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To wear or not to wear, was that the question? Understanding citizen responses to COVID-19 crisis management in social media across Europe

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Abstract

This study aims to gain qualitative insights about and compare public responses to COVID-19 crisis management during the different pandemic phases and across three countries—Norway, Sweden and Italy. To do so, we have carried out a qualitative content analysis of a selection of 2606 tweets containing the term 'face mask' in Italian, Norwegian, and Swedish published between March 1, 2020 and June 31, 2022. The article combines *risk society* theses with *social practice theory* as a lens through which to examine public responses to crisis management. Analyzing the data from Norway, Sweden, and Italy, this article discusses the extent to which individualism, reflexive modernization, and cosmopolitanism account for citizen responses to authority's crisis management efforts in each of the countries during the different phases of the pandemic. Findings highlight the crucial role of socio-cultural contexts that shape citizen responses to crisis management over time, showcasing a spectrum of attitudes ranging from scepticism and critique to trust and compliance. This comparative analysis underscores the importance of considering the dynamic interplay between criticism and support, individualism and collectivism, as well as global and local experiences in understanding diverse and situated societal responses to crisis management during a global pandemic. The article also points to social media as a meaningful arena where individuals and groups share information and participate in discussions that shape collective views, thus having a significant role in shaping citizen responses to COVID-19 crisis management and influencing decision-making.

KEYWORDS
citizen responses, face mask, pandemic practices, risk society, Twitter, COVID-19

1 | INTRODUCTION

The traditional paradigm of crisis management, dominated by top-down responses from governments and public health authorities, has been significantly challenged in recent years. The COVID-19 pandemic serves as a prime example, highlighting the crucial role citizens play in crises (Bakshi et al., 2021). Their involvement was multifaceted, encompassing critical appraisals of public health directives alongside steadfast adherence to prescribed measures (Czeisler et al., 2020; Lazarus et al., 2022). Thus, instead of being

passive recipients of governmental mandates, citizens assumed pivotal roles, embracing behaviours such as facemask utilization and adherence to social distancing protocols, which proved instrumental in curtailing the spread of the virus (Flaxman et al., 2020). Consequently, citizens transcended the status of mere recipients of disruptions, emerging as central figures in both adapting to and mitigating the crisis (Vigoda-Gadot et al., 2023).

This notable citizen engagement during COVID-19 underscores a critical gap within extant crisis management scholarship (Chan et al., 2021). Traditionally, the field has focused on top-down responses, paying considerably less attention to public responses and citizen-driven initiatives (Haeffele & Storr, 2020; Helsloot & Ruitenberg, 2004). Most studies in this field concentrate on the role and impact of governments, elite groups, and the interaction with market forces (e.g., Haeffele & Storr, 2020), whereas the role of citizens and their perspectives are largely overlooked Integrating a citizen perspective into the field becomes imperative to fully comprehend how citizens perceive and respond to crisis management, and the impact that their participation may have in future crises (Appleby-Arnold et al., 2021; Lenz, 2024; Sunder & Prashar, 2023). This article adopts a citizen perspective and contributes with empirical insights about how citizens responded to the diverse and evolving crisis management strategies implemented in three different countries —Norway, Sweden and Italy—during the COVID-19 pandemic.

Social media platforms, particularly Twitter (now X), have emerged as dynamic spaces where citizens engage in real-time discussions, sharing perspectives, critiques, and support regarding their governments' crisis management measures (Eriksson & Olsson, 2016; Guo et al., 2021). The onset of the COVID-19 pandemic has led to an exponential increase in studies investigating the role of social media during crises (Tsao et al., 2021). Previous research has primarily focused on the effective use of social media for disseminating health information to the public during a pandemic (Hyland-Wood et al., 2021; McGuire et al., 2020; Sanders, 2020). Many studies have focused on how we generate, consume, and propagate information on social media, as well as public attitudes to governmental decisions (Tsao et al., 2021). Quantitative analysis and social computing techniques have become predominant in the literature, with sentiment analysis being particularly popular (Tsao et al., 2021). While recognizing the value of such methods, we posit that there is a need for more qualitative insights to gain a better understanding of cultural aspects, which have been largely understudied. It is important to develop more detailed knowledge of the potential influence cultural differences have on how people react to different types of uncertainty (Appleby-Arnold et al., 2021; Gross, 2016). Moreover, there is a notable gap in the literature as very few studies extend their focus beyond the initial months or year of the pandemic. We contend that more research is needed to understand later phases when restrictive measures were lifted, and nations had to navigate the complexities of closure and transition to post-pandemic lives.

This study specifically focuses on the face mask as an iconic measure of COVID-19 crisis management. The implementation of the face mask as an infection control measure required coordinated efforts related to preparedness, crisis response, and communication (Zhao & Knobel, 2021). Its successful implementation relied on the public. Moreover, the face mask emerged as a symbol of the pandemic, transcending its purely preventive value and becoming a device rich in cultural, political, and moral meanings, affective forces, and embodied sensations (Lupton et al., 2022). Studying citizen responses on Twitter offers a valuable lens to understand the public's sentiments, concerns, and attitudes toward COVID-19 crisis management. We argue that face mask discussions on Twitter serve as a suitable case for gaining an in-depth understanding of the characteristics of public responses in crisis management. This study aims to contribute to the crisis and disaster field by providing empirical insights into how citizens perceive and respond to crisis management efforts throughout the various phases of the pandemic in Norway, Sweden and Italy.

1.1 | CONTEXT: CRISIS MANAGEMENT AND NATIONAL RESPONSES TO COVID-19 IN ITALY, NORWAY AND SWEDEN

The onset of the COVID-19 pandemic, marked by profound uncertainty, prompted countries across the globe to adopt a wide range of strategies to confront the evolving crisis (Boin et al., 2021) National responses varied significantly, shaped by each country's unique challenges, political landscape, socio-cultural factors, legislation and public perceptions (Qian & Yihong, 2022; Staupe-Delgado, 2021). In this section, we offer an overview of the key features that characterized national responses in Italy, Norway and Sweden.

In Italy, the COVID-19 pandemic commenced with the detection of the first two cases in Rome on January 31, 2020, swiftly leading to a declaration of a 6-month national emergency. Italy faced an unprecedented crisis, being the first and most severely impacted European country, resulting in the implementation of strict national lockdown measures from March 9, 2020, as decreed by the Italian Prime Minister. This outbreak posed a severe public health challenge, with Lombardy, the hardest-hit region, experiencing over 23,000 excess deaths within the initial 2 months of the outbreak's first wave.

Initially, containment measures in Italy targeted municipalities with high infection rates, later expanding to encompass entire regions and eventually the entire nation. These measures included the establishment of 'red zones' with stringent movement restrictions, followed by additional restrictive measures tailored to specific regions. Nationwide school closures, suspension of non-essential services, and enforcement of social distancing protocols both indoors and outdoors culminated in a national lockdown. Subsequently, Italy transitioned into phase 2, permitting the resumption of most business activities under COVID-19 safety protocols. This experience dominated Italy's 2020 timeline, from the initial recognition of the threat in January to subsequent waves experienced in September and during the Christmas season, all under stringent restrictions.

