re distribute. Regulation & Governance, https://doi.org/10.1111/rego.12277.

Cohen, J., & Kupferschmidt, K. (2020). Mass testing, school closings, lockdowns: Countries pick tactics in “war” against coronavirus. Science (Accessed August 17, 2020).

Dawes, R. M. (1980). Social dilemmas. Annual Review of Psychology, 31(1), 169–193.

Fehr, E., & Gächter, S. (2002). Altruistic punishment in humans. Nature, 415(6868), 137–140.

Freeman, A. L. J., Schneider, C. R., Dryhurst, S., Kerr, J., Recchia, G., van der Bles, A. M., & Linden, S. V. D. (2020). Risk perception of COVID-19/coronavirus. August 1, 2020. <https://doi.org/10.17605/OSF.IO/JNU76>.

Gächter, S., & Herrmann, B. (2009). Reciprocity, culture and human cooperation: Previous insights and a new cross-cultural experiment. Philosophical Transactions of the Royal Society B: Biological Sciences, 364(1518), 791–806.

Gneezy, U., Meier, S., & Rey-Biel, P. (2011). When and why incentives (don’t) work to modify behavior. Journal of Economic Perspectives, 25(4), 191–210.

Hale, T., Angrist, N., Kira, B., Petherick, A., Phillips, T., & Webster, S. (2020). Variation in government responses to COVID-19. Version 6.0. Blavatnik School of Government Working Paper. May 25, 2020. Retrieved from <http://www.bsg.ox.ac.uk/covidtracker> (Accessed August 17, 2020).

Henley, J. (2020). Critics question Swedish approach as coronavirus death toll reaches 1,000. Guardian, April 15, 2020. Retrieved from <https://www.theguardian.com/world/2020/apr/15/sweden-coronavirus-death-toll-reaches-1000> (Accessed August 17, 2020).

Jagers, S. C., Harring, N., Löfgren, Å., Sjöstedt, F., Alpizar, F., Brülde, B., Langlet, D., Nilsson, A., Almroth, B. C., Dupont, S., & Steffen, W. (2020). On the preconditions for large-scale collective action. Ambio, 49, 1282–1296.

Leminen, Edward. (2020). Bitter partisan divide shapes California opinion on COVID-19, poll finds. Berkeley News, May 1, 2020. Retrieved from <https://news.berkeley.edu/2020/05/01/bitter-partisan-divide-shapes-california-opinions-on-covid-19-poll-finds/> (Accessed August 17, 2020).

Lynch, P. & Khoo, A. (2020). Coronavirus: Volunteers flock to join community support groups. BBC News, March 22, 2020. Retrieved from <https://www.bbc.com/news/uk-england-51978388> (Accessed August 17, 2020).

McCright, A. M., & Dunlap, R. E. (2011). The politicization of climate change and polarization in the American public’s views of global warming, 2001–2010. Sociological Quarterly, 52(2), 155–194.

Olewe, D. (2020). Coronavirus in Africa: Emergency laws vs individual rights. BBC News, April 9, 2020. Retrieved from <https://www.bbc.com/news/world-africa-52214740> (Accessed August 17, 2020).

Ostrom, E. (2000). Collective action and the evolution of social norms. Journal of Economic Perspectives, 14(3), 137–158.

Ravetz, J. R. (1999). What is post-normal science. Futures, 31, 647–653.

Rothstein, Bo, Samanni, Marcus, & Teorell, Jan (2012). Explaining the welfare state: power resources vs. the Quality of Government.. European Political Science Review, 4(1), 1–28. https://doi.org/10.1017/S1755773911000051.

Saltelli, A., Bammer, G., Bruno, I., Charters, E., Di Fiore, M., Didier, E., ... Vineis, P. (2020). Five ways to ensure that models serve society: A manifesto. Nature, 582, 482–484. https://doi.org/10.1038/d41586-020-01812-9.

Walker, P. G. T., Whittaker, C., Watson, O. J., Baguelin, M., Winskill, P., Hamlet, A., ... Ghan, A. C. (2020). The impact of COVID-19 and strategies for mitigation and suppression in low- and middle-income countries. Science, 369(6502), 413. https://doi.org/10.1126/science.abc0035.