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The making of a Swedish strategy: How organizational culture shaped the Public Health Agency's pandemic response



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ABSTRACT

Several suggestions have been made as to why Sweden's approach to managing the COVID-19 pandemic came to rely on a strategy based on voluntary measures. Two of the most prominent explanations for why the country chose a different strategy than many other countries have focused on micro- and macro-level factors, explaining the strategy either in terms of the psychologies of prominent actors or by pointing to particularities in Swedish constitutional law. Supported by a qualitative analysis using interviews and text analysis, we argue that the Swedish strategy cannot be understood without paying attention to the meso-level and the organizations that produced the strategy. Moreover, we argue that to understand why one of the central organizations in Swedish pandemic management, the Public Health Agency, came to favor certain interventions, one must investigate the culture of production inside the organization and how it created precedents that led the Agency to approach pandemic management with a focus on balancing current and future health risks.

1. Introduction

Medical science, experts, and evidence have been at the forefront of the COVID-19 pandemic as governments have grappled with how to best manage a rapidly spreading viral disease. In Sweden, the government and the Public Health Agency opted against the lockdown policies introduced by many other governments (Boin et al., 2021). Instead, Sweden pursued a strategy based on recommendations and voluntary measures - an approach that some have dubbed a 'soft lockdown' (Giritli Nygren & Olofsson, 2020). For this, Sweden received a lot of attention from international politicians, press, and academics, and many tried to explain why a country allegedly famed for having introduced hard and coercive means to manage historical infectious epidemics (see, Baldwin, 2021) suddenly went for a soft or - as some alleged - a 'laissez faire' approach (Perlstein & Verboord, 2021; Svensson & Rodriguez, 2021, see also; Irwin, 2020). In this paper, we investigate the origins of Sweden's pandemic strategy within the Swedish Public Health Agency. We first situate our inquiry within the broader literature on pandemic governance during the COVID-19 pandemic and review two prominent explanations for why the Swedish strategy assumed the shape it did: Swedish experts' idiosyncrasies and the country's legal frameworks. Next, we go beyond these two explanations by investigating how the Public Health Agency's understanding of the pandemic and its mission to manage it shaped Sweden's pandemic response. Specifically, we show how the organizational 'culture of production' (Vaughan, 1996) within the Agency shaped the Swedish strategy in profound ways. We argue that the Public Health Agency's approach to managing COVID-19 in Sweden cannot be reduced to psychological factors or legal frameworks; instead, understanding the Swedish strategy requires paying attention to meso-level organizational factors and to investigate the institutional beliefs that shape and inform decision making processes within organizations.

1.1. Previous research on Sweden's pandemic management

Since the early days of the COVID-19 pandemic, researchers have been engaged in a continuous vivisection of the virus and the policies put in place to manage it. In the social sciences, work has in part focused on explaining the origins of different national strategies for managing the pandemic; and this work has produced two prevalent explanations for how national strategies come to be. According to these accounts, strategies (and their outcomes) can be explained either by reference to the individual actors involved, that is, to politicians and the expert groups advising them (Bylund & Packard, 2021, see also Bækkeskov, 2016 for a similar argument regarding the 2009 H1N1 pandemic) or by looking to

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comparative differences in the national legal frameworks and politico-legal traditions (Hirschfeldt & Petersson, 2020; Jonung, 2020; Kuhlmann et al., 2021; Petridou, 2020; Wenander, 2021; Yan et al., 2020). Nevertheless, while these two perspectives offer insights into why different countries adopted different strategies in response to the pandemic, previous research on crises, disasters, and organizations often contradicts important tenets of individual or law focused explanations. For example, explanations placing the origin of the Swedish strategy within the minds of individual actors fail to account for the organizational context in which the strategy came to be (see, e.g., Emerson, 1983). That is, while the national strategies employed in managing the pandemic in many respects have been explained in reference to the psychologies and personalities of the individuals who have come to personalize national strategies, such explanations fail to account for, first, the role of tacit regimes of knowledge that inform experts when they approach epidemiological crises (Lakoff, 2017), second, that bureaucratic and political organizations tend to act as the 'final arbiters of hazards', not individuals (Clarke, 1989, p. 178), and third, that while individuals may be the focal point of controversy in a crisis, 'routine nonconformity, mistake, misconduct, and disaster' are 'systematic products of complex structures and processes' (Vaughan, 1999a, p. 298).

Likewise do law-focused institutionalist accounts fail to exhaustively explain why countries adopt different strategies. For example, several studies of the Swedish strategy have sought to explain the strategy by pointing to Swedish constitutional law (see, e.g., Hirschfeldt & Petersson, 2020; Jonung, 2020). However, while part of the differences between, e.g., the French, German, and Swedish strategies may be explained by their different legal contexts (Kuhlmann et al., 2021), the same explanation cannot sufficiently explain differences between more similar contexts, e.g., between Sweden and its Nordic neighbors (Laage-Thomsen & Frandsen, 2022). Moreover, when relying on the law to explain differences in national strategies, institutionalist explanations often underestimate the flexibility of institutions, both in terms of their interpretation and their use of regulation. For example, the constitutional protection of governmental agencies from political interventions, that have been suggested as the reason for why the Swedish strategy came to be (Lindblad et al., 2021), is not without limits. After all, the government is still able to influence agencies and their work, e.g., by reducing an agency's funding in the next budget cycle or assigning a different director general to lead the agency (Pierre, 2020). In short, while macro level institutions play important roles in shaping what actions and interactions that are possible, regulatory fixity determined by the broader legal framework cannot on its own explain why countries chose different strategies for managing the COVID-19 pandemic. After all, laws can be adapted, stretched, or replaced - especially in a prolonged crisis such as this pandemic, as it was in Sweden when new pandemic legislation was introduced, first in April 2020, and later in January 2021 (Olofsson & Vilhelmsson 2022). Instead, as the continuation of this paper will demonstrate, important factors behind macro-level outcomes such as national policies are to be found in meso-level mechanisms, that is, inside the organizations that shape policies and strategies.

2. Analytical perspectives: crisis scholarship

Sociologists have shown how the *culture of production* within an organization has both internal and external ramifications for how organizations manage crises. According to Vaughan's definition (1998, p. 39), cultures of production are 'institutionalized belief systems that [shape] interpretations, meaning, and actions at the local level.' Being institutionalized, cultures of production shape organizational practices over time (Fine, 2006) and 'have powerful and continuous effects on how information is created, gathered, processed, exchanged, recorded, stored, and used' within and between organizations (Vaughan, 1999b, p. 931). Sociologists and science and technology scholars have furthermore outlined how organizations contribute to organizing crises and disasters (Clarke, 1989; Horowitz, 2020; Vaughan, 1996). While crises may appear

to bring forth a chaotic, howling 'night-side of reality' that threatens to swallow up the perceived orderliness of everyday life (Berger & Luckmann, 1991, p. 116), they only seem to unravel social organization (Jasanoff et al., 2021). That is, crises do not constitute a break away from social organization but are themselves socially organized.