Conversely, Norway and Sweden began registering growing concerns by February 2020, triggered by reports from Italy detailing overcrowded hospitals and escalating death tolls. Despite fundamental similarities as neighbouring countries, Norway and Sweden adopted distinct pandemic responses. The situation accelerated rapidly at the beginning of March, prompting the World Health Organization to declare COVID-19 a pandemic on March 11, 2020. This pivotal moment led the Norwegian government to shift from soft measures, such as testing, isolation, contact tracing, and quarantine for international travellers, to a comprehensive lockdown with closed borders and stringent regulations on March 12, 2020 (Ihlen et al., 2022).

In contrast, Sweden chose a different path, opting to maintain societal openness by placing substantial trust in citizens' individual responsibility. The Swedish government embraced a more relaxed approach characterized by voluntary guidelines (Johansson & Vigsø, 2021). Borders remained open, with businesses, restaurants, gyms and schools (providing remote education for older students) operating as usual. Unlike many other nations, Swedish authorities declined to mandate facemasks, instead advocating for physical distancing measures, sparking significant debate both domestically and internationally and portraying Sweden as an outlier in pandemic management strategies (Johansson & Vigsø, 2021). Sweden positioned itself as a bastion of scientific rationality amidst a global atmosphere dominated by hysteria and overreaction (Simons, 2020). However, as the pandemic progressed, disparities between the two countries' approaches diminished, with Sweden's strategy ultimately aligning more closely with those adopted by Norway and other Nordic nations (Esaiasson et al., 2021; Johansson et al., 2023).

Despite disparities in pandemic response strategies, certain commonalities characterized the Norwegian and Swedish experiences. Crisis management in both Nordic countries was typified by robust trust in government and associated agencies, fostering a cooperative institutional relationship (Johansson et al., 2023). Notably, health institutions enjoyed a remarkable degree of public trust during the pandemic's nascent stages (Ihlen et al., 2022). Governmental management of the pandemic largely withstood political opposition in both Norway and Sweden, albeit not without ensuing controversies.

Italy encountered a distinct set of challenges and dynamics in managing the COVID-19 pandemic. Public trust within Italy initially eroded as the crisis unfolded, with scepticism growing among specific population segments (Falcone et al., 2020; Gualano et al., 2022). The Italian government encountered substantial political opposition and criticism, particularly during the pandemic's initial phases when healthcare infrastructure was overwhelmed (Capano, 2020). Notably, conflicts between regional administrations and the central government in northern Italy complicated decision-making processes, impeding effective virus containment efforts (Rubinelli, 2020). Collaboration among disparate governmental entities and institutions in Italy was frequently tested during the pandemic, revealing inherent dysfunctions (Alber et al., 2021). Ambiguities surrounding roles and responsibilities further impeded coordination efforts, although the crisis ultimately engendered some degree of unity and collaboration among organizations, albeit not without challenges (Corvo et al., 2022).

Comparatively, Norway and Sweden exhibited lower mortality rates in contrast to Italy, reflecting varying impacts of the pandemic despite Sweden's heightened toll compared to Norway. Italy reported over 191,700 deaths from the pandemic's onset through October 2023, significantly exceeding Nordic countries' statistics (see Figure 1).

Finally, face mask strategies also differed among these countries (see Figure 2). Italy enforced a comprehensive and extended facemask mandate covering indoor and outdoor settings, Norway initially discouraged public facemask use but later endorsed them for specific situations, and Sweden refrained from mandating or widely recommending facemasks throughout the pandemic, with only limited and temporary guidelines during certain time periods. Each country's approach to facemask usage reflects their unique strategies in managing the COVID-19 pandemic and underscores the varied responses to public health measures across different nations.

These countries, with their distinct management pathways, offer a unique opportunity to explore cross-cultural variations in citizen responses, thereby enhancing our understanding of crisis dynamics in different socio-cultural contexts.

2 | THEORY

Efforts to theorize the COVID-19 crisis have applied a great variety of theories and approaches (e.g., Aven & Bouder, 2020; Boin et al., 2021; Collins et al., 2020; Hu & Liu, 2022; Lupton, 2022;
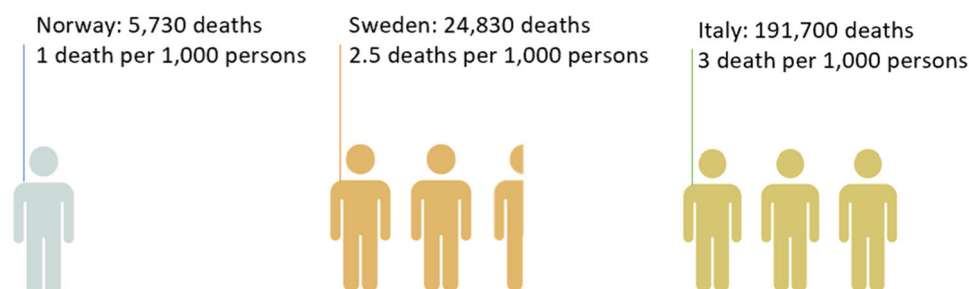

FIGURE 1 Death tolls in Norway, Sweden and Italy as of October 2023.

FIGURE 2 Overview of facemask policies in Norway, Sweden and Italy.

't Hart, 2023). A particularly intriguing contribution comes from Lupton (2022), who explores Ulrik Beck's contributions to risk theory as a framework for comprehending the COVID-19 pandemic. Lupton argues that Beck's (1992) seminal concepts concerning risk society—specifically reflexive modernization, individualization, and cosmopolitanism—offer a valuable framework for comprehending the dynamics of the ongoing pandemic crisis. *Reflexive modernization* involves a critical examination of the outcomes and consequences of modernization, with scepticism concerning the value of expert knowledge and systems. Beck posits that this reflexivity is a significant source of political conflict and change, leading to the conviction that late industrial societies are undermining themselves. Traditional logics of risk attribution and causality have broken down in the face of globalized risks, causing the public to become sceptical about the benefits of expert knowledge. Consequently, definitions of risk have become even more uncertain and contested. *Individualization* is the result of dissolving traditional expectations and values, compelling individuals to take charge of managing and making informed decisions about their own lives, rather than adhering strictly to rules and norms. The public is expected to seek out knowledge about risks and uncertainties and take action to protect themselves. Finally, *cosmopolitanism* is described as the assumption that boundaries have blurred, regional ties have diminished, and cultural identities have expanded beyond borders. As Lupton (2022) argues, these three features of the risk society involve a self-critical and sceptical awareness of the ambivalences and contradictions of contemporary life in relation to risk and uncertainty.

