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Lindholm, Jenny; Carlson, Tom; Albrecht, Frederike; Hermansson, Helena

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Chapter 7

# Communicating Covid-19 on social media

## *Analysing the use of Twitter and Instagram by Nordic health authorities and prime ministers*

Jenny Lindholm,[I] Tom Carlson,[I] Frederike Albrecht,[II] & Helena Hermansson[III]

[I] Political Science with Media and Communication, Åbo Akademi University, Finland

[II] Department of Political Science and Law, Swedish Defence University, and Centre for Natural Hazards and Disaster Science (CNDS), Uppsala University, Sweden

[III] Department of Leadership and Command & Control, Swedish Defence University, and Centre for Natural Hazards and Disaster Science (CNDS), Uppsala University, Sweden

**Abstract**

This chapter analyses how Nordic health authorities and prime ministers used social media during the first wave of the Covid-19 pandemic. The research questions address the extent to which they interacted with other actors on social media and what communication objectives they pursued in messages to the public. The data consists of health authorities' Twitter communication and prime ministers' Instagram posts. The results show that both the health authorities and prime ministers primarily interacted internally with domestic governmental and administrative actors. Still, they pursued different communication objectives. Whereas the health authorities mainly instructed the public on how to act, the prime ministers provided support and appealed for solidarity. National differences are observed. The Danish case stands out, as both the national health authority and the prime minister clearly focused on communicating support to the public.

**Keywords:** crisis communication, social media, health authorities, political leaders, communicating Covid-19

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## Introduction

During crises, social media has proved to be prone to becoming channels where misinformation is distributed (Cinelli et al., 2020; Kouzy et al., 2020). Simultaneously, though, social media can be essential for people in times of crisis for finding critical up-to-date information, seeking support, and sharing information and experiences (Austin et al., 2012; Brummette & Sisco, 2015). Consequently, for today's public authorities and political leaders, crisis management is not only about actions, but also about communication strategies and about the information shared in a new complex communications context where social media is central (Boin et al., 2016). For such authorities and leaders, it is essential during crises to share consistent and coordinated information and messages on social media to both meet the public's needs and counteract potential trends of misinformation. Moreover, using social media as a communication channel during a crisis gives actors a more direct and immediate relationship with certain groups in society, such as young people and those less interested in following traditional news (Ceccobelli & Vaccari, 2021).

Although social media as a form of crisis management and crisis communication is nowadays utilised during all types of crises, Graham and colleagues (2015) have demonstrated that social media is used significantly more during public health crises. One explanation is that the need for information is more widespread if a health crisis poses an imminent threat to the well-being of the general public, in comparison with disasters or social or political crises (Graham et al., 2015). In an international study of political communication during the Covid-19 pandemic (Lilleker et al., 2021b), one conclusion is that social media played a significant and positive role during the pandemic (Lilleker et al., 2021a).

In this chapter, we provide a review of research on the use of social media by health authorities and political leaders, and we present an empirical analysis of how Nordic health authorities and prime ministers used Twitter and Instagram, respectively, during the Covid-19 pandemic. The main reason to study these state actors is that during major health crises, people not only go online to follow news media; they also turn directly to social media communication by authorities and leaders to understand and make sense of the situation, receive guidance and support, and assess the measures taken. Social media can be utilised by both types of actors to communicate controlled messages about the Covid-19 crisis directly to the public. As health crisis communication by health authorities and political leaders are typically studied separately, one contribution of this chapter is to identify similarities and differences in the Covid-19 communication approaches on social media between health authorities and political leaders across the Nordics, paying attention to the political and administrative context. Specifically, our analysis focuses on two crucial aspects of crisis communication on social media, that is, the interaction of

the communicating actor with other actors in the messages and, secondly, the specific objectives of the communicators when communicating to the public. Two research questions are addressed:

RQ1. To what extent did Nordic public health authorities and political leaders interact with other actors on social media during the Covid-19 pandemic?

RQ2. What communication objectives did Nordic public health authorities and political leaders pursue in messages to the public on social media during the Covid-19 pandemic?

The foci of the research questions – interaction and objectives – are further discussed in the analytical framework. The analysed period is the critical first wave of the Covid-19 pandemic, starting on 11 March 2020, when the World Health Organization declared a pandemic, and ending three months later. We compare two empirical case studies: the Twitter communication by the health authorities in four Nordic countries (Denmark, Finland, Norway, and Sweden), and the Instagram posts by the prime ministers in three Nordic countries (Denmark, Finland, and Sweden). The selection of countries and social media platforms are discussed in the data and method section.

The remainder of the chapter is structured as follows. An initial literature review is followed by the analytical framework for the case studies. Thereafter, the data and methods are described. Subsequently, the findings of the analysis of the two cases – the Nordic health authorities and prime ministers, respectively – are reported. The final part juxtaposes the central findings from the two case studies and presents a concluding discussion.

## Literature review

During crises, public organisations play a pivotal role in communicating to the general public. As many actors compete for relevance, attention, and legitimacy during crises (Hall & Wolf, 2021; Holmes et al., 2009), it is essential for public organisations, such as governmental actors and authorities, to deliver reliable, consistent, and effective communication to citizens and to coordinate and collaborate with other public organisations regarding outgoing messages (Boin et al., 2016; Comfort, 2007; Kapucu, 2006).