Vaughan's (1996) work on the Challenger disaster is a classic that has inspired countless studies, e.g., in the field of organizational sociology. In her work on the process that led to the explosion of the Challenger, Vaughan offers an example of how organizations shape crises, and the role organizational culture plays in this process. Focusing on the culture of production at NASA, she demonstrates how cultural tenets enabled NASA engineers to incorporate technical deviance and uncertainty into experience-based risk conceptions that allowed decision-makers at NASA to approach an uncertain and hazardous system as if it was predictable and manageable. Vaughan stresses how precedents and experience here become important guidelines for action; as experience builds, new guidelines are added to the old ones, creating a system of rules that reproduce the cultural scripts nested in the group's culture of production - in the case of the Challenger, these nested cultural scripts were those of the engineering profession, NASA, and the Marshall Space Flight Center (Vaughan, 1996, p. 236).

Crises are moreover shaped by the social, technical, and economic configurations in which they unfold. While a crisis may express itself as an event caused by a natural hazard – such as the unusually low temperatures on the night before the Challengers final launch, or the emergence of a novel virus – the ways in which a hazard becomes a crisis is the consequence of political and organizational decision making. For example, Horowitz's analysis of Hurricane Katrina shows how the crisis that grew out of the hurricane was shaped by decisions made by politicians and city planners long before the hurricane made landfall in 2005 (Horowitz, 2020, see also; Jacobs, 2021; Wynne, 1988). Scholars of how crises become organized therefore stress two complementary aspects of studying crises. First, to analyze how the culture of production within the organizations involved in crisis management contributed to how the crisis was organized, and second, what role pre-existing social, economic, and technical configurations had in shaping a crisis.

3. Methodology and data

3.1. Case description

The Public Health Agency (Folkhälsomyndigheten) has been the center of Sweden's pandemic management since the beginning of the COVID-19 pandemic. The Agency is relatively young, funded January 1, 2014, through a merger of the National Institute for Public Health and the Institute for Communicable Disease Control. The merger was one of several reforms that followed after lawmakers began moving toward responsibilization and patient participation in disease preventive work in the mid-1990s, and was motivated by a need for clarifying the division of labor among governmental agencies and for gathering epidemiological competence and responsibility within one agency (Smittskyddsutredningen, 2009). This new division of labor meant that one governmental agency had the mandate to lead the pandemic response, with other agencies (e.g., the Civil Contingencies Agency and the National Board of Health and Welfare) following the Public Health Agency's strategic decisions. Importantly, despite the merger, key personnel from the National Institute for Public Health and the Institute for Communicable Disease Control remained with the new, unified agency, and many of the officers working to manage the COVID-19 pandemic were also involved in the management of the 2009 H1N1 pandemic. 1

Since the 2014 merger, the Public Health Agency is responsible for public health in Sweden and for developing and improving evidence-

 $^{^{1}}$ For details on how the Public Health Agency approached managing the H1N1 pandemic in 2009, see Mulinari and Vilhelmsson (2020).

based public health practices in the country, of which disease prevention is only one part (Ministry of Health and Social Affairs, 2021). As part of its mission, the Agency gathers and analyses public health data, evaluates public health interventions, and coordinates incentives to improve public health. Moreover, the Agency operates a high-containment laboratory (the only BSL-4 laboratory in the Nordic region) and leads the work on disease prevention at the national level. As part of the work on disease prevention, the Agency is responsible for overseeing disease prevention work among healthcare practitioners, and issues different types of regulatory documents, including strict directives as well as recommendations and general guidelines. Moreover, the Public Health Agency is responsible for the Swedish pandemic preparedness plan (see, e.g., Ministry of Health and Social Affairs, 2021).

Published in 2019, the latest version of the pandemic preparedness plan builds on Swedish legislation and existing WHO guidelines (e.g., World Health Organization, 2017) and stipulates that the aim of Swedish pandemic management is to:

- 1. Minimize mortality and morbidity in the population
- 2. Minimize additional negative consequences of importance to society and to the individual (The Public Health Agency, 2019, p. 6)

The plan also lists and reviews interventions that authorities may deploy to meet these targets. According to the pandemic preparedness plan, medical interventions such as vaccines and anti-viral drugs are central to managing pandemics. Moreover, the plan states that non-pharmaceutical interventions (NPIs) such as recommendations to wash hands, voluntary quarantine, use of face masks, school closures, and social distancing have limited evidential support wherefore any implementation of NPIs must be weighed against their potential for causing negative societal impacts.

One of the foundations of the pandemic plan, besides WHO guidelines, is the Disease Prevention Act (2004:168). The Act regulates the responsibilities and rights of public actors and patients in relation to diseases assessed to be of particular risk to society or to the public and is formulated - following prolonged debate and criticism of previous disease preventive legislation (Hirschfeldt & Petersson, 2020; Wenander, 2021) - in a way that emphasizes the rights and responsibilities of the individual patient. According to the Act, patients with one or more defined risky infectious diseases have a responsibility to manage their illness in a way that prevents spread to others, while medical practitioners have a responsibility to undertake contact tracing and inform the authorities of any new cases infected with a disease deemed a risk. What diseases are considered risk diseases is determined by the government and new diseases are added following requests from the Public Health Agency. COVID-19 was added to the list February 2, 2020 (Ministry of Health and Social Affairs, 2020).

3.2. Data and analysis

To investigate how the culture of production within the Public Health Agency shaped the social organization of pandemic response in Sweden, we combine in-depth interviewing with qualitative text analysis. By utilizing both interviews and documents, we are able to analyze Sweden's pandemic management as it unfolded, both in serious speech acts (Dreyfus & Rabinow, 1983) such as documents and press briefings, and in the experiences of centrally placed actors. The combination of texts and interviews also allows us to investigate how Swedish pandemic interventions were assessed and implemented both frontstage and backstage.