Beck's ideas have encountered criticism for their epistemological and ontological shortcomings (Jong, 2022; Selchow, 2016) and a perceived lack of empirical substantiation (Mythen, 2021). However, despite these criticisms, Mythen argues that Beck's concepts still offer valuable insights into situations characterized by 'non-knowledge' and uncertainty, such as the uncertainties surrounding the consequences of different pandemic strategies (Fergusson et al., 2020; Staupe-Delgado, 2021). Addressing the critique of empirical grounding and aligned with claims about the utility of Beck's ideas for understanding uncertainty, this paper posits that

Beck's concepts can serve as valuable analytical dimensions to understand citizen responses.

To achieve this, the article combines Beck's theoretical constructs with a more empirical approach—specifically, a social practice sensibility informed by recent efforts to integrate social theory practices into crisis and risk studies (Heidenstrøm & Kvarnlöf, 2018; Heidenstrøm, 2022; Oscarsson & Danielsson, 2018; Oscarsson, 2022). As explained by Heidenstrøm (2022), a practice-based framework acknowledges that social group actions are shaped by broader cultural and social structures, influencing responses to events implicitly and inconspicuously. Despite Beck's primary focus on the individual level, we argue that his contributions can be effectively combined with a practice-based approach to better understand how individual actions are influenced by wider cultural and social contexts, leading to diverse citizen responses to COVID-19 management. This approach bridges the gap between structural influences and individual behaviours, shedding light on the interplay between a crisis characterized by 'nonknowledge' and the population experiencing it.

Inspired by Staupe-Delgado's (2021) notion of pandemic practices, this study examines tweets published during the pandemic as mediated pandemic practices through which citizen responses to crisis management are enacted. By approaching tweets through the lens of practices, we acknowledge the nuanced ways in which citizens articulate their responses, navigating uncertainties, emphasizing the importance of shared understandings, societal norms, values and structures. Furthermore, a practice-based approach allows us to capture the temporal dimension and trace the trajectory of crisis responses, capturing shifts and adaptations over different phases of the crisis. Recognizing tweets as mediated pandemic practices highlights Twitter's role as a medium through which individuals express their responses to the pandemic, providing insights into how digital platforms influence and shape crisis responses in contemporary society.

In summary, the analytical framework of this article integrates theoretical insights from Beck (1992) with an empirical social practice lens. By adopting a practice-based approach, this paper aims to

understand the interplay between the COVID-19 crisis management and the population experiencing it, gaining insights into mediated citizen responses in Italy, Norway and Sweden. Beck's concepts of reflexive modernization, individualization, and cosmopolitanism are deployed to account for the features characterizing observed mediated pandemic practices.

3 | METHOD

This study used a mixed-method approach combining data science techniques with the capacities of qualitative analysis. We overcame the challenges of harvesting social media data (see, e.g., Andreotta et al., 2019) by automating certain aspects of the data collection and consolidation process to leave a manageable volume of data to synthesize and interpret. We developed a three-step protocol:

(1) Harvesting social media – compiling a corpus of tweets for each country

Using Twitter API for R, we gathered all tweets published from January 2020 to July 2022 containing the word 'face mask' in Italian, Norwegian and Swedish. We gathered a total of 1,540,107 tweets (see Figure 3).

(2) Extracting a subset of data in each country

Using R, we displayed the number of tweets per day in a graph. We manually selected peak periods and then identified communication-intensive days, that is, the dates with the highest number of published tweets within these peak periods. A total of four different days were selected in Norway and Italy and five in Sweden. Other relevant tweets were included in the data set, specifically tweets from one relevant day in Sweden and the initial period in Norway. See Figure 4 for more information about the data. Finally, we ran a random selection of tweets in each of the country data sets to reduce to a manageable volume of data. This left us with a selection of 2606 tweets, which were manually analyzed.

(3) Interpretative content analysis

The selection of tweets was coded following the same guidelines for the three countries. Each tweet was coded according to the main topic (and secondary topic if relevant), imagined audience and intention. The coding was abductive, with the development of country-based codebooks in the process, combining codes based on hypotheses, theories and concepts, while new insights and perspectives were discovered directly from the data. Furthermore, throughout the coding process, new entries were continuously compared with these codes and categories. This helped to ensure that the

	Norway	Sweden	Italy	**Total**
Timeframe		**Jan 2020 – June 2022**		
Total number of tweets	40,251	145,628	1,354,228	**1,540,107**
Intensive communicative days	June 6th, 2020 September 29th, 2020 December 7th, 2021 February 12th, 2022	May 5th, 2020 August 18th, 2020 December 18th, 2020 September 4th, 2021 January 13th, 2022	January 31st, 2020 February 27th, 2020 May 4th, 2020 June 28th, 2021	
Other days included in analysis	March 1-17th, 2020*	December 30th, 2020**		
Number of tweets publ. on selected dates	1,971	5,852	17,481	**25,304**
Total tweets analysed	806	800	1000	**2,606**

*To capture the initial phase

**To capture public reactions to the official recommendation of wearing facemasks in public transportation.

FIGURE 3 Data sets facts.

Topic (primary/secondary)	Imagined audience	Intention
Information from public authorities	Citizen to citizen	Humour
Travelling advice and borders	Citizen to authorities	Educational/ Informational
Vulnerable groups	Authorities to citizens	Opportunism
Facemasks as measure	Experts to citizens	Inspirational
Preparedness	Business to citizens	Calls for action
Trust	Citizens to media	Calls for different behaviour/ action
Morality	Citizen to all	Denounce/ Criticism
Responsibility	Citizen to politicians	Support
Bricolage	Citizen to business	
Learning		
International experiences		
Individual vs collective actions		
Control		
Emotional responses		

FIGURE 4 A list of common codes by category.

analysis remained grounded in the data and allowed for the refinement of categories. Figure 4 presents some of the common codes used across countries. Thus, the analysis of the data has been inspired by ground theory, which argues for theories and explanations grounded in the empirical data.

Results for each country were described following the same style (description of main topics, main audiences and main patterns of intention).

4 | RESULTS

In this section, we describe the different dates that were analyzed and the most discussed topics and arguments. Notably, our first finding was the identification of the different communicative-intensive days in which users were particularly engaged during the pandemic. Figure 5 provides an overview of dates included in the analysis and main topics discussed during those dates. In what follows, we describe the thematic content and arguments raised.

4.1 | Norway

4.1.1 | The face mask as a foreign device – March 1–17, 2020

This period starts with the first case being confirmed in Norway, still days before the WHO declared a global pandemic. It includes days both before and after the government introduced first restrictions to limit the spread of the virus, including national lockdown.

The use of face mask
During this phase, the predominant and contentious topic revolved around the general population's use of face masks. Arguments

against general use centred on the perceived lack of scientific evidence, the need to prioritize face masks for healthcare workers and infected patients, and concerns about fostering a false sense of security. Many tweets supported public health authorities' advice (discouraging general use), sharing information and citing evidence. However, a substantial number expressed confusion and questioned the logic, with certain users citing scientific evidence on the role of face masks in preventing transmission from the wearer.

