Scandinavian Journal of Public Administration
Vol. 29 No. 2 (2025)
p. 60 - 87

DOI:
https://doi.org/10.58235/sjpa.34399

The Price of Safety: Assessing the Acceptance of COVID-19 Measures in Nordic Countries

Therese Sefton[1] and Are Vegard Haug[2]

Abstract

The COVID-19 pandemic prompted Nordic governments to implement various measures to control the virus's spread, impacting individuals in different ways. This study seeks to understand the extent to which people in the Nordic countries (Denmark, Finland, Iceland, Norway, and Sweden) perceive these COVID-19 regulations as reasonable. We conducted surveys among representative samples of citizens in these countries and analyzed the data using linear regression. Our findings indicate a high level of acceptance for these measures, suggesting a willingness to sacrifice significant freedoms in a pandemic crisis. However, this acceptance does not imply that 'anything goes.' Acceptance varies based on individual circumstances and context, aligning with the notion of critical compliance. The study underscores the importance of both state-centered and citizen-based perspectives in understanding public acceptance of pandemic measures. It raises questions about citizens' willingness to sacrifice fundamental human rights and highlights potential negative impacts on democratic standards and values during crises. Our insights can assist policymakers in creating more effective and widely accepted regulations in response to pandemics or similar crises.

Keywords:
public perceptions;
human rights;
legitimacy;
democracy;
crisis;

Practical Relevance

- The insights from this study could assist policymakers in crafting more effective and widely accepted regulations in response to pandemics or similar crises. By understanding public perceptions of infection control measures, policymakers can utilize this knowledge to design policies that amass greater support and adherence, ensuring better compliance with necessary regulations.
- The research identifies potential factors influencing public perception towards regulations implemented during the pandemic. This revelation opens new avenues for further research on these elements, contributing to a more comprehensive understanding of how people perceive, comprehend, and potentially react to infection control measures during public health crises.
- The study underscores that there are considerable differences among the measures regarding the infringements on rights and the necessity of these measures. Even in countries with high levels of institutional trust, there is a compelling need for increased scrutiny of crisis regulations.

[1]*Corresponding author:* **Therese Sefton**, is a Ph.D. candidate in Business Administration, Innovation and Governance, Oslo Business School and Norwegian Social Research Oslo Metropolitan University. Her research interests are crisis management, regulatory governance, public policy, democracy, human rights, international relations and history.

[2]**Are Vegard Haug**, is a political scientist (PhD) and senior researcher at NOVA at Oslo Metropolitan University, Norway, and in the Department of Political Science and Management at the University of Agder, Norway. His research interests include local government, welfare states, political economy, innovation, organisation and management, democracy, and law. His recent research projects include crisis management, governance and welfare models and Nordic regional development.

Article first published as an article in press: May 27, 2025
Article published in Vol. 29 No. 2: June 23, 2025

e-ISSN: 2001-7413

Introduction

In a recent NY Times opinion, David Wallace-Wells argues that 'COVID remade America' (2025), turning Americans into 'hyperindividualists' and ushering humanity into a new age of social 'Darwinism' where survival became a measure of merit. The pandemic became a 'morality tale' in which people's fate was ultimately every person's individual responsibility, similar to the framing of the crisis in Sweden. Wallace-Wells notes that "COVID destabilized and undermined politics almost everywhere," pointing out that most people, even liberals, have grown skeptical of political institutions—though they cannot agree on how these institutions have failed them (ibid.).

Moreover, according to a recent report on the state of democracy by the V-Dem Institute in March 2025, we now live in a world with fewer democracies (N=88) than autocracies (N=91), indicating a truly global wave of autocratization (Nord et al., 2025). During the COVID-19 pandemic, the Nordic countries each adopted unique regulatory approaches, leading to varying health outcomes and different experiences of the pandemic among citizens (Nguyen Duy & Stokstad, 2024). Recent studies highlight that among the five Nordic countries, Sweden and Denmark experienced the most significant public health crises. Policy choices and regulatory instruments significantly influenced the pandemic's course and consequently, the public health outcomes (Heggebø & Pedersen, 2024).

As Egger et al., (2021) emphasize, crisis policymaking's primary objective is to manage the disruptive impacts of crises on individuals, institutions, and societies. Decision-makers are primarily concerned with policy enforcement and stringency, perhaps less with citizen-based experiences and subsequent perceptions, which are important for the legitimacy of the process of crisis governance (e.g., representation and accountability, legality of measures and rule of law) (Grogan, 2022; Schmidt, 2013). However, exceptional measures can undermine democratic legitimacy, potentially leading to democratic backsliding (Edgell et al., 2021; Fiorina, 2023).

Echoing this sentiment, (Greene, 2022) explores the relationship between emergencies, policy perceptions, and illiberalism. He argues that liberal values may be temporarily suspended and potentially lead to permanent illiberal transformations during emergencies, by pleas to necessity and technocratic solutions. Other studies show that the willingness of citizens to sacrifice democratic principles for effective crisis management depends on their personal experiences and political attitudes (Lindholt et al., 2021).

To explore the Nordic citizenry's perceptions of the pandemic policies, and what this potentially tells us about the potential for democratic backsliding during emergencies like the COVID-19 pandemic, we surveyed representative samples from each Nordic country. We asked residents to rate the reasonableness of 17 restrictive measures implemented during the pandemic. This article presents the survey results, focusing on how residents in the Nordic countries perceive the reasonableness of COVID-19 regulations in their respective countries. We argue that this question also indirectly measures the level of personal freedom individuals are willing to sacrifice during a pandemic crisis. We explore whether individuals distinguish between regulations that infringe upon human rights (high-cost measures) and other types of measures based on perceived reasonableness. We ask the following question: To what extent do people in the Nordic countries perceive the various COVID-19 regulations in their respective countries as reasonable?