The majority of data were collected in the spring of 2021 when Sweden was experiencing a second and third wave of COVID-19 infections and residents were recommended to maintain both physical and social distance. Because of these circumstances, data collection has been limited to distanced methods including tele-interviews using video conference software such as Zoom. The resulting dataset consists of: (i)

transcripts of joint agency press briefings in which the Public Health Agency – and to a lesser extent the National Board of Health and Welfare, and the Civil Contingencies Agency – reported and commented on epidemiological trends and developments, presented results from investigations and analyses, introduced and justified new interventions and recommendations, and answered journalists' questions; (ii) in depthinterviews with five informants occupying key positions in Swedish pandemic management²; (iii) **reports**, studies, policies, and guidelines published by the Public Health Agency and related agencies – including the National Board of Health and Welfare, the Civil Contingencies Agency, and the National Health and Social Care Inspectorate during the period January 2020, to June 2021, and; (iv) a detailed timeline produced by two of the authors that chronicles events, policies, and government interventions across the pandemic.

Transcripts of press briefings were obtained through a freedom of information request filed with the Public Health Agency. Interviews were carried out by Olofsson in the spring of 2021. All informants interviewed for this project gave their informed consent and where briefed on the purpose of the project and their rights as participants in accordance with Swedish Research Council guidelines (The Swedish Research Council, 2011). Interview transcripts have been anonymized. Archival materials were obtained from government and agency web-archives. For details on the timeline, please see (Olofsson & Vilhelmsson 2022).

Interview and press briefing transcripts were analyzed using Nvivo. Transcripts were coded in three steps, albeit with some back and forth between steps. The first step involved open, descriptive line-by-line coding (Strauss & Corbin, 1998). In the second step, descriptive codes were organized into themes based on what activity, phenomenon, or experience they described, e.g., discussion of the costs and benefits of pandemic interventions, claims about the Swedish strategy etc. Finally, as we realized that institutional beliefs characteristic of a culture of production is a central factor in determining what interventions the Public Health Agency chose to introduce, the third step consisted of analyzing and organizing the themes from step two in conversation with Vaughan's (1996) work on the Challenger disaster and the abovementioned scholarship on the social organization of disasters. Based on the theoretical framework and the focus on how cultures of production contribute to how crises become organized, particular care was taken to identify moments when concerns related to these topics where foregrounded in materials and by informants.

4. The Swedish strategy and the relative weight of interventions

Returning to the culture of production within the Public Health Agency and how it played into the Agency's work to organize the pandemic in Sweden, we begin our analysis by outlining how the Agency contributed to the organization of Sweden's response to the pandemic in general before going in depth in an analysis of how the Agency approached two widely debated NPIs: school closures and isolation of the elderly. Nevertheless, before going further, some observations are needed regarding what the term strategy means in relation to the 'Swedish strategy.' What journalists or scholars tend to refer to when talking about pandemic strategies are the interventions used to suppress the spread of COVID-19 (for examples, see, e.g., Pierre, 2020; Rambaree & Nässén, 2020). This way of talking about strategies differs from how the term is used in Swedish pandemic preparedness documents and how it has been used in practice by the Public Health Agency and other governmental agencies; that is, in reference to the overall approach and not the interventions that may or may not be implemented to realize the strategy. In a parliamentary hearing on March 26, 2021, the Public

² Informants included experts in disease prevention, epidemiology, and virology who during the pandemic occupied some professional role of relevance for Swedish pandemic management. Among the informants are scholars, analysts, and senior Public Health Agency officers.

Health Agency's director general Johan Carlson described the Agency's understanding of what the Swedish strategy entailed:

The strategy (...) actually consists of two main strategies: One is to use different interventions to suppress spread of infections in the public – the strategy is that straightforward. And the reason for this is really that doing so will limit the number of people who get infected and that will hopefully reduce general mortality – which of course is an important matter – and protect the healthcare services from becoming overstretched, like we've seen happen in Europe. The other aspect of the strategy is to particularly focus attention to those who we believe are at greatest risk of suffering severe illness or death from this [disease] (Swedish Parliament's Committee on the Constitution hearing 2021-03-26).

As Carlson notes, the strategy in this respect consisted of broadly stated targets, first, to suppress viral transmission, and second, to protect vulnerable sections of society. What the public and scholarly debate about the Swedish strategy concerns is therefore not the strategy per se. Instead, it is in the operationalization of strategy into concrete policy interventions that the particularities and controversies of the Swedish approach to the pandemic are to be found; that is, in how one proposes to realize the aim of suppressing the virus and protecting vulnerable people. This difference between strategy and policy was highlighted by Carlson in the same hearing when he explained that 'suppressing an epidemic' means 'putting as much pressure on [virus transmission] as possible, given the possibilities one has' and 'what is at the other end of the scales.' In relation to the interventions used to suppress viral spread, Carlson explained, the Public Health Agency has weighed every intervention against possible public health outcomes and has then presented the government with any interventions they believe would help limit viral transmissions without causing undue harms to public health. For example, when questioned about how the Public Health Agency approached the restrictions on crowd sizes introduced in March 2020, Carlson explained that:

The assessments we undertake are mainly to do with health aspects. That is, are there regulations here that restrict peoples' living conditions in a way that may cause significant health consequences? These questions were naturally asked also when we were reviewing these restrictions (Swedish Parliament's Committee on the Constitution hearing 2021-03-26).

As we show below, this weighing of public health benefits and costs that Carlson is describing is crucial for understanding the Public Health Agency's pandemic response. While the government in general, and the Ministry of Justice in particular, worked on assessing the legal pathways to implementing pandemic interventions suggested by the Public Health Agency, the Agency itself focused on balancing the expected benefits of interventions against their public health costs. To understand the processes in which interventions were assessed, implemented, or laid aside by the Public Health Agency, one must first understand how these assessments were made; and to do so one must look to how the Agency defined and weighed the costs and benefits of potential interventions and of the uncertainties involved.

4.1. School closures: what schools should be closed and why?

In the Swedish pandemic preparedness plan, school closures are outlined as one of several NPIs that may be implemented to slow the spread of an epidemic and limit its impacts during the time before a vaccine is developed (The Public Health Agency, 2019). However, as we have noted above, the plan also asserts that the effectiveness of NPIs is uncertain and that 'only under certain conditions may they be assumed to have an effect on the spread of infections' (The Public Health Agency, 2019, p. 20). School closures and other NPIs were, in other words, already on the Public Health Agency's table going into the pandemic, but unlike interventions such as voluntary quarantine, tele-working arrangements, and hand hygiene regimes – which were all implemented

early on – school closures were never implemented in full and never to the extent seen in many other countries (Lindblad et al., 2021). One difference was that Sweden chose to keep primary schools open while closing secondary schools and universities. A Public Health Agency officer explained the Agency's reasoning behind keeping schools open:

[W]e have actively resisted school closures to whatever extent possible. And this is because schools are extremely important from a broad public health perspective. Schools are perhaps the most important institution that society has when it comes to creating good public health. And if you close them down, you'll get very many negative effects. And you can see this more and more, in the media and in reports from around the world, that what is being created now is, like, a lost generation of children who haven't been able to go through school like you'd normally do. (Interview 4).