Existing information, knowledge, and early advice
In this phase, uncertainty and limited knowledge about the virus prompted numerous information-seeking tweets. Common questions focused on virus characteristics such as symptoms and contagiousness. There were questions regarding how to interpret early control measures, especially quarantine regulations for travellers. Many tweets expressed dissatisfaction with public authorities' crisis management, criticizing advice and measures as inadequate, unreasonable, and unclear. Recurrent themes included perceived authorities' unpreparedness, citing issues such as material shortages and insufficient intensive care units. The data showed a keen interest in international experiences, with users considering developments in affected countries as potential future scenarios for Norway and seeking best practices to navigate the crisis.

Novelty, oddness, values and morality
Tweets revealed varied responses to the unknown. Some considered wearing face masks an overreaction. Others expressed fear and anxiety regarding the situation. Some users discussed values and morality, with egoism and perceived lack of solidarity being common themes. There were many tweets criticizing greed, like hoarding protective materials and opportunistic businesses in face mask black markets. Racist claims against Asians and immigrants were also present.
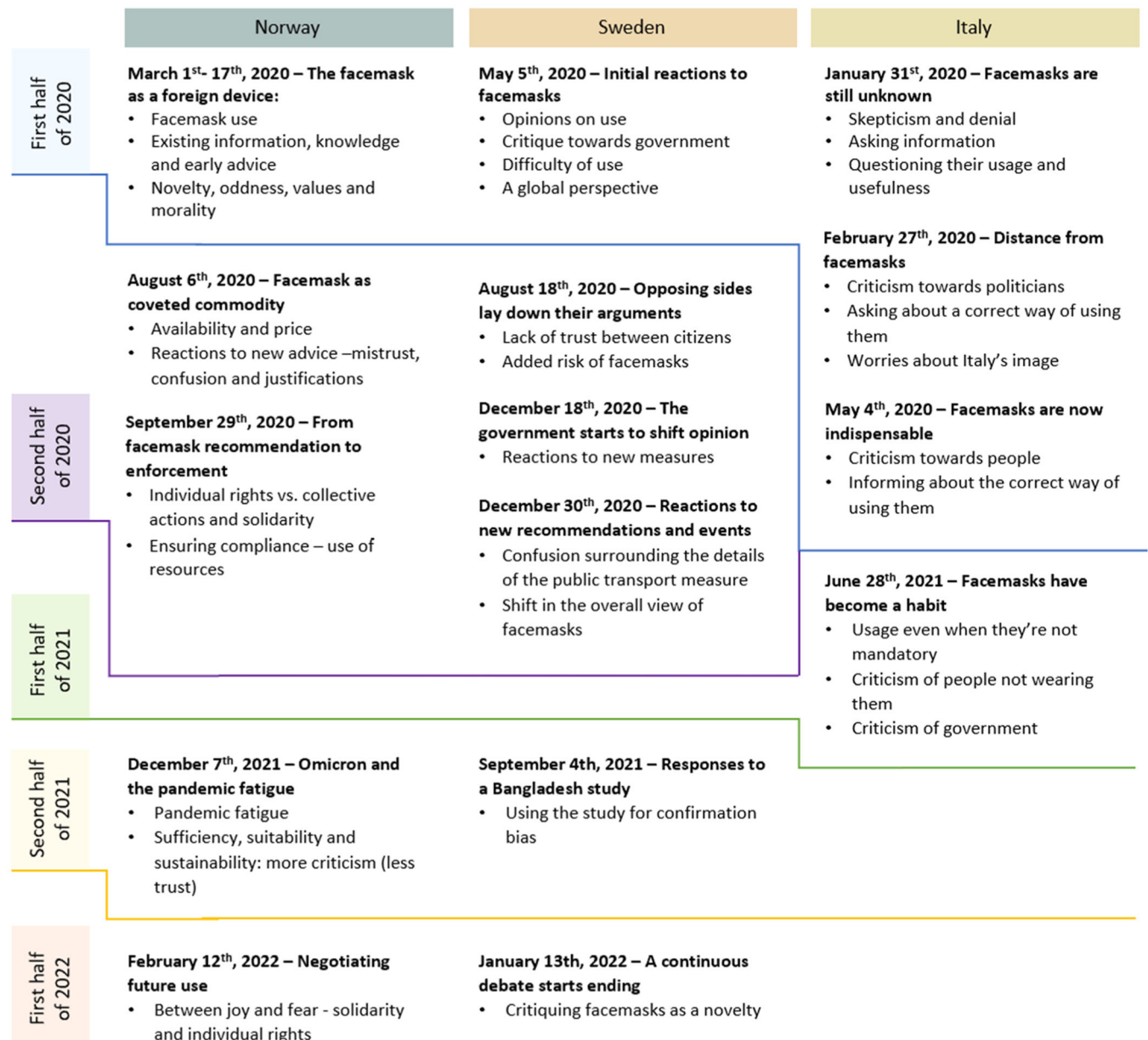
Norway	Sweden	Italy

First half of 2020

Norway
March 1st- 17th, 2020 – The facemask as a foreign device:
- Facemask use
- Existing information, knowledge and early advice
- Novelty, oddness, values and morality

Sweden
May 5th, 2020 – Initial reactions to facemasks
- Opinions on use
- Critique towards government
- Difficulty of use
- A global perspective

Italy
January 31st, 2020 – Facemasks are still unknown
- Skepticism and denial
- Asking information
- Questioning their usage and usefulness

February 27th, 2020 – Distance from facemasks
- Criticism towards politicians
- Asking about a correct way of using them
- Worries about Italy's image

Second half of 2020

Norway
August 6th, 2020 – Facemask as coveted commodity
- Availability and price
- Reactions to new advice –mistrust, confusion and justifications

September 29th, 2020 – From facemask recommendation to enforcement
- Individual rights vs. collective actions and solidarity
- Ensuring compliance – use of resources

Sweden
August 18th, 2020 – Opposing sides lay down their arguments
- Lack of trust between citizens
- Added risk of facemasks

December 18th, 2020 – The government starts to shift opinion
- Reactions to new measures

December 30th, 2020 – Reactions to new recommendations and events
- Confusion surrounding the details of the public transport measure
- Shift in the overall view of facemasks

Italy
May 4th, 2020 – Facemasks are now indispensable
- Criticism towards people
- Informing about the correct way of using them

First half of 2021

June 28th, 2021 – Facemasks have become a habit
- Usage even when they're not mandatory
- Criticism of people not wearing them
- Criticism of government

Second half of 2021

Norway
December 7th, 2021 – Omicron and the pandemic fatigue
- Pandemic fatigue
- Sufficiency, suitability and sustainability: more criticism (less trust)

Sweden
September 4th, 2021 – Responses to a Bangladesh study
- Using the study for confirmation bias

First half of 2022

Norway
February 12th, 2022 – Negotiating future use
- Between joy and fear - solidarity and individual rights

Sweden
January 13th, 2022 – A continuous debate starts ending
- Critiquing facemasks as a novelty

FIGURE 5 A summary of dates analyzed and main themes discussed.