In the context of the Covid-19 pandemic, previous research has found that government agencies in the US may have initially struggled with adequate risk communication on Twitter, but over time, they increased in communication consistency and coordination (Wang et al., 2021). A comparative study of public health agency communication on Twitter and in agency press releases

in Italy, the US, and Sweden during the Covid-19 pandemic illustrated that health authorities in these three countries predominantly coordinated their communication with other domestic government agencies (Tagliacozzo et al., 2021). Moreover, the study showed that the communication rarely indicated interaction with political officials and domestic nongovernmental organisations.

Coombs (2020) has identified communicative demands for the Covid-19 pandemic. Demands to deal with anxiety, create empathy, and prevent fatigue among the public can be seen to have a clear connection to supportive messages by public organisations managing the crisis, while emphasising efficacy to effectively manage the crisis through campaigns, such as #Flattenthecurve, has a clear instructive function. The importance of supportive messages is further illustrated by an empirical study, which identified that American government actors' tweets with reassuring messages during the Covid-19 crisis were much more likely to be retweeted by the public than tweets with alarming tones (Rao et al., 2020).

Previous research on organisational crisis communication has often focused on reputational aspects (Olsson, 2014), with less attention on aspects involving other objectives of organisational communication. Furthermore, the increasingly complex nature and structure of social media channels and the inherent competition for legitimacy between senders during crises have created a need to understand how public organisations attempt to proactively engage in this context by coordinating their messages with other actors.

Communication by political leaders, in turn, becomes specifically important during national crises, when fear and anxiety direct citizens' attention to the situation, and they look for motivational cues from their leaders. During crises, leaders should display both competence and empathy to guide the public through an unexpected event (Wooten & James, 2008). Hence, successful communication with the audience is about clear and concise communication through institutional messages as well as emotional supportive connection (Gigliotti, 2016). In the words of Boin and colleagues (2016: 87), an effective crisis communication frame by leaders "offers a credible explanation of what happened, it offers guidance, it instills hope, shows empathy, and suggests that leaders are in control".

Concerning research on political leaders' use of social media specifically during the Covid-19 pandemic, no Nordic studies were found (as of October 2022). International research has mostly analysed leaders' use of Twitter in crisis communication and looked at the initial phase of the pandemic. A study of 143 worldwide state leaders' use of Twitter during the early stages of the pandemic found that several of the leaders who tweeted actively about Covid-19 obtained an increase in followers (Haman, 2020; see also Rullo, 2021). This finding would suggest that people turn to leaders, also on social media, in times of crises. A content analysis of viral Covid-19-related tweets in March 2020

from the G7 world leaders (Rufai & Bunce, 2020) found that 82 per cent of the tweets were informative, while 9 per cent were "morale-boosting". Almost a third of the informing tweets included links to official governmental sources.

Other studies have paid attention to affective and symbolic aspects. Drylie-Carey and colleagues (2020) – investigating European political leaders' Covid-19-related communication on Twitter by looking at the visual information in the tweets – found that most of the leaders did not personalise the information or try to engage their followers, such as leading by example and communicating authentic leadership, which can facilitate implementation of recommendations and sanctions during crises. Moreover, one study of political leaders' tweets found that female leaders were more likely than male leaders to use empathetic language and highlight the need for collective actions and solidarity (Dehingia et al., 2021).

Previous research on how political leaders use social media in the Covid-19 crisis has rarely addressed how leaders coordinate and interact with other actors in social media. In addition, systematic investigations of how leaders in their pandemic crisis communication on social media manoeuvre between different communication objectives do not abound.

## Analytical framework

In this chapter, we apply an analytical framework that combines two critical functions of crisis communication on social media. First, actors' positioning in a communication ecology and the interaction with other actors in said ecology, and second, the pursuit of specific objectives when communicating with the public.

Crises challenge public organisations and political leaders with the need to disseminate information in ways that reduce potential information inconsistencies. Therefore, it is critical that these actors deliver their messages "in a coordinated and collaborative way [to] avoid the creation of an information vacuum that may otherwise be filled by misinformation" (Tagliacozzo et al., 2021: 935). An important way to decrease information inconsistencies and to amplify the actor's own message is the interaction and coordination with other actors to disseminate messages. Studying the coordination and interaction with other actors in communicative networks originates from the idea of communication ecologies, which is a conceptualisation used to describe communication networks that actors interact with when pursuing a specific goal in communicative efforts (Houston, 2021).

This study adopts a framework by Tagliacozzo and colleagues (2021) to examine the presence of such interaction to coordinate communication or to illustrate collaborative efforts specifically in the context of a global health crisis.

According to this framework, actors position themselves in their communication ecology by engaging with other actors. By doing so, the actor's message can be amplified and has a greater chance of outweighing other strains of information, like misinformation (Tagliacozzo et al., 2021). When engaging with other actors on social media specifically, interaction can be as simple as mentioning other actors or sharing their content. It can also occur through collaboratively shared information or by disseminating messages that illustrate ongoing collaborative efforts with other actors to the public. Tagliacozzo and colleagues (2021) suggest that governmental organisations, political officials such as ministers, national or international scientific organisations, and nongovernmental organisations are of core interest for actors to include in their communication ecologies, and hence, to interact with on social media during public health crises.