When asked to specify what they meant by a 'lost generation,' the officer elaborated saying that 'we know' that those who leave school without having passed their classes 'will have a much worse prognosis' for their 'future health in many ways'. When it came to balancing the costs and benefits of closing schools, the Public Health Agency therefore concluded that the costs outweighed the benefits, partially because the scales were already balanced in such a way that any benefits of school closures would be weighed against potential public health costs associated with poor educational outcomes. Moreover, the Public Health Agency was also able to support for their view that the costs of school closures outweighed the benefits by pointing to data from Wuhan and other locations of early outbreaks that indicated that children neither were at risks of severe COVID-19, nor did they significantly contribute to the spread of the disease. That young children did not drive the epidemic was something the Public Health Agency returned to repeatedly in their press briefings.

However, the balancing of costs and benefits of keeping schools open for older children was different and more complex. On March 17, 2020, the Public Health Agency issued a recommendation that secondary schools and tertiary education cease on-campus activities and move teaching online. The recommendation was motivated by several assumptions that impacted the balance of costs and benefits from closing on campus education. First, the Agency said, one can assume that older children and university students, because of their age and relative maturity, are better equipped to manage the transition to online learning wherefore the costs of the intervention would be lower than for younger children. Second, the Agency argued that moving secondary education online would produce greater benefits than closing schools for younger children because it would help limit crowding and the risk of disease transmission as closures would lead to high-schoolers spending less time in public areas and on public transport.

Nevertheless, while the Public Health Agency's initial assessment had been that students over 16 would be able to handle online education, they were continuously seeking to adjust the intervention. This was first done on June 15, 2020, when the Agency re-opened secondary education for oncampus education and revised its recommendation for adult education, opening them up for local hybrid solutions mixing online and on campus activities. Nevertheless, as the epidemiological situation worsened during the fall and winter, the Agency chose to reintroduce partial closures in secondary schools and tertiary education; first on November 18, when the government – following the Agency's advice – granted schools opportunities to close campuses temporarily. and later, on December 7, when all upper secondary schools were instructed to close campuses.

The Agency later confirmed its position on keeping schools open in a report in which it reviewed the academic literature on the pandemic's impact on children. In the report, the Agency stated that while children had not suffered significant medical consequences from the COVID-19 epidemic in Sweden, school closures and closed free time activities – as well as additional impacts from the pandemic, e.g., on parents' unemployment – had produced costs to children's' physical and psycho-social wellbeing.

Because interventions had negative effect on children's wellbeing, the Agency concluded, balancing costs and benefits of disease preventive measures is essential to ensure that interventions do not cause more harm than the disease would (The Public Health Agency, 2021, p. 25).

The decision whether to close schools and the reasoning behind decisions on which schools are closable or not illustrate the role of cultures of production in the organization of crises. The Public Health Agency's approach to school closures rested on two sets of precedents: first, that COVID-19 only causes negligible medical impact in children, and second, that school closures create significant short and long-term costs. Shortterm costs, the Agency asserted, included poorer educational performance and risk of worsened psycho-social well-being among students, c. Costs that also increased the risk for long-term consequences in the form of negative health outcomes associated with poor educational outcomes. The choice to include long-term costs based on the statistical relation between poor educational performance and poor health later in life created a precedent that tipped the scales in favor of keeping schools open, especially for children under 16 - who were deemed to be at greater risk of poor educational outcomes from school closures than were older children. This decision contributed to shaping the COVID-19 crisis in Sweden and illustrates the Public Health Agency's tendency to favor established epidemiological knowledge over uncertain and evolving evidence such as the potential long-term impacts of COVID-19 in children. Moreover, the reluctance to close schools illustrates a productive culture that prioritizes precedent based on long-term statistics over immediate uncertainty management (cf. the division between actuarian and sentinel public health in Lakoff, 2015) - effectively prioritizing managing the large and broad body of foreseeable suffering over the unknown suffering potentially caused by the new disease.

4.2. Personal lockdown: the protection and isolation of the elderly May to October 2020

Our second example of an intervention that was adjusted over time as the relative weight of costs and benefits shifted were recommendations that elderly people isolate themselves. Early in the pandemic it was established that advanced age was one of the most important factors behind severe COVID-19 and death (Williamson et al., 2020). To accommodate this characteristic of the pandemic, the Public Health Agency was quick to introduce measures to protect elderly people from infections. The measures that were implemented to accomplish this relied on a mixture of individualist and collectivist approaches (Rambaree & Nässén, 2020) and consisted both of measures to improve the welfare system's ability to limit contagion among elderly patients and care users (e.g., through information campaigns and education programs targeting healthcare and care personnel) and recommendations that everyone over the age of 70 isolate themselves to reduce the risk of becoming infected (The Public Health Agency, 2020b). When introducing the intervention at a press briefing on March 16, 2020, Sweden's state epidemiologist Anders Tegnell, representing the Public Health Agency, acknowledged that the Agency was asking a lot of elderly people: 'We must remember that isolating in this manner is not fun or enjoyable for anyone [...] And least of all if you're elderly, then it's very hard.' Nevertheless, the measure was a necessary step to protect both elderly people from getting sick and the healthcare services from becoming overwhelmed, Tegnell continued. In addition, those under 70 were asked to help elderly people isolate by postponing visits to elderly family members 'unless strictly necessary', as Tegnell phrased it in a news bulletin published on March 16, 2020 (The Public Health Agency, 2020a). The Agency also recommended the government to close nursing homes to visitors, which it did on April 1, 2020.

The implementation of recommendations and restrictions limiting social contacts among people aged 70 and older rested on an arithmetic that isolated elderly people by setting them apart from an otherwise relatively open society. While everyone was expected to do their part in

maintaining social and physical distance – work from home if possible and self-isolate at first sign of illness – the elderly were expected to do even more. People above 70 years were therefore hit twice over as they were both at greater risk of severe illness and death from COVID-19 and the ones who had to carry the greatest burden of the measures implemented to manage the pandemic.