4.1.2 | Face mask as coveted commodity – August 6, 2020

Amidst a surge in COVID-19 cases, public authorities announced forthcoming changes to face mask recommendations, starting the following day. Norwegian health officials were about to recommend the use of face masks for the general population in the capital for the first time since the onset of the pandemic, as an additional precaution in situations where maintaining a 'social distance' of one metre or more proved challenging (e.g., public transportation). It is noteworthy that while the use of face masks was to be strongly recommended, it would not be enforced as mandatory.

Availability and price—issues of justice, solidarity, and effectiveness
The most discussed topic in this phase was the price of face masks, with users condemning a significant increase before the new advice, leading to unequal access. Concerns about justice and privilege were raised, calling for public institutions' involvement to ensure fair distribution. High prices were said to potentially lead to re-use, thereby compromising efficacy. The debate on individual versus state responsibility for face mask provision emerged. Advocates of the individualistic approach highlighted precaution and personal protection as individual responsibilities, justifying the purchase of face masks despite general advice to the contrary. In contrast, proponents of the collective responsibility perspective emphasized the state's role in preparedness, urging people not to hoard masks unnecessarily and calling for a fairer distribution system.

Reactions to new advice—mistrust, confusion and justifications

The shift in public advice triggered mixed reactions within the population. For some, this change heightened mistrust towards health officials. Many expressed dissatisfaction with the delayed recommendation of face masks despite existing scientific evidence of their efficacy. However, numerous tweets took a constructive approach, attempting to address confusion by explaining the rationale behind the change in advice or denouncing the spread of misinformation that questioned the effectiveness of face masks.

4.1.3 | From face mask recommendation to enforcement – September 29, 2020

Oslo municipality announced the first introduction of the face mask obligation on public transport. Following the press release outlining fines for breaching infection control regulations, the police conveyed through social media their intention to not allocate resources to actively enforce this obligation. Notably, this phase is characterized by a more humorous tone in the tweets.

Individual rights versus collective actions and solidarity

The recent implementation of fines and the announcement of legal consequences were viewed as foreign to the Norwegian approach to pandemic crisis management. The majority expressed disagreement with the imposition of fines, questioning the necessity and effectiveness of such measures, and asserting that most of the population already adhered to the regulations voluntarily. Some voiced mistrust, highlighting the perceived inconsistencies in public authorities' advice, noting that the current mandate contradicted earlier recommendations that discouraged mask usage based on false security arguments.

A few users went further, questioning the legality of the face mask mandate and suggesting an infringement on individual freedoms, with extreme comparisons drawn between the face mask enforcement and the Nazi occupation of Norway in 1940. Conversely, others celebrated the enforcement and underscored the importance of solidarity and collective actions.

Ensuring compliance—use of resources

A series of tweets debated who bore the responsibility for ensuring compliance with the new regulations in Oslo. Many disagreed with the local public transport company, which asserted an inability to take responsibility for enforcing regulations. In response, some tweets praised Oslo police for deciding not to allocate resources to prosecute violators of face mask rules on public transport.

4.1.4 | Omicron and the pandemic fatigue – December 7, 2021

This date coincides with the outbreak of the omicron variant in Norway. Authorities found themselves compelled to reimpose nationwide restrictions to mitigate the spread of this new variant. In regions experiencing elevated infection rates, particularly in Oslo, the use of face masks in crowded places became mandatory.

Pandemic fatigue

Tweets reflected 'pandemic fatigue', expressing pessimism about the pandemic's end and questioning society's ability to overcome the virus. Users focused on the challenges and the profound impact the pandemic had on their lives, for instance, how arduous and unsustainable social isolation was in the long term. Certain sectors, notably cultural and entertainment, highlighted the fatal consequences of some of the implemented measures.

Sufficiency, suitability and sustainability—more criticism, less trust

The oscillation between recommendations and measures negatively influenced the government's credibility, and users perceived authorities' crisis management efforts as vague and inconsistent. Discussions concerning the feasibility, sufficiency, or suitability of current measures were also observed in this phase, yet to a lesser extent than in others. In particular, several tweets debated the case of schools, with several users denouncing schools once again being left behind without measures to effectively reduce contagion. A new theme also emerged—the environmental impact of widespread mask usage, prompting questions concerning prioritizing human over planetary health.

4.1.5 | Negotiating future use – February 12, 2022

The Norwegian government announced the removal of all regulatory measures against COVID-19, including the mandate to wear a face mask, based on recommendations from the Norwegian Directorate of Health and the Norwegian Institute of Public Health.

Between joy and fear—solidarity and individual rights

Tweets in this period revealed varied reactions to the announcement. Some celebrated the end of measures, seeing it as a return to normality and signalling the pandemic's end. However, discontent was notable, primarily related to health concerns and objections to the timing amid high infection rates. Users also shared personal experiences coping with the removal of these measures. Future face mask use was a topic, with some advocating for individual discretion, arguing for the 'right' to wear masks when sick or for the protection of oneself or vulnerable groups.

4.2 | Sweden

4.2.1 | Initial reactions to face masks – May 5, 2020

Twitter posts initially surged on May 5, 2020, during a period with 3000–4000 weekly COVID-19 cases in Sweden. The tweet peak coincided with escalating infection rates, prompting reactions to the government and the Public Health Agency's (FHM) decision against face masks.

Difficulty of use

A notable theme gaining traction was the perceived difficulty with the proper use of face masks, with several users questioning whether the average citizen would be able to use them correctly. Some posts highlighted the risks associated with improper use, which could contribute to increased spread of the virus. Conversely, other tweets expressed confidence in citizens' ability to use face masks correctly. Some argued that Sweden's strategy relied heavily on proper hand hygiene and social distancing, reflecting the high trust the government placed in citizens' ability to adhere to recommendations. Interestingly, this trust contrasts with the authorities' scepticism concerning citizens' ability to follow proper protocols for wearing face masks.

A global perspective

Twitter discussions also compared Sweden's approach to other countries' strategies. The global uptake of face masks was often contrasted with Sweden's stance, where not even people working with vulnerable populations were obligated to use them. The widespread use of face masks in other countries became an argument for suggesting that Sweden might have chosen an incorrect strategy.

4.2.2 | Opposing sides lay down their arguments – August 18, 2020

The second Twitter peak followed a press conference where the FHM Director General discussed face masks as a potential measure, emphasizing associated risks. Twitter served as a platform for continued government strategy criticism, with users accusing them of prioritizing the economy over lives by not implementing face mask requirements.