Since communication ecologies imply the pursuit of a common goal by actors within the network, our study also incorporates an analysis of communication objectives to distinguish between different types of objectives that actors can have when disseminating information on social media during a crisis. This framework is adopted from Sturges (1994) and distinguishes between three core types of communication objectives. According to Sturges (1994), when a crisis occurs, the first important task is to instruct the public on how to physically act or behave to protect themselves or others. The second core objective of communication is to provide people with support to cope with the crisis psychologically and to adapt to the extraordinary situation (Ozanne et al., 2020; Spence et al., 2015). Strengthening or rebuilding the organisation's reputation is the third potential communication objective, which is most important when the organisation's responsibility for the occurred crisis is high (Coombs & Holladay, 2002).

In the context of health crises more broadly, and Covid-19 specifically, instructive messages advise people how to act and behave. Supportive messages can either convey emotional support or promote general well-being. Finally, reputational messages aim at boosting the sender's reputation.

## Data and methods

### Data

The empirical part comprises two case studies: an analysis of Twitter communication by health authorities in Denmark, Finland, Norway, and Sweden; and an analysis of the Instagram posts by the prime ministers in Denmark, Finland, and Sweden. The Instagram posts by the Norwegian prime minister Erna Solberg were not analysed, as she published too few posts ($n$ = 12) on her personal Instagram account during the examined period. By focusing on the social media platform Twitter, the first case study builds upon earlier international studies

of how health authorities tweeted during the Covid-19 pandemic (see Tagliacozzo et al., 2021). As the official Twitter accounts of the Danish, Swedish, and Norwegian prime ministers appear to represent the formal institution and not the person, the second case study examined the Covid-19-related posts on the prime ministers' personal Instagram accounts.

Inevitably, there are some differences between Twitter and Instagram. Twitter has a 280-character limit for tweets, which creates short and clear text messages or captions, whereas images and videos are in focus on Instagram. Instagram has been shown to deepen the relationship between actors and the public in crises (Guidry et al., 2017). Therefore, Instagram provides a valid platform to study the empathic leadership required from political leaders, while Twitter has proved to play a key role in delivering information between government agencies and the public (Rosenberg et al., 2020).

The two case studies do not cover all five Nordic countries. Due to practical problems in finding coders with sufficient skills in the Icelandic language, the communication by the Icelandic health authority and prime minister is not included in the empirical analyses.

The data of the first case study consists of Twitter data during 11 March–10 June 2020. In total, 698 tweets were analysed from the official accounts of four Nordic public health authorities:

- Danish Health Authority [Sundhedsstyrelsen], Denmark. @SSTSundhed (Sundhedsstyrelsen, n.d.), $n = 115$.
- Finnish Institute for Health and Welfare [Terveyden ja hyvinvoinnin laitos], Finland. @THLorg (Terveyden ja hyvinvoinnin laitos, n.d.), $n = 416$.
- Norwegian Institute of Public Health [Folkhelseinstituttet], Norway. @Folkhelseinst (Folkhelseinstituttet, n.d.), $n = 73$.
- Public Health Agency of Sweden [Folkhälsomyndigheten], Sweden. @Folkhalsomynd (Folkhälsomyndigheten, n.d.), $n = 94$.

The second case study consisted of posts published on the following prime ministers' personal Instagram accounts during 11 March–10 June 2020:

- Mette Fredriksen, Denmark, leader of the Social Democrats, female. @mette (Fredriksen, n.d.).
- Sanna Marin, Finland, leader of the Social Democrats, female. @sannamarin (Marin, n.d.).
- Stefan Löfven, Sweden, leader of the Social Democrats, male. @stefanlofven (Löfven, n.d.).

In all, 183 Covid-19–related posts were registered. All the posts that had a clear connection to Covid-19 – both directly, such as mentioning the coronavirus or using the hashtag #COVID19 in the caption, and indirectly, such as referring to the ongoing crisis. The posts are distributed as follows: Fredriksen posted 69 (82% of all her posts during this period); Löfven posted 93 (95%); and Marin posted 21 (88%). These posts included 203 images and videos (some posts contained multiple photos, graphics, or videos).

All tweets and Instagram posts quoted in this chapter were originally written in Nordic languages and have been translated by us to English.

## Methods

In both case studies, we applied quantitative content analysis to the data with the single tweet or Instagram post as the unit of analysis. The analysis of Instagram posts examined the written text captures and, when available, the verbal content in videos.

To answer the first research question, the tweets and posts were coded for the presence of interaction with four types of actors: government organisations; political officials; nongovernmental organisations; and scientific organisations (see Tagliacozzo et al., 2021). Interaction consisted of mentioned actors, reused information (reposts or quotes), or collaboration (jointly produced and released information or information about collaboration with the actor in question). The study of the prime ministers' Instagram posts allowed a further distinction between two types of governmental actors: the prime minister's government and its ministers, and other governmental actors. Moreover, interaction with public health agencies or organisations were coded in the Instagram analysis.