The isolation of the over 70s came at high costs,; both to elderly people who lost access to social relations and saw their lives upended by the policies (Iversen et al., 2021) and to their relatives who were barred from visiting sick and dying family members in care homes (Wasshede & Björk, 2021). By May 2020, the Public Health Agency was looking into the imbalances in the costs and benefits of isolating elderly people to protect them from infections. At a press briefing on May 20, Tegnell pointed to the challenges of strict social distancing and the suffering it had brought elderly people and encouraged those affected to find ways to improve their situation, for example, by finding ways to socialize online or outdoors:

[W]e've been going through this for three to four months now, and it's apparent that a lot of elderly people are suffering from the isolation. It is therefore important to emphasize that you can break the isolation digitally and that you can visit people under safe conditions. If you're healthy, meeting someone outside is not a problem if you maintain distance and proper hand hygiene. It's also important to plan [care home] operations so that you can help people get out so that they can meet relatives and break the isolation (Press briefing 2020-05-20).

Pointing to the possibilities of socializing while maintaining the benefits of isolation, Tegnell offered up ways for elderly individuals and care providers to ease the burden of isolation and thereby recalibrating the scales so that the benefits would once more outweigh the costs. Nevertheless, encouragements to find safe ways to socialize proved insufficient. A Public Health Agency report published on October 22, 2020, found that while the isolation of elderly people had saved lives, the costs had been dire as elderly people reported that the policies had led to them experiencing stigmatization and that the loss of social relations had left them without much to live for (The Public Health Agency, 2020c). Because of the high costs of isolation as a means to protect the elderly, the report concluded, such measures – while efficient in saving lives – should only be used for a limited amount of time. Soon thereafter, the Agency decided to withdraw the interventions, which it did at the end of October 2020. In connection to the ending of isolation measures for the elderly, Carlson stated that 'it is not reasonable to place too much responsibility on a single group when the negative consequences are so dire.' Instead, he continued, everyone would henceforth be responsible for reducing the spread of COVID-19 and for protecting the elderly and other vulnerable groups (The Public Health Agency, 2020d).

The Public Health Agency's attempts to adjust and fine tune the interventions isolating elderly people illustrate how its weighting of costs and benefits of interventions shifted over time, but also how the agency consistently sought to adjust the effectiveness and consequences of its measures. The isolation of the elderly lasted for the better part of seven months, during which the Agency attempted to adjust the weight at the different ends of the scales. First by encouraging elderly people and caregivers to find ways of breaking isolation safely, e.g., by meeting online or outdoors. When this did not help, the Agency saw itself forced to lift the interventions and to enact new policies that spread the burden of protecting the elderly and vulnerable more equally. Importantly, the reason why the agency lifted the interventions was not that they were not saving lives. As the Agency noted in its own report, isolation policies had successfully prevented deaths from COVID-19. Nevertheless, it was concluded that the cost of saving lives was too high as isolation too greatly undermined the quality of the lives that were being saved.

We argue that the reversal of isolation measures is characteristic of the way the Public Health Agency has sought to manage the pandemic. Moreover, we argue that it is indicative of the culture of production within the Agency. First, in how the interventions focused on a sense of individual responsibility and rationality both in how the measures were meant to work through individual adaptation by elderly people and, when applicable, their caregivers. Second, it shows how the Agency's broad conceptualization of health as also incorporating quality of life affected how it assessed the effectiveness of the interventions it implemented to manage the pandemic.

The isolation of elderly people is also indicative of the limits of the Public Health Agency's broad view of public health. After all, not even the broadest approach can encompass everything and despite the broadness of their mission and the precedent it created for working with a broad concept of public health, the Public Health Agency has horizons of its own: it does not see everything. For example, when weighing the costs and benefits of isolation measures, the Agency overestimated the effectiveness of isolation measures as it failed to observe and act on preexisting structural problems in Swedish elderly care - problems that have been highlighted by the Swedish Corona Commission (Coronakommissionen, 2020). Structural problems in the elderly care sector were well known and documented by the National Board of Health and Welfare and by the Health and Social Care Inspectorate but appear to have been unknown to the Public Health Agency. When asked at a press briefing on May 6, 2020, whether the Agency had been surprised by the challenges to implement its recommendations in Swedish elderly care, Tegnell responded that the Public Health Agency does not oversee or enforce operational measures in elderly care. Instead, it informs and distributes knowledge support for best practice; and, Tegnell pointed out, the Agency had been extremely clear about the increased risk faced by elderly people. During a Public Health Agency press briefing on December 3, 2020, reporters asked Tegnell to reflect on the challenges of protecting elderly people once more, this time following reports from the Health and Social Care Inspectorate of severe shortcomings in the care provided at elderly care homes during the pandemic (The Health and Social Care Inspectorate, Inspektionen för vård och omsorg, 2019). Tegnell reiterated that it is not within the Agency's responsibilities to regulate the elderly care sector:

The Public Health Agency does not regulate how elderly care and nursing homes in Sweden are to conduct their operations – that falls on others. It is the care providers who are responsible [for the quality of care]. Of course, everyone would have wanted to do better in protecting [the elderly] and, above all, we would have liked to see fewer dead. But different measures on the national level would not have made much difference, that's our assessment. You wonder of course whether different interventions at nursing homes would have made a difference, but it's not on the Public Health Agency to implement those (Press briefing 2020-12-03).

While the Public Health Agency works with a broad mandate to improve public health, the Agency's mission still has borders and the culture of production within the Agency is mindful of those borders. The Agency's mission is to produce and disseminate knowledge, not to make direct interventions or to carry out oversight, and this is made clear in Tegnell's response regarding the care sector and its problems: the Agency's job is to provide the best available information so that others can make rational decisions. This is true both for the individual actor who is to be provided with sufficient information to allow them to successfully reduce their risk of infection, and for the care provider who is to ensure the safety of their patients. However, it also points to an expectation that the recommendations issued by the Agency produce a certain type of response. This expectation was sooner met when directed to the government – as in the recommendation to close certain schools – and less so when it was directed to regional or municipal governments, and even less so when directed to a myriad of public and private elderly care providers across the country.

5. Discussion

What do these two examples tell of how the culture at the Public Health Agency contributed to the organization of the pandemic? First, they illustrate a tendency to accommodate uncertainties within already existing conceptualizations of public health risks. As Vaughan (1996) points out, precedents are often capable of accommodating also deviant experiences as they help organizational actors to fold uncertainty into existing risk concepts. In the case of the Public Health Agency, the pandemic preparedness plan was one such precedent as it provided a standard against which pandemic managing interventions were weighed before being implemented. However, this did not mean that the Agency was unwilling to adapt its measures over time. On the contrary, the Agency worked constantly to fine-tune and adjust the measures introduced to manage the pandemic. Nevertheless, following a Bayesian-type logic, any adaptation was likely to occur within a prior frame as new evidence got folded into a pre-existing knowledge-base, wherefore it became unlikely that new evidence would stand out in a way that motivated drastic changes in what interventions were used and how.