Lack of trust between citizens

During this phase, there was a growing focus on the incorrect use of face masks, from both supporters and opponents of face mask use. Another dimension of the debate was whether the use of face masks should be a collective or individual decision. Those emphasizing that this should be an individual choice stressed that there was prohibition on using face masks for those who chose to do so.

Added risk of face masks

A new argument against face masks emerged regarding perceived false security, suggesting that individuals could neglect social distancing as they considered the mask to be sufficient protection. In contrast, face mask proponents asserted their right to wear one, denouncing that this argument was adding to the judgement they already faced.

4.2.3 | The government starts to shift opinion – December 18, 2020

Around this day, media and press conferences were dominated by information about the pandemic, including recommendations and measures for Christmas and New Year celebrations. The first wave of

COVID-19 peaked during this week, with over 46,000 confirmed cases. The Public Health Agency drafted guidelines for potential face mask use on public transport at the request of the prime minister, which only advised use during rush hour, triggering reactions and criticism.

Critics deemed the approach unnecessary and questioned its exclusivity. Discussions extended to comparisons with countries with high infection rates despite face mask requirements, fuelling the broader debate on face mask efficacy as a preventive measure.

Reactions to the new measures

Some criticized the decision to create guidelines for specific timeslots, rather than opting for an all-encompassing approach throughout the day. Critics perceived this as an unnecessary complication. Moreover, questions arose regarding the limitation of the recommendation to public transport, omitting other crowded settings such as grocery stores. The decision to delay the recommendation's implementation until January 7, 2021, also faced criticism.

Some asked whether supporters of the government would alter their opinion on face masks in alignment with the changes in the advice. Many shared comparative data from other countries, particularly those with high infection rates despite face mask enforcement, thereby challenging the efficacy of face masks as a preventive measure.

4.2.4 | Reactions to the new recommendation and events – December 30, 2020

This date was included in the study because it was the only time in which a national face mask recommendation was announced in Sweden, with the suggested use of face masks on public transport during rush traffic hours, starting January 7, 2021. Discussions during this time were largely characterized by criticism of this measure.

Confusion surrounding the details of the public transport measure

Several aspects were again brought into question: firstly, the exclusive focus on public transport, omitting other crowded spaces like grocery stores. Secondly, specifying certain times for the recommendation, rather than endorsing face mask use throughout the day, was considered illogical. Thirdly, FHM drew criticism for placing the responsibility on public transport companies to provide face masks to those without, with some users arguing that acquiring face masks should be an individual responsibility.

Shift in the overall view on face masks

Most of the tweets were seemingly in favour of the use of face masks at this point. Although some opposition to face mask was expressed by pointing to practical challenges and concerns, such as whether commuters would be able to properly disinfect their hands before and after putting on a face mask, Sweden's overarching strategy

emphasized the primacy of maintaining distance, with face masks considered as a complementary measure rather than a solution.

4.2.5 | Responses to a Bangladesh study – September 4, 2021

In September of 2021, amid low infection rates in Sweden, a study on face mask use in rural Bangladesh sparked reactions on Twitter. Some referenced the study to argue for face mask implementation, while others questioned its relevance and evidence.

Using the study for confirmation bias

Remarkably, the study was used to support contrasting viewpoints. Opponents emphasized the study's reported 10% reduction in COVID cases, questioning if the potential risks associated with face mask use justified such a marginal decrease. In contrast, face mask proponents highlighted the potential lives that could be saved with even a small reduction, emphasizing its potential positive impact on society.

The study intensified criticism of the government and FHM, with users demanding that decision-makers take responsibility for delaying potentially life-saving measures. Further critique ensued as the government and FHM still did not admit the effectiveness of face masks.

4.2.6 | A continuous debate starts coming to a close – January 13, 2022

By January 2022, Sweden faced a new wave of COVID-19 cases linked to the Omicron variant. Twitter users continued to criticize the government and FHM for their reluctance to endorse face masks, questioning the reasons for this position, especially as other more invasive measures were implemented, such as remote learning for upper secondary schools.

Critiquing face masks as a novelty

Some posts questioned the often-claimed citizens' lack of familiarity with face mask usage after 2 years of the pandemic. Frustration grew in ongoing efficiency debates, despite an increasing number of studies supporting face mask effectiveness. However, both sides acknowledged the complexity of factors influencing the spread of the virus.

4.3 | Italy

4.3.1 | First appearance of the face mask in the public debate – January 31, 2020

Italy witnessed the first appearance of face masks in the public debate. It was one of the first signs that the country was starting to take action against the virus.

The use of face masks

On this day, discussions mainly revolved around face mask use, including queries on proper use, concerns about efficacy, and reflections on utility. Tweets fell into three categories: information-seeking inquiries, debates on their preventive role and emotionally charged reactions. In this early pandemic phase, sceptical and denial-oriented tweets were predominant, indicating a lack of alarm about COVID-19's emergence and questioning the necessity and effectiveness of face masks.

Scepticism and controversies

During this period, fewer tweets criticized authorities compared to subsequent dates, possibly because the issue had not yet escalated into an acute crisis. Conspiracy theories emerged, often seeking information with a humorous tone, reflecting an underestimation of the situation. Some tweets criticized citizens adopting protective measures like face masks, and openly racist tweets blamed Asians for the situation.

4.3.2 | A politician wearing face mask – February 27, 2020

On this day, a video of a prominent politician wearing a face mask triggered reactions. This represented a key moment in the pandemic's early stages, sparking Twitter discussions on mask efficacy and proper use. Despite the official lockdown not being implemented until March 9th, Northern regions of Italy already faced fatalities and an overburdened healthcare system.

Italy's shifting public sentiments

In the pandemic's early days, emotions ranged from anger to humour. Many commented the video discussing issues such as proper use and efficacy of face masks and seeking explanations. Concerns related to the pandemic's economic impact, and damage to Italy's image and tourism were also raised.

Italy's international image

The video triggered reactions on Twitter, including anger and concerns about Italy's international image. Since Italy had implemented measures ahead of other European countries, the issue of face masks had not yet gained attention abroad. While scepticism and denial regarding the pandemic persisted, it decreased. The episode highlighted the disparity between Italy's proactive response, seen in the politician's mask wearing, and the slower actions of mainly local politicians and citizens.

4.3.3 | Second phase of lockdown: Restrictions release – May 4, 2020

On this day, Italy entered into the second phase of the lockdown, with eased restrictions and a gradual return to normality. However, face mask use remained mandatory.

Use of face masks outside

The public's concerns primarily centred on the ease of restrictions. Strong criticism surfaced, particularly directed at individuals venturing outside their homes without face masks and concerns about the proper use of masks.

Seeking information

During this time, many shared and sought information about this new phase in social media. People asked about COVID-19 updates, government directives and other important facts. Simultaneously, outdoor sports debates emerged, discussing safe engagement with a focus on face mask use.