Regarding the second research question, the tweets and posts were coded for the absence or presence of three objectives (examples of coding are provided in the online Supplementary Material file for this chapter):

- Instructive messages advising people on how to act and physically behave to protect themselves or others before and during a crisis, for example, messages instructing people to maintain social distance from others.
- Supportive messages, which can be of two types: 1) messages – including encouraging messages – intended to emotionally support people to face adversity and to strengthen their psychological coping capacity (e.g., messages concerning how to cope with social distancing); and 2) messages aiming to promote general well-being from a broader perspective (e.g., messages urging individuals to not avoid seeking medical care due to fear of the novel coronavirus).
- Reputational messages that aim to strengthen the sender's reputation. This could be done by tweeting about the achievements of the organisa-

tion or actor. For example, the health authorities can inform about new collaborations or studies. Political leaders, in turn, may frame actions undertaken by themselves or their government in a positive light.

In addition, given that prime ministers act as central political leaders of the people during a crisis, the Instagram analysis further examined the absence or presence of three affective means to reach the supportive objective in the posts. These means were developed from an inductive reading of the posts but are also grounded in the literature of political leadership in crises, stressing the need of leaders to express involvement and empathy and instil hope (Boin et al., 2016): 1) morale-boosting messages that encourage the public to endure during the crisis (see Rufai & Bunce, 2020); 2) messages expressing empathy by showing concern towards people or groups affected by the pandemic and sharing their feelings; and 3) messages expressing gratitude or recognition to groups, individuals, actors, or organisations (examples of coding are included in the online Supplementary Material file).

As initial readings of the prime ministers' posts revealed that they included appeals for national solidarity and unity – which has been noted to be a recurrent feature in political leaders' general crisis communication during the Covid-19 pandemic (see Bjørkdahl et al., 2021; Christensen & Lægreid, 2020; Lilleker et al., 2021a) – the posts were coded for the absence or presence of appeals for solidarity, such as asking persons or groups to make an effort and take responsibility for the whole (the community, the nation, and its people; see the online Supplementary Material file for an example).

A codebook was used to guide coders through every step of the coding process. An inter-reliability check was performed on 20 randomly sampled Instagram posts, and the inter-coder reliability was assessed using Holsti's formula and yielded an average coefficient value across all variables of 0.91 (range 0.85–1.00). The average reliability coefficients across pairs of coders, using Holsti's test on a random sample of 20 Swedish tweets, exceeded 0.90 for all variables. In both case study analyses, coders discussed unclear cases and differences in coding decisions in order to reach agreement on final appropriate coding.

## Findings

### Nordic health authorities' Covid-19 communication on Twitter

Regarding interaction with other organisations and actors, the results in Table 7.1 indicate that most Nordic health authorities commonly interacted with other government organisations, for example, by mentioning them in tweets, retweeting their information, or collaborating with them. In Denmark and

Finland, approximately one-fifth of all tweets by the national health authority were characterised by interaction with other government organisations, and the Norwegian Institute of Public Health interacted with other government organisations in 14 per cent of their tweets, indicating that Nordic public health authorities were overall likely to engage in interaction with agencies similar to their own organisation. Only the Public Health Agency of Sweden made substantially fewer (7%) references to government organisations in their tweets.

In contrast, most Nordic countries' health authorities rarely interacted with elected political officials on Twitter. The authorities mentioned political officials or reused their information at most in 5 per cent of all tweets.

***Table 7.1*** *Interaction with other actors in tweets by Nordic health authorities, 11 March–10 June (per cent)*

| Actors | Danish Health Authority (*n* = 115) | Finnish Institute for Health and Welfare (*n* = 416) | Norwegian Institute of Public Health (*n* = 73) | Public Health Agency of Sweden (*n* = 94) |
|---|---|---|---|---|
| Government organisation | 19 | 20 | 14 | 7 |
| Political official | 5 | 2 | 3 | 5 |
| Nongovernmental organisation | 21 | 3 | 1 | 4 |
| Scientific organisation | 1 | 3 | 4 | 1 |

Twitter interaction with nongovernmental organisations on both domestic and international levels was remarkably high (21%) for the Danish Health Authority, while remaining below the 5 per cent mark for the remaining Nordic countries. The Danish Health Authority interacted with, for example, various doctors' and nurses' associations and the Danish Red Cross.

Direct interaction with scientific organisations and experts on Twitter was low in all four countries. In Denmark, Finland, and Sweden, interaction with these actors rarely occurred on Twitter (interaction rates varied 1–3%). Although the Norwegian Institute of Public Health had similarly low interaction rates with these actors (4%), the results should be treated with caution, as it did not directly interact with scientific organisations or experts by mentioning them specifically but rather showed great focus on research and scientific knowledge outside the institutional boundaries, which were communicated through a frequently updated systematic map of Covid-19 research. These research summaries were aimed at making it easier to access and review relevant scientific knowledge (Folkhelseinstituttet, 2020a). While the newsletters connected to the mapping of Covid-19 research referred to relevant scientific experts, the coded material in the form of tweets did not make any direct references to these experts.