Second, the examples make clear several lines of distinction that have been of crucial importance in how the Agency approached managing the pandemic. The first distinction concerns a difference between established and less established evidence. This distinction relates to the reliance on a pre-existing knowledge-base and was of importance in the decision to keep schools open. In the Public Health Agency's reasoning, several things about school closures were already known before the onset of the pandemic: first, that there is limited evidence that school closures are effective at limiting general disease transmission, and second, that poor educational outcomes have long-term public health costs. Moreover, it was established early on that children - unlike for many other illnesses do not contribute significantly to the spread of COVID-19. This allowed the Agency to let statistically known costs of school closures weigh heavier than the potential reduction in disease transmission among children and their teachers and parents. Moreover, it allowed the Agency to disregard less established evidence. For example, when the alpha and delta variants of the virus grew more prevalent during the first half of 2021, the Agency repeatedly argued against stepping up NPIs in the educational sector as it was not certain that the new variants would impact children differently than the original variant had done. This points to a robustness in the Agency's approach to pandemic management as less established evidence were negated by references to more established dittos. Nevertheless, this robustness is not universal. When evidence emerged that elderly people suffered from being isolated or that high schoolers and university students were struggling under online education regimes, the Agency responded by updating or lifting interventions in ways that accommodated new evidence.

The second distinction is between evidence and practice. As was made clear in how the Public Health Agency approached (or failed to approach) challenges to the implementation of its recommendations, such as the pre-existing structural problems in Swedish elderly care, the agency did not view itself as practically involved in the management of the pandemic on the ground, so to say. Rather, the Agency saw as its responsibility to provide evidence that would facilitate rational decision making on the part of more practically involved actors. The Agency's mission, in other words, was to act from afar by issuing recommendations based on available evidence so that actors on all levels, from the government to the individual resident, could make informed decisions that in turn would limit transmissions of COVID-19. When Agency officers issued statements that advanced age was an important risk factor behind severe illness and death from COVID-19, the Agency expected those working with the elderly to act effectively on that information. In short, the Public Health Agency approached managing the pandemic in a way that assumed that evidence when communicated through the Agency's press briefings, reports, and other channels would translate into improved practices among residents and organizations.

The third distinction is between *public health* and *short-term crisis management*. The ways in which the Public Health Agency weighed the costs and benefits of different interventions relied on a view of pandemic management that transcends the immediate problem, i.e., the COVID-19 epidemic in Sweden, and takes into consideration other types of public

health outcomes in the present and future. This broad and long-term view of health outcomes rested on precedents established in public health research and produced a reluctance within the Agency to introduce interventions that, while beneficial in the short-term, would potentially lead to significant costs in the future. This distinction, and the policies it supported, is both an important part in explaining why Swedish pandemic management came to favor certain types of measures while shunning others, and an invitation to problematize current discussions about what it means to practice precaution in pandemic management (see, e.g., Meßerschmidt, 2020). The debate about precaution in relation to COVID-19 has often emphasized the importance of strictness in interventions and a focus on realizing short-term benefits such as curbing the spread of the disease. However, in the light of the Public Health Agency's broad approach to public health, a precautionary approach instead meant relying on existing precedents rather than embracing new policies at the risk of causing future health costs and to consider future costs equally important as present ones. This approach to precaution is an important dimension in the explanation for how controversial decision, such as that to keep schools open, were both reasonable and normative to Public Health Agency insiders.

These examples show how the culture of production within the Agency, through its emphasis on broad, long-term public health and the privileging of pre-existing evidence and experience shaped the organization of the pandemic in Sweden and helped the officers tasked with managing the pandemic make sense of how the uncertainties of a new disease could be accommodated within existing precedents. The result was a strategy that was both based in a reliance on established epidemiological tenets and a willingness to tinker with and adjust measures to make sure that costs and benefits produced by an intervention did not tip the scales in an unfavorable direction. Nevertheless, the reliance on established epidemiological tenets may also have come at the cost of a strategy that, at times, has been perceived by its critics as resistant to change.

6. Conclusions

Although the Challenger and Hurricane Katrina were very different crises compared to the COVID-19 pandemic, the three crises are nevertheless similar in important ways. For example, while they appear like sudden events. all three crises were years in the making and, more importantly, the way they came to unfold was formed by the institutional beliefs that shaped their social organization (Horowitz, 2020; Vaughan, 1996). As we have shown, the lead up to the COVID-19 crisis took place both in the development of a culture of production within the Public Health Agency and in the social, technical, and economic configurations that would soon disproportionally expose disadvantaged and vulnerable people to the new illness. The Swedish COVID-19 experience was shaped at the intersection of these two long-term processes. To understand the origins of the Swedish strategy therefore means investigating its roots in a culture of production within the Public Health Agency – a culture that emphasizes a broad and long-term perspective on public health and that shaped the Agency's understanding of its mission vis-à-vis other actors in Swedish pandemic management.

However, while we draw parallels between the Challenger and the Swedish strategy to managing COVID-19, this does not mean that we suggest that the strategy is similar, either in practice or metaphorically, to the space shuttle disaster. Instead, the parallel consists of contrasting two cases in which institutionalized precedents lead to normative, everyday decisions that to outsiders may appear deviant. In the case of the Public Health Agency, the precedents supported by the Agency's culture of production shaped how the Agency weighed new and old evidence when balancing the costs and benefits of implementing possible interventions during the pandemic. Moreover, these precedents led the Agency to remain at arm's length from the practical implementation of the recommendations it issued. This decision not involving itself in the practical work of realizing interventions on the ground, we argue, led the Agency to fail to anticipate how pre-existing social, economic, and

technical configurations such as long-standing structural problems in Swedish elderly care would affect the effectiveness of its interventions.

In this paper, we have approached the question of how the Swedish strategy came to be. By using interviews and text analysis, we have outlined and analyzed decisions that shaped the management of COVID-19 in Sweden; and by doing so, we have explored how the culture of production within the Public Health Agency played into the social organization of the pandemic in Sweden. In that way, we have provided a detailed and empirically grounded account of pandemic management that complements previous accounts. Nevertheless, while we have shed light on the complexities of crisis management in Sweden, more research is needed to expand the implications of these findings to other organizations and jurisdictions. Moreover, as this study has focused solely on how a culture of production is expressed in the Public Health Agency's management of the COVID-19 pandemic, further studies are required to establish how the institutional beliefs highlighted here have shaped the Agency's work in other areas of public health policy and management.

Ethical statement

Hereby, I Tobias Olofsson on behalf of all co-authors consciously assure that The making of a Swedish strategy.