Face masks in daily lives: Responsibility and guidelines

Some users reflected on the profound change in personal habits caused by the pandemic. Users highlighted the challenges of returning to pre-COVID routines, with many emphasizing the continued importance of face masks. Discussions stressed the need to follow government guidelines and exercise personal responsibility for virus mitigation. The perceived importance of face masks as a protective measure remained even as the perception of the pandemic waned.

Unclear guidelines

Despite decreased criticism, concerns about government clarity regarding new regulations persisted. A decree that allowed family visits during lockdown, which relied on citizens' common sense over government oversight, was criticized by many. Some users interpreted this as unclear advice, potentially leading to confusion or ambiguity.

4.3.4 | Removal of requirement for face masks in outdoor places – June 28, 2021

This was the day when the requirement to wear face masks in outdoor settings was lifted. Up until this moment, the mandate for mask-wearing had extended to outdoor spaces, particularly when maintaining a safe physical distance was not possible. Starting from this day, the obligation to wear masks was applicable exclusively in enclosed spaces.

Face masks and outdoor use

Despite the relaxation on face mask regulations, users stressed the personal responsibility to wear masks outdoors beyond legal requirements. Some experienced an unwillingness to stop wearing masks, while others encouraged fellow citizens to persist, emphasizing personal choices.

Confusion and negative sentiments

Numerous tweets sought information about the new guidelines, indicating confusion and a request for clearer crisis communication. There was a slight increase in criticism towards the government, reflecting general discontent. This surge aligned with fears of a pandemic resurgence, prompting calls for mask wearing. Criticism of the changing regulations highlighted anxieties about the evolving situation and shifting policies.

Criticism of people's choices

During this period, there was an upsurge in tweets criticizing fellow citizens' behaviours and choices regarding new regulations. Some claimed people's responsibilities surpassed rule-following, stressing personal responsibility for public health in a context where mask regulations were no longer legally mandated.

5 | DISCUSSION

This section starts discussion how Beck's ideas of reflexive modernization, individualism and cosmopolitanism are reflected in mediated pandemic practices.

5.1 | Reflexive modernization in practice

In Norway, criticisms to authorities centre around issues of preparedness, responsiveness, and communication throughout the various phases of the pandemic. In the early stages, the lack of government preparedness drew significant discontent, particularly concerning the scarcity of face masks and protective materials. Disagreements surfaced regarding the scientific basis for decisions, such as the recommended one-metre social distance and the public advice regarding the use of face masks. Calls for more stringent measures and the general use of face masks clashed with the opinions of those who saw these actions as overreactions at an early stage, foreign to Norwegian culture, and inefficient resource use. The debate evolved along the different phases and extended to when the restrictions were lifted, reflecting diverse interpretations of what proportional and suitable crisis measures should involve. Critics also targeted communication inconsistencies, especially during periods of high uncertainty. Users highlighted a lack of explanation for advice changes, leading to confusion and mistrust. However, not all the analyzed citizen responses questioned public advice. Contrastingly, a significant portion of citizens were not critical to the expert governance system nor knowledge. What was common to all these more positive responses was the high levels of public trust, showcasing high levels of support for government decisions.

In Sweden, criticisms centred on a perceived lack of trust in citizens' ability to use face mask, government stubbornness against implementation of mask requirements, and authorities' responsiveness. Initially, those advocating for face masks interpreted the government's opposition to face masks uptake as a lack of trust in citizens' capacity. Paradoxically, Sweden's strategy relied heavily on the government's trust in citizens taking responsibility. Advocates of the government pointed to observed misuse of face masks as evidence to support the government's decision to not introduce

face masks. As the pandemic progressed, the critique shifted towards the government's refusal to change its viewpoint on face masks, even as new scientific evidence emerged, and COVID cases increased. The government's cautious approach drew sharp criticism for being laidback and unresponsive. Even when the advice was modified to include the recommendation of using face masks on public transport during rush hour, it was met with scepticism and questioned for its inconsistency with previous government advice. Thus, the overarching critique in Sweden revolved around the government's lack of responsiveness, leading citizens to question the chosen measures and the absence of a more straightforward solution, such as widespread use of face masks.

Italy's early pandemic stages brought about scepticism and denial, challenging established knowledge and crisis measures. Individuals questioned the necessity of face masks and downplayed the pandemic's severity, reflecting scepticism toward expert guidance. However, as the pandemic evolved, public perceptions shifted to criticism, often accompanied by humour, and concerns about Italy's international image and economy. The transformation in the public perception reflected the evolving circumstances and government measures. Later, individuals become more conscious of the consequences within the context of the crisis, and many become more compliant. Still, criticism of the government remained consistent, reflecting a characteristic feature of Italian public opinion.

Thus, Ulrich Beck's thesis of reflexive modernization provides a lens through which we can understand the questioning of traditional expertise and governance systems, evident in the three countries' responses. This scepticism was reflected in the criticisms towards public health authorities and government measures, particularly around issues of preparedness, responsiveness, and communication.

5.2 | Individualism in practice

In Norway, the response to the COVID-19 pandemic reflects a dualistic interplay between individualistic and collective mindsets. Users adopting an individualistic approach emphasize personal responsibility for protection. Many sought best practices, challenged public advice, and went against recommendations by purchasing face masks at an early stage. This stance often involved criticism of the government's lack of preparedness and proactiveness. Conversely, those with a collective sense prioritized solidarity and community protection, and often raised negative moral judgements of individualistic perspectives. Trust in public authorities is historically high in Norway, and there is a willingness to support and help others, with protection seen as contingent on these collective principles.

Similarly, Sweden witnessed a temporal evolution in responses, initially leaning towards a collective mindset. Criticism of the government's decision not to implement face masks centred on the importance of collective action. However, as time progressed, there was a shift towards an individualistic mindset, with debates on personal choice and the right to wear face masks. Trust in collective abilities eroded, and some expressed individualistic concerns about

the collective risks associated with face mask use. Towards the end of the data period, a collective shift emerged, possibly influenced by a change in government recommendations, indicating a growing acceptance of face masks as a collective tool against COVID-19.

In Italy, the response to the pandemic unfolded in phases, reflecting evolving attitudes towards both individualism and collective responsibility. The early stages were characterized by widespread denial and an individualistic focus on personal freedom over collective well-being. The discourse revolved around individual rights and personal choices, with scepticism toward the necessity of face masks. As the crisis progressed, there was a notable shift towards collectivism, recognizing personal responsibility and the importance of adherence to government guidelines. This marked a time of balance between individual choices and collective well-being.

The culmination of this transformation occurred when Italy lifted the requirement for masks in outdoor settings. The discourse shifted from questioning the necessity of masks to critiquing those who chose not to wear them, indicating a societal shift in expectations. Italy's response reflects a dynamic interplay between individualism and collective responsibility, with attitudes evolving from an emphasis on personal rights to a recognition of shared standards throughout the course of the pandemic.

The responses observed in the three countries suggest a trend towards individualization. Citizens actively engaged with information, questioned authorities, and made decisions based on their own risk assessments. This relates also with Beck's (1992) concept of reflexive modernization, where individuals take on more responsibility in navigating uncertainty.