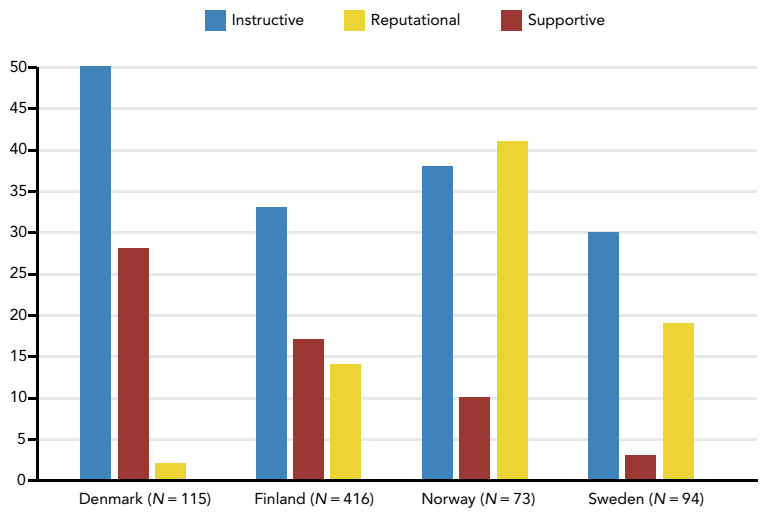
Regarding communication objectives, then, tweets by all the Nordic public health authorities in this study focused on instructive messages, for example, tweets containing instructions on how the public should prepare or behave physically (see Figure 7.1). In Finland, Norway, and Sweden, 30–40 per cent of all tweets during the first wave of the Covid-19 pandemic were instructive. Denmark illustrated the highest proportion of instructive tweets: half of the Danish Health Authority's tweets between March and June 2020 provided the public with instructions and guidelines on how to prepare, act, or behave.

It is worth noting that instructions given by the health authorities varied in the tone in which they were phrased (for an examination of the differences of tone in Covid-19 public campaigns in Scandinavia, see Almlund et al., Chapter 6). Some statements were vague recommendations – for example, "Think about whether the journey is really necessary" (Folkhälsomyndigheten, 2020a) – to be interpreted and acted upon by each individual recipient. Other statements used more assertive styles:

> Protect yourself and others. Try not to meet other people if you feel unwell and you have a runny nose, cough, or fever. Do not go to work, school, or day care. This applies even if you just feel a bit unwell. (Folkhälsomyndigheten, 2020b)

While we did not investigate communication styles further in our study, it is possible that although the proportions of instructive messages were high across all four authorities, the way these instructions were delivered varied between the Nordic countries.

***Figure 7.1*** *Communication objectives present in tweets by Nordic health authorities, 11 March–10 June (per cent)*



The Nordic health authorities included in our study had different approaches to supportive messages, for instance, tweets intended to support the public in adjusting to the Covid-19 crisis and in maintaining general well-being. Almost one-third of all tweets by the Danish Health Authority contained assistance to people on how to adjust to the crisis (see Figure 7.1). In comparison, a share of 10–17 per cent of all analysed tweets by the Norwegian Institute of Public Health and the Finnish Institute for Health and Welfare aimed at maintaining individuals' general well-being. Finally, this type of support barely existed in tweets by the Public Health Agency of Sweden (3%).

In Norway, the Norwegian Institute of Public Health promoted #KlappForNorge [#ClapForNorway], which was intended to express support and gratitude for essential workers (Folkhelseinstituttet, 2020b). The Danish Health Authority provided the Danish public with detailed advice on how to maintain their mental health during the pandemic: "It is important to keep mental health in mind during the #coronavirus-epidemic. We have developed 11 good tips about what one can do to avoid the epidemic taking a too large toll on one's general well-being #COVID19dk" (Sundhedsstyrelsen, 2020a). In other cases, supportive messages thematised how everyday life was affected by the pandemic, including tweets targeting potentially vulnerable groups, such as families with children (Sundhedsstyrelsen, 2020b). Comparable supportive tones or encouraging voices from the Public Health Agency of Sweden were essentially non-existent on Twitter. One of the few tweets including supportive content warned the elderly of new forms of fraud in the context of the pandemic (Folkhälsomyndigheten, 2020c).

Reputational messages – for example, tweets aimed at (re)building the health authorities' reputation among the public – were most common in Norway, where two out of five tweets presented the authority in a positive light. The proportion of tweets strengthening agency reputation was lower in Finland (14%) and Sweden (19%), and rare in Denmark (2%). The comparatively high frequency of tweets in the reputation category in Norway (41%) emanates from two activities that the Norwegian Institute of Public Health undertook frequently on Twitter. First, they made an ambitious effort to regularly collate and organise research reports, publications, and other information concerning Covid-19 in, which they called a "LiveMap on COVID-19 evidence". Multiple tweets informed followers when new reports were added and were simultaneously used for self-promotion: "The map of COVID-19 research https://t.co/ejH4U1knqc @folkehelsinst makes it easier to produce systematic reviews. What are the burning questions? See Newsletter #4" (Folkhelseinstituttet, 2020a). Second, the Norwegian Institute of Public Health developed an app early during the pandemic, "Smittestopp" [Contagion stop], aimed at assisting in tracing and breaking chains of transmission. Issues related to the development and testing of the app were frequently posted on Twitter (see, e.g., Folkhelseinstituttet, 2020c).