- 1) Is a product of the authors' own original work, which has not been previously published elsewhere.
- 2) Is not currently being considered for publication elsewhere.
- Reflects the authors'own research and analysis in a truthful and complete manner.
- Credits the meaningful contributions of co-authors and co-researchers in a truthful manner.
- Reports results that are appropriately placed in the context of prior and existing research.
- 6) Properly discloses all sources used.

And that

 All authors have been personally and actively involved in substantial work leading to the paper, and will take public responsibility for its content

We agree with the above statements and declare that this submission follows the policies of SSM Qualitative Research in Health as outlined in the Guide for Authors.

Declaration of competing interest

None.

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References

Bækkeskov, E. (2016). Explaining science-led policy-making: Pandemic deaths, epistemic deliberation and ideational trajectories. *Policy Sciences*, 49(4), 395–419. https://doi.org/10.1007/s11077-016-9264-y

Baldwin, P. (2021). Fighting the first wave: Why the coronavirus was tackled so differently across the globe. Cambridge University Press.

- Berger, P. L., & Luckmann, T. (1991). The social construction of reality: A treatise in the sociology of knowledge. Penguin Books.
- Boin, A., McConnell, A., & 't Hart, P. (2021). Governing the pandemic: The politics of navigating a mega-crisis. Springer International Publishing. https://doi.org/10.1007/ 978-3-030-72680-5
- Bylund, P. L., & Packard, M. D. (2021). Separation of power and expertise: Evidence of the tyranny of experts in Sweden's COVID-19 responses. Southern Economic Journal, 87(4), 1300–1319. https://doi.org/10.1002/soej.12493
- Clarke, L. (1989). Acceptable risk? Making decisions in a toxic environment. University of California Press.
- Coronakommissionen. (2020). Äldreomsorgen under pandemin. SOU 2020: Delbetänkande från Coronakommissionen (SOU 2020-80). Socialdepartementet.
- Disease prevention act [Smittskyddslag] (p. 168). (2004) (2004:168), Pub. L. No. 2004.Dreyfus, H. L., & Rabinow, P. (1983). In Michel Foucault: Beyond structuralism and hermeneutics (2nd ed.). University of Chicago Press.
- Emerson, R. M. (1983). Holistic effects in social Control decision-making. Law & Society Review, 17(3), 425–456. https://doi.org/10.2307/3053588
- Fine, G. A. (2006). Shopfloor cultures: The idioculture of production in operational meteorology. The Sociological Quarterly, 47(1), 1–19.
- Giritli Nygren, K., & Olofsson, A. (2020). Managing the Covid-19 pandemic through individual responsibility: The consequences of a world risk society and enhanced ethopolitics. *Journal of Risk Research*, 23(7–8), 1031–1035.
- Hirschfeldt, J., & Petersson, O. (2020). Rättsregler i kris. Dialogos.
- Horowitz, A. (2020). Katrina: A history, 1915-2015. Harvard University Press.
- Irwin, R. E. (2020). Misinformation and de-contextualization: International media reporting on Sweden and COVID-19. Globalization and Health, 16(1), 62. https://doi.org/10.1186/s12992-020-00588-x
- Iversen, C., Redmalm, D., Flinkfeldt, M., & Persson, M. (2021). En m\u00e4nniska bland andra?: \u00e4ldre m\u00e4nniskors begripligg\u00f6rande av vardagen under covid-19-krisen. Sociologisk Forskning, 58(1-2), 53-76. https://doi.org/10.37062/sf.58.22100
- Jacobs, F. (2021). Beyond social vulnerability: COVID-19 as a disaster of racial capitalism. Sociologica, 15(1), 55–65. https://doi.org/10.6092/ISSN.1971-8853/11659
- Jasanoff, S., Hilgartner, S., Hurlbut, J. B., Özgöge, O., & Rayzberg, M. (2021). Comparative covid response: Crisis, knowledge, politics—interim report. Cornell University & Harvard Kennedy School.
- Jonung, L. (2020). Sweden's constitution deciedes its covid-19 exceptionalism [Working Paper].
- Kuhlmann, S., Hellström, M., Ramberg, U., & Reiter, R. (2021). Tracing divergence in crisis governance: Responses to the COVID-19 pandemic in France, Germany and Sweden compared. *International Review of Administrative Sciences*, 87(3), 536–555. https://doi.org/10.1177/0020852320979359
- Laage-Thomsen, J., & Frandsen, S. L. (2022). Pandemic preparedness systems and diverging COVID-19 responses within similar public health regimes: A comparative study of expert perceptions of pandemic response in Denmark, Norway, and Sweden. Globalization and Health. 18(1). 3. https://doi.org/10.1186/s12992-022-00799-4
- Lakoff, A. (2015). Real-time biopolitics: The actuary and the sentinel in global public health. Economy and Society, 44(1), 40–59. https://doi.org/10.1080/ 03085147.2014.983833
- Lakoff, A. (2017). Unprepared: Global health in a time of emergency. University of California Press.
- Lindblad, S., Wärvik, G.-B., Berndtsson, I., Jodal, E.-B., Lindqvist, A., Messina Dahlberg, G., Papadopoulos, D., Runesdotter, C., Samuelsson, K., Udd, J., & Wyszynska Johansson, M. (2021). School lockdown? Comparative analyses of responses to the COVID-19 pandemic in European countries. European Educational Research Journal, 20(5), 564–583. https://doi.org/10.1177/14749041211041237
- Meßerschmidt, K. (2020). COVID-19 legislation in the light of the precautionary principle. The Theory and Practice of Legislation, 8(3), 267–292. https://doi.org/10.1080/ 20508840 2020 1783627
- Ministry of Health and Social Affairs, & Socialdepartementet. (2020, February 1). Regeringen har fattat beslut med anledning av Folkhälsomyndighetens hemställan gällande infektion med coronavirus (2019-nGoV). Regeringskansliet https://www.regeringen.se/pressmeddelanden/2020/02/regeringen-har-fattat-beslut-med-anlednin g-av-folkhalsomyndighetens-hemstallan-gallande-infektion-med-coronavirus-2019-n cov/?TSPD_101_R0=088d4528d9ab20007803279f7a2e7f30d05db61e0ade 7825366e366e7f2b2d05173e0b3389f71c9808f99140ed1430005c873e1c4735bca 27799cea8daa80629817b4afbd2269ed29cb185949722c73ccab07643cfbbe9449cf 094ad5f8b0549.
- Ministry of Health and Social Affairs, & Socialdepartementet. (2021). Förordning (2021: 248) med instruktion för Folkhälsomyndigheten. https://www.riksdagen.se/sv/dok ument-lagar/dokument/svensk-forfattningssamling/forordning-2021248-med-inst ruktion-for_sfs-2021-248.
- Mulinari, S., & Vilhelmsson, A. (2020). Revisiting the pharmaceuticalisation of pandemic influenza using Lukes' framework of power. Sociology of Health & Illness, 42(2), 327–341. https://doi.org/10.1111/1467-9566.13006
- Olofsson, T., & Vilhelmsson, A. (2022). Dataset: COVID-19 epidemic policy and events timeline (Sweden). Data in Brief, 40, 107698. https://doi.org/10.1016/ i.dib.2021.107698