5.3 | Cosmopolitanism in practice

In Norway, recognizing the global nature of the threat, individuals sought insights from diverse corners of the world. Arguments often revolved around best practices or potential future scenarios for Norway. Some advocated for solutions applied by countries that adopted face masks earlier, emphasizing the global circulation of knowledge. Social media emerged as a platform for the global exchange of local insights, fostering a dynamic information-sharing environment. Conversely, others underscored Norway's idiosyncrasies such as low population density, as factors necessitating more context-specific approaches.

In Sweden, cosmopolitan discussions unfolded prominently in the context of face mask debates. Supporters and opponents engaged in a comparative analysis, aligning or contrasting Sweden's face mask strategy with global practices. Advocates for implementation referred to other countries and the World Health Organization endorsing face masks, framing Sweden's deviation as a potential flaw. Opponents countered by citing high infection rates in countries with mandatory face mask use, challenging the effectiveness of such measures. This global awareness situated Sweden within the broader pandemic context, drawing on diverse studies and experiences worldwide to evaluate and critique the national strategy.

Italy's early exposure to the pandemic as the first significantly affected European country created a unique context for cosmopolitan perspectives. Unlike some nations, Italy lacked clear international precedents to draw upon, given the unprecedented nature of the crisis. The distinctiveness of China's case, where the pandemic originated, further limited direct applicability to Italy due to political, societal, and cultural differences. The absence of ready-made solutions intensified the sense of uncertainty. However, Italy did turn outward when considering its international image. As the first European country to implement lockdown measures and mandatory mask-wearing, Italy became acutely aware of how its actions and policies would be perceived globally. This international scrutiny heightened the importance of projecting a positive image and contributed to Italy's engagement with the global community.

Cosmopolitanism played a significant role in shaping citizen responses, particularly in the early phases of the pandemic when uncertainty was high. Shaw et al. (2020) argue that the COVID-19 pandemic is global, but its response is local. However, our findings show that responses are not just local but the outcome of the interplay between situated as well as globalized cultural discourses, beliefs and practices surrounding disease outbreak and control (Lupton, 2022).

The findings discussed in this study contribute significantly to our understanding of the interaction between authorities' crisis management and citizen responses (Bakshi et al., 2021; Sunder & Prashar, 2023). While comprehensive public authorities' crisis management measures may be vital for an effective pandemic response, they alone are insufficient to achieve the goal of controlling pandemic growth (Vigoda-Gadot et al., 2023; Chan et al., 2021).

Drawing on a practice-based perspective, we illuminate how responses are enacted and shaped in the digital realm, influenced by factors like values, cultural norms, expert advisors, face mask availability, production and supply chains, government measures, and political groups on both sides in the debate on face mask wearing. The study also shows how citizen responses to specific crisis management measures change over time, reflecting the unfolding of the crisis as observed with other relevant issues, such as vaccine perceptions (Fiskvik et al., 2023). Thus, the study underscores the significance of spatial and temporal dimensions in shaping these mediated practices. Geographic and temporal contexts influence how citizens interpret and respond to crisis management efforts, reflecting unique socio-cultural and political dynamics (Boin et al., 2021; Friedler, 2021; Johansson et al., 2023; Lupton, 2022; Staupe-Delgado, 2021).

The range of responses observed underscores the diversity of attitudes and perspectives among citizens. Beck's theses become relevant to account for the heterogeneity of responses. While some individuals expressed scepticism and criticism towards government measures and public health advice, others demonstrated a high degree of compliance and adherence to pandemic protocols. This spectrum of responses reflects the complexity of public opinion and the diverse ways in which individuals engage with crisis management efforts (Daoust, 2023; Wong & Jensen, 2022).

The study highlights the interplay between individualism and collective action in shaping pandemic responses. Certain responses emphasized personal autonomy and individual decision-making regarding health measures, while others emphasized the importance of collective responsibility and solidarity in managing the pandemic. This tension between individualism and collectivism underscores broader debates around governance, citizenship, and societal values (Costa & Carrus, 2023; Lenz, 2024; Song & Choi, 2023).

The findings illuminate the interplay between localized and globalized nature of pandemic responses. Some responses were grounded in local contexts, reflecting community-specific concerns and priorities. In contrast, other responses drew upon international perspectives, referencing global practices, scientific findings, and experiences from other countries. This global-local dynamic underscores the interconnectedness of pandemic responses in an increasingly globalized world (An et al., 2024).

The findings of this study shed light on several key aspects of citizens' responses during the COVID-19 pandemic, particularly within the realm of social media. By analyzing responses on this platform, the study provides nuanced understandings of how social media influences and shapes public perceptions, behaviours, and attitudes during times of crisis. Our findings show how social media served as a dialectical platform that: (1) allowed both reflexive discussions and trust-building, emphasizing a nuanced response that blended scepticism with support; (2) served as an arena for both individualistic practices and fostering collectiveness; and (3) enabled the global circulation of local insights and situated experiences.

By examining citizen responses in the digital realm, this study contributes to understanding citizen engagement and crisis navigation during a pandemic. Further research exploring the interplay between individual agency, social practices, and governance structures will be crucial for informing effective responses to future crises (Karlsen & Antonsen, 2023). Finally, this research focused on a specific social media platform. Future research could explore how these dynamics vary across different platforms, how specific algorithms and content moderation practices influence responses, and their implications for crisis management in the digital age.

6 | CONCLUSIONS

The study shows different sociocultural responses to face masks in different political and geographical contexts. While each country exhibited unique dynamics, a common thread across Norway, Sweden, and Italy was the intricate interplay between trust, support, and criticism. In Norway, trust in public authorities remained high throughout the pandemic, while coexisting with critique. Sweden witnessed the erosion of trust due to perceived government stubbornness, leading to sustained critiques. Italy experienced an evolution from scepticism to compliance, emphasizing a shift towards a more supportive citizenry.

Across the three countries, the citizen responses to the COVID-19 crisis management depict a spectrum of attitudes ranging

from individualistic to collective and evolving over time. Norway's dualistic dynamics showcase a nuanced coexistence of both approaches. The Swedish tweets highlight the change from collective to more individualist approaches, and Italy's journey demonstrates the adaptability of responses over time. Finally, the cosmopolitan lens manifested differently across Norway, Sweden, and Italy. Norway balanced global insights with local idiosyncrasies, Sweden became an outsider, and its citizens looked to the outside to argue for a change in the face mask strategy. Italy, confronted with unique circumstances, navigated the early pandemic while being preoccupied with its international image. Finally, while not all responses can be explained as reflexive modernization, individualization, or cosmopolitanism, these themes are definitely important aspects to account for the citizens' responses to the crisis management of the pandemic.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Data available on request from the authors due to privacy/ethical restrictions. The data that support the findings of this study are available from the corresponding author upon reasonable request.

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