Reputation-reinforcing tweets in the Swedish case presented, for example, survey results that indicated high levels of public trust in the agency (Folkhälsomyndigheten, 2020d), or self-promotion by presenting the authority's work in a positive light: "The Public Health Agency takes the initiative to collaborate to increase COVID-19 testing capacity" (Folkhälsomyndigheten, 2020e). The Danish Health Authority, on the other hand, mostly avoided reputational tweets (2%).

### Nordic prime ministers' Covid-19 communication on Instagram

With regard to how the Nordic prime ministers included in this study interacted with other organisations and actors in their Instagram communication, few posts were re-posts (4 of 183), even less (2) re-used information from or quoted other actors, and only 1 post was coded as explicitly communicating a collaborative effort (prime ministers routinely interact with different societal actors, e.g., discussions and hearings; thus, such day-to-day cooperation was not coded here as collaborative efforts). Interaction by simply mentioning other actors was the rule. In general, as Table 7.2 shows, the prime ministers primarily interacted with the core actors in pandemic crisis management: the government and minsters, other governmental organisations, and various health agencies. The prime ministers referred to other types of actors (political officials, nongovernmental organisations, and scientific organisations) to a lesser extent. The interaction with scientific organisations and experts was close to non-existent in the posts.

***Table 7.2*** *Interaction with actors in Instagram posts by Nordic prime ministers, 11 March–10 June (per cent)*

| Actors | Mette Fredriksen (DK) (*n* = 69) | Stefan Löfven (SE) (*n* = 93) | Sanna Marin (FI) (*n* =21) | Total (*n* = 183) |
|---|---|---|---|---|
| Government and ministers | 15 | 62 | 62 | 44 |
| External governmental organisation | 23 | 44 | 10 | 32 |
| Political official | 12 | 8 | 5 | 9 |
| Nongovernmental organisation | 9 | 24 | 0 | 15 |
| Scientific organisation | 1 | 2 | 0 | 2 |
| Health agency | 19 | 54 | 24 | 37 |

A cross-national comparison of the results reported in Table 7.2 reveals some differences in the approaches of the prime ministers. The Swedish prime minister, Stefan Löfven, stands out as the one who was most focused on interacting with

core crisis managers, that is, his own government (62%), other governmental bodies (44%), and health agencies (54%). Additionally, he mentioned various nongovernmental organisations to a higher extent (24%) than the others did. For example, he brought up the valuable work of Swedish churches, religious communities, and civic organisations (e.g., organisations of the Swedish sports movement and pensioners' associations). The Finnish prime minister, Sanna Marin, is conspicuous in her strong emphasis on interacting with her government (62%), while mentioning other organisations and actors sparingly (ranging 0–24%). That stands out in contrast to the Danish prime minister, Mette Fredriksen, who mentioned her government and ministers in only 15 per cent of her posts and had a more varied mix of interactions.

Regarding communication objectives, Table 7.3 illustrates similarities as well as differences between the prime ministers. One similarity is that the presence of the three main objectives (instructive, supportive, and reputational) in the posts are ranked in the same order in all countries, although the levels differ: 1) supportive, 2) instructive, 3) reputational. In general, reputational objectives were not stressed (22% of total posts). Possibly, in this early and initially acute phase of the pandemic crisis, it was neither the time nor appropriate for leaders to exalt their capability to handle the crisis and place their taken measures in a positive light. Notably, though, Löfven was twice as likely as his Nordic colleagues to include reputation-building messages.

Another similarity across the prime ministers' communication practices is that a majority of their posts contained appeals for solidarity directed to the public (ranging 51–73%). In particular, Löfven called for solidarity (73%). For example: "we now also see [...] people coming together. Solidarity is there when it is needed most. We all need to do our part for the good of society and Sweden" (Löfven, 2020a). Fredriksen revived the Danish term samfundssind, which can be roughly translated as community spirit or civic-mindedness and has been defined by the Danish Language Council as "putting the concern of society higher than one's own interests" (Johanson, 2020; see also Bjørkdahl et al., 2021): "It depends on all of us. Every single person's behaviour matters. We must show samfundssind" (Fredriksen, 2020b). In Finland, Marin stated that "it is the responsibility of each of us to protect our own health, that of our loved ones, and that of our fellow human beings" (Marin, 2020).

*Table 7.3* *Communication objectives present in Instagram posts by Nordic prime ministers, 11 March–10 June (per cent)*

| Objectives | Mette Fredriksen (DK) (*n* = 69) | Stefan Löfven (SE) (*n* = 93) | Sanna Marin (FI) (*n* = 21) | Total (*n* = 183) |
|---|---|---|---|---|
| Instructive | 25 | 45 | 19 | 34 |
| Supportive | 80 | 74 | 33 | 72 |
| Reputational | 15 | 30 | 14 | 22 |
| Morale boosting | 36 | 47 | 19 | 40 |
| Expressing empathy | 44 | 30 | 10 | 33 |
| Expressing gratitude | 55 | 18 | 19 | 32 |
| Appealing for solidarity | 51 | 73 | 52 | 62 |