- Perlstein, S. G., & Verboord, M. (2021). Lockdowns, lethality, and laissez-faire politics. Public discourses on political authorities in high-trust countries during the COVID-19 pandemic. PLoS One, 16(6), Article e0253175. https://doi.org/10.1371/ journal.pone.0253175
- Petridou, E. (2020). Politics and administration in times of crisis: Explaining the Swedish response to the COVID-19 crisis. European Policy Analysis, 6(2), 147–158. https://doi.org/10.1002/epa2.1095
- Pierre, J. (2020). Nudges against pandemics: Sweden's COVID-19 containment strategy in perspective. *Policy and Society*, 39(3), 478–493. https://doi.org/10.1080/ 14494035.2020.1783787
- Rambaree, K., & Nässén, N. (2020). 'The Swedish strategy' to COVID-19 pandemic: impact on vulnerable and marginalised communities. The International Journal of Community and Social Development, 2(2), 234–250. https://doi.org/10.1177/ 2516602620936048
- Smittskyddsutredningen. (2009). Ett effektivare smittskydd: Betänkande av Smittskyddsutredningen (SOU 2009:55). Statens offentliga utredningar.
- Strauss, A. L., & Corbin, J. M. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory. SAGE.
- Svensson, G., & Rodriguez, R. (2021). A Laissez-Faire strategy marked by blinkers to fulfill established pandemic goals—the case of Sweden. *International Journal of Environmental Research and Public Health*, 18(18), 9551. https://doi.org/10.3390/ijerph18189551
- The Public Health Agency, & Folkhälsomyndigheten. (2019). Pandemiberedskap. Hur vi förbereder oss ett kunskapsunderlag [Elektronisk resurs]. Folkhälsomyndigheten. http://www.folkhalsomyndigheten.se/publicerat-material/publikationsarkiv/p/p andemiberedskap-hur-vi-forbereder-oss-ett-kunskapsunderlag.
- The Public Health Agency, & Folkhälsomyndigheten. (2020b). Nya allmänna råd: Håll avstånd och ta personligt ansvar [New recommendations: Keep distance and take individual responsibility]. https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2020/april/nya-allmanna-rad-hall-avstand-och-ta-personligt-ansvar/.
- The Health and Social Care Inspectorate, Inspektionen för vård och omsorg. (2019). Vad har IVO sett 2018? Iakttagelser och slutsatser om vårdens och omsorgens brister för verksamhetsåret 2018. The Health and Social Care Inspectorate (IVO 2019-6).
- The Public Health Agency, & Folkhälsomyndigheten]. (2020c). Konsekvenser för personer 70 år och äldre av smittskyddsåtgärder mot covid- 19 (No. 20168). The Public Health Agency
- The Public Health Agency, & Folkhälsomyndigheten. (2020a). Personer över 70 bör begränsa sociala kontakter tills vidare. Folkhälsomyndigheten. https://www.folkhalsomyndigheten.se/nyheter-och-press/nyhetsarkiv/2020/mars/personer-over-70-bor-begransa-sociala-kontakter-tills-vidare/.
- The Public Health Agency, & Folkhälsomyndigheten. (2020d). Viktigt att alla tar ansvar när allmänna råd ändras för personer som är 70 år och äldre. Folkhälsomyndigheten.Se https://www.folkhalsomyndigheten.se/nyheter-och-pre ss/nyhetsarkiv/2020/oktober/viktigt-att-alla-tar-ansvar-nar-allmanna-rad-andras-for-personer-som-ar-70-ar-och-aldre/.
- The Public Health Agency, & Folkhälsomyndigheten. (2021). Covid-19 hos barn och unga: En kunskapssammanställning—version 3 (No. 21092). The Public Health Agency.
- The Swedish Research Council. (2011). *Good research practice*. The Swedish Research Council.
- Vaughan, D. (1996). The Challenger launch decision: Risky technology, culture, and deviance at NASA. University of Chicago Press.
- Vaughan, D. (1998). Rational choice, situated action, and the social Control of organizations. Law & Society Review, 32(1), 23–61.
- Vaughan, D. (1999a). The dark side of organizations: Mistake, misconduct, and disaster. Annual Review of Sociology, 25, 271–305.
- Vaughan, D. (1999b). The rôle of the organization in the production of techno-scientific knowldge. Social Studies of Science, 29(6), 913–943.
- Wasshede, C., & Björk, S. (2021). Avsked i coronatider: Att ta farväl av döende nära anhöriga i tider av restriktioner. Sociologisk Forskning, 58(1–2), 153–176. https:// doi.org/10.37062/sf.58.22264
- Wenander, H. (2021). Sweden: Non-binding rules against the pandemic formalism, pragmatism and some legal realism. *European Journal of Risk Regulation*, 12(1), 127–142. https://doi.org/10.1017/err.2021.2
- Williamson, E. J., Walker, A. J., Bhaskaran, K., Bacon, S., Bates, C., Morton, C. E., Curtis, H. J., Mehrkar, A., Evans, D., Inglesby, P., Cockburn, J., McDonald, H. I., MacKenna, B., Tomlinson, L., Douglas, I. J., Rentsch, C. T., Mathur, R., Wong, A. Y. S., Grieve, R., ... Goldacre, B. (2020). Factors associated with COVID-19-related death using OpenSAFELY. Nature, 584(7821), 430–436. https://doi.org/10.1038/s41586-020-2521-4
- World Health Organization. (2017). Pandemic influenza risk management: A WHO Guide to informs & harmonize national & international pandemic Preparedness and response (global influenza programme). World Health Organization.
- Wynne, B. (1988). Unruly technology: Practical rules, impractical discourses and public understanding. Social Studies of Science, 18(1), 147–167.
- Yan, B., Zhang, X., Wu, L., Zhu, H., & Chen, B. (2020). Why do countries respond differently to COVID-19? A comparative study of Sweden, China, France, and Japan. The American Review of Public Administration, 50(6–7), 762–769. https://doi.org/ 10.1177/0275074020942445