Regarding differences, Löfven stressed instructive messages to the citizens about how to behave during the pandemic to a higher extent than his Danish and Finnish colleagues did ("keep a distance" was the most common exhortation). Another difference across the prime ministers is that Fredriksen and Löfven very frequently communicated supportive objectives in their posts (80% and 74%, respectively) in contrast to Marin (33%). However, an examination of the presence of the three affective ways to express support reveals somewhat different approaches between the Swedish and Danish prime ministers. Löfven most frequently included morale-boosting messages aimed towards strengthening the endurance of citizens during the crisis; for example, "It will take perseverance and strength on the part of each of us – but together we will succeed" (Löfven, 2020b). Fredriksen, on the other hand, primarily expressed empathy with people and groups that were affected by the pandemic, and gratitude for efforts by various people and groups: "I know how much this situation demands of you. Thank you for the great effort" (Fredriksen, 2020a). In a series of Instagram posts, she shared Covid-19–related stories depicting ordinary people and workers and expressed empathy with and gratitude towards them. The posts told the stories of, among others, a chronically ill girl, a midwife, a cleaner, and a dustman.

## Discussion

### Similarities and differences in Nordic health authorities' Covid-19 communication on Twitter

The Nordic health authorities included in our study showed several interesting similarities in their communication on Twitter during the Covid-19 pandemic's first wave. All four health authorities most commonly interacted with other

government organisations on Twitter, which corroborates the findings from the US and Italy (Tagliacozzo et al., 2021). Even in other cases of social media communication, government agencies tend to engage with organisations already in their communication circles (Liu & Xu, 2019; Wukich & Mergel, 2016). In contrast, the low level of interaction with political officials may reflect Nordic health authorities' need to not politicise their own communication by intertwining it with politicians' messages, and instead to manifest their role as professional civil servants. The Nordic public health authorities may also perceive themselves as independent agencies, although in practice, this independence varies between public administrative systems in the Nordic countries. Likewise, all the Nordic health authorities in our study largely refrained from engaging with national or international scientific organisations. Overall, this may reflect their self-perceived role as experts on matters regarding public health. As discussed previously, the Norwegian Institute of Public Health still provided information about scientific research outside their organisational boundaries, even though the authority did not explicitly refer to specific organisations.

The health authorities in all four countries frequently aimed at providing the public with instructions via Twitter. This is well in line with theoretical approaches stating that instructive information is most important during the early stages of a crisis (Coombs & Holladay, 2002; Sturges, 1994). The focus on instructions by the Nordic health authorities during the first wave of the Covid-19 pandemic implies that they recognised the need for guidance among the public and specified appropriate actions to be taken or behavioural guidelines to be followed. Thus, the public health authorities took a strong role in each country as the government agency with appropriate expertise to provide the public with guidelines.

The Danish Health Authority pursued several different communication strategies on Twitter than its Nordic counterparts. First, they interacted frequently with nongovernmental organisations, which are essential for the general public during crises, including the Covid-19 pandemic (Akingbola, 2020). Frequent interaction with nongovernmental organisations may improve agency communication to the public and further an agency's "understanding of different social groups and help NGOs cater to vulnerable groups" (Tagliacozzo et al., 2021: 947). Against this background, the Danish Health Authority outperformed other Nordic health authorities by publicly interacting with nongovernmental organisations on Twitter.

Nongovernmental organisations are also essential actors for psychosocial support during crises. Therefore, it is possible that there is a connection between the Danish Health Authority's more frequent engagement with relevant societal actors and the agency's remarkable proportion of supportive tweets, which stood out in comparison with the other health authorities. Communicative demands to prevent anxiety and fatigue, as well as create empathy (Coombs,

2020), were therefore more likely fulfilled by the Danish health authority than by its Nordic counterparts. The Public Health Agency of Sweden illustrated the lowest rate of supportive messages on Twitter. The reasons for this restriction could not be investigated as part of this study. The organisation may not have recognised the necessity to provide more psychosocial support to the public, illustrated by a statement that mental well-being in Sweden had been affected less by the pandemic since restrictions were less strict (Public Health Agency of Sweden, 2020).

Finally, the Norwegian Institute of Public Health had a much larger focus on reputational messages than the other Nordic health authorities. In the early stages of the pandemic, there were claims about disagreements between the government and the expert agency, which, although denied by the agency (Norwegian Institute of Public Health, 2020), may have increased the need to rebuild reputation. Reputation-reinforcing messages are generally limited to the phase when the crisis is mostly over (Sturges, 1994). Thus, it is remarkable that Nordic health authorities tweeted reputational messages within only one week of the World Health Organization's declaration of a pandemic, implying that they engaged in reputation-building from the start of the pandemic instead of waiting until less urgent stages of the crisis.

### Similarities and differences in Nordic prime ministers' Covid-19 communication on Instagram

The analysis of how Nordic prime ministers as political leaders communicated the Covid-19 crisis on Instagram revealed similarities as well as differences in approaches. Regarding interaction, a main similarity across the communication by the three Nordic prime ministers is that the core actors of the Covid-19 crisis management – the government, governmental organisations, and health-related agencies – were usually in focus in the posts. Hence, the prime ministers mainly interacted with organisations and actors within the state administrative system. However, Löfven paid attention to efforts made during the pandemic by non-governmental organisations to a higher extent than his Nordic counterparts did. A second similarity is that all the prime ministers frequently appealed for solidarity in their messages during the Covid-19 pandemic, which is a finding that is consistent with previous studies (Bjørkdahl et al., 2021; Christensen & Lægreid, 2020; Lilleker et al., 2021a) (for a discussion of how the different government-public administration relations in the Scandinavian countries influenced the different expressions of the common sense of solidarity during the Covid-19 pandemic, see Nord & Olsson Gardell, Chapter 3).

Beyond similarities, our analysis has detected differences between the communicative profiles of the Nordic prime ministers. Obviously, the most marked difference in the approaches is between the Swedish and the Danish prime

ministers. In Sweden, Löfven typically provided instructive messages, strongly appealed for solidarity, and additionally aimed at boosting the morale of the citizens. The general impression is of a paternalistic leader talking *to* the people during the crisis. This is underlined by numerous video clips from press briefings where he alone delivered messages to Swedes from a podium. Fredriksen, in contrast, primarily emerged as a supportive and compassionate leader who was interactive and involved *with* the people by communicating gratitude to the public and groups for various efforts and recognising the citizens' hardships of coping with the crisis by expressing empathy. In all, she appears as an authentic and affective political leader during the pandemic.

As both Löfven and Fredriksen are Social Democrats, it would be tempting to interpret the differences in communication approaches between them in the perspective of gendered political leadership styles. Differences in emotional communication styles have been brought forward as one significant divergence between female and male leaders during the Covid-19 pandemic (Dehingia et al., 2021; Grebelsky-Lichtman & Katz, 2020). However, such an interpretation would not be fully accurate considering the results here, inasmuch as Marin, also a Social Democrat, did not communicate in a similar way as her Danish female colleague. Marin, acting in the role of head of government, interacted with her government, talked about governmental actions, and additionally, albeit to a lesser degree, called for solidarity and boosted morale. Supportive messages and affective ways to communicate support were not prevalent in her posts.

In sum, the studied Nordic prime ministers exhibited similar practices in their social media communication regarding interaction in the content with organisations and actors in their surroundings, but diverging approaches vis-à-vis how communication objectives were emphasised and the kind of leadership style that was projected to the public during the crisis.

## Conclusions

Juxtaposing the main findings from the two case studies, a first observation is that both the Nordic health authorities and prime ministers primarily interacted with various governmental and administrative organisations and actors in their messages. This leads to the conclusion that comparatively homogenous communication ecologies in crisis management were formed in the Nordic countries. These ecologies focus on governmental and administrative actors, while mostly excluding other external actors. Still, the efforts of nongovernmental organisations during the Covid-19-crisis were recognised, mostly by the Danish health authority and the Swedish prime minister.

A second conclusion based on comparing the findings from the case studies is that the Nordic health authorities and prime ministers as political leaders,

although belonging to the same communication networks, pursued different but complementary objectives in their crisis communication on social media. During the first wave of the pandemic, the Nordic health authorities mostly provided instructions to the public, whereas the prime ministers mainly delivered (emotional) support to the people. These differences can be understood through the different roles and role perceptions that the actors have in managing crises. Beyond providing encouraging support to the people (boosting morale, instilling hope, showing empathy, and recognising efforts), Nordic political leaders frequently appealed to their citizens to stand together by calling for solidarity during the crisis.

As pointed out earlier, although the political and administrative systems and traditions in the Nordic countries exhibit many similarities, there were substantial differences in management strategies during the Covid-19 pandemic, and the countries were impacted differently. These contextual factors probably had a bearing on the communication strategies chosen by the health authorities and political leaders during the first wave of the pandemic. A striking observation when juxtaposing the findings across actor types is that the Danish Health Authority and the Danish prime minister stand out in both case studies by showing a clear focus on communicating emotional support to the public. This could imply that the overall goal of the Danish actors' communication strategies was more focused on providing psychosocial and emotional support to the public than in other Nordic countries. Moreover, the strong focus on recommendations of behaviour instead of legal restrictions in the Swedish management of the pandemic is, possibly, reflected in the finding that the prevalence of guidance and instructions in the Swedish health authority's messages (30%) was paralleled in the posts by the Swedish prime minister (45%).

Our study has contributed with novel empirical knowledge on crisis communication on social media by authorities and leaders. The results are important for communication about future pandemics and societal crises. Still, the findings should be interpreted with some caution, since the coding of the data is not completely transferable due to differences in the type of actors and in the social media platforms studied. Suggestions for further research are to examine the effects of different communication objectives in social media posts on user reactions, but also the effects on the willingness to follow recommendations and the evaluation of the actors. Although differences between the style and tone of instructions were notable in the empirical analysis, this study did not explore whether instructions fulfilled the communicative demand of efficacy, which is another avenue for future research. Our study furthermore noted that political leaders employ different visual framings of their messages (e.g., press conference footage vs. imagery of affected ordinary people), thus suggesting that future studies should include visual analyses of crisis communication on social media (see Drylie-Carey et al., 2020; see also Almlund et al., Chapter 6,

for an examination of the differences in Covid-19 poster campaigns in Scandinavia). Finally, since previous research on Covid-19 has focused extensively on the initial phase of the crisis, we lack any knowledge of how the social media communication by authorities and leaders developed during the later stages of the pandemic.

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