We aim to identify variables that may be associated with perceptions of reasonableness. For instance, are positive views on local performance associated with higher values of perceptions of reasonableness. Previous research identifies interpersonal trust, fear, and virus exposure as significant drivers of adherence to pandemic regulations (Helsingen et al., 2020; Jørgensen et al., 2021; Memoli, 2024; Siegrist & Bearth, 2021). Are these factors also relevant in understanding people's perceptions of COVID-19 measures in the Nordic countries?

This article is structured as follows: The first section provides an overview of two perspectives on crisis management and regulations – state-centered and citizen-based including the important question of the consequences of the many measures that were implemented on the health of democratic institutions, such as rule of law and accountability. The second section presents a brief contextual overview of the differing Nordic crisis responses and public health outcomes. The third section discusses the theory of reasonableness, including its implications

for administrative decision-making and citizens' perceptions of reasonableness. The fourth section presents our hypotheses. The fifth section describes the study's methods, including the operationalization of reasonableness, details on data collection, sample characteristics, survey instrument, variables, index construction, analytical techniques, and addressing methodological challenges. The sixth section presents the results, including descriptive data and regression analyses. The final section offers a discussion of the findings and their potential implications and ends with concluding remarks.

Two Perspectives on Crisis Management and Regulations

Our study revolves around two perspectives on the management strategies and regulations implemented during the COVID-19 pandemic: a state-centered perspective and a citizen-based perspective. The COVID-19 pandemic presented unprecedented challenges, leading to stringent infection control measures such as lockdowns, school closures, and movement limitations, impacting civil liberties and fundamental rights (Flood et al., 2020; Heinikoski & Hyttinen, 2022).

The state-centered perspective

Nordic countries faced critical challenges despite differing strategies and varying allocation of competencies between government levels (Nguyen Duy & Stokstad, 2024). These included shortages in Intensive Care Units (ICU) capacities, protective equipment, resources, and economic foresight (Christensen & Lægreid, 2023; Haug, 2024).

To illustrate, Norway introduced over 800 local regulations, only stricter than the national rules, under the Infection Control Act of 1994 (Ubaid, 2023), while Sweden adopted a more relaxed approach without significant constraints on civil liberties (Garcia et al., 2024; Sommar et al., 2024). Denmark's national response was led by the Ministry of Health and the prime minister's office, with regional responsibilities centralized (Houlberg & Foged, 2024). Finland's response was coordinated by multiple health institutions, regions and municipalities. The regions had a certain degree of autonomy to adjust national regulations for the local context (Godenhjelm, 2024). Iceland adopted a centralized approach, with local restrictions implemented by central authorities (Eythórsson, 2024). These strategies led to varying outcomes in death rates, excess mortality, hospitalizations, confirmed cases, and vaccination rates. As Heggebø and Pedersen (2024) conclude: “The death toll related to COVID-19, both in absolute numbers and adjusted for population size, was highest in Sweden followed by Denmark both in 2020 and 2021” (p. 26). Information on excess mortality and hospitalization related to COVID-19 are also highest for Sweden (ibid).

An important question that has been raised in the literature on COVID-19 is what consequences infection control measures, derogations to rights and declared states of emergency would have on ‘the health of democracy’ (Comstock et al., 2025; Katsanidou et al., 2022). The measures implemented, often praised by governments, sometimes violated established norms for emergency measures, potentially eroding transparency and democratic legitimacy (Edgell et al., 2021; Staronova et al., 2023). Policymakers faced trade-offs between individual rights and collective health goals, balancing liberal and mere authoritarian powers (Gjerde, 2021). This raises questions about democratic governance, accountability, and legitimacy (Fiorina, 2023), and places the resilience of democratic institutions and practices under test. Indeed although Sorsa and Kivikoski find in their scoping review on the early research on COVID-19 and democracy that democracy appeared to have significant impact on some aspects of policy responses, in most parts of the world however, “the scope, the franchise, and authenticity of democracy narrowed down due to the pandemic, albeit in most cases only temporarily” (Sorsa & Kivikoski, 2023, p. 2). The same authors conclude that although various mechanisms such as constitutional checks and balances to popular backlash have been important safeguards and proven the resilience of democracies, “empirical research show some weak signals of anti-democratic tendencies that may become more accentuated in the longer run” (ibid, p. 17).

The citizen-based perspective

If crisis governance curtailing rights poses a threat to democracies, individuals' perceptions of COVID policies matter for potential criticism of- and opposition to such measures and hence the risk of democratic backsliding. People's compliance with COVID-19 measures has been extensively researched, yet few studies examine how adherence evolves over time (Petherick et al., 2021; van Loenhout et al., 2022).

Exploring perceptions of the reasonableness of public health policies can enhance understanding of compliance (Amirkhanyan et al., 2023). If individuals regard certain measures as reasonable, they are more likely to adhere to them, illustrating the degree of personal freedom they are potentially prepared to forgo during a crisis. This has broad implications for democratic values such as the rule of law, accountability, and legitimacy, which are values imperative to safeguard, especially during times of crisis. However, a variety of factors influence a person's decision to comply, such as trust in authorities and others, and here others argue that trust and compliance can reflect people's life situations: 'a scenario of *critical compliance*, in which citizens discriminate between regulations according to their own circumstances, can be expected' ((Baldersheim & Haug 2024, p. 6; Boin & 't Hart, 2024, p. 27).

Perceptions of reasonableness are essential for policymakers during a crisis, as they signal the extent of freedoms individuals are willing to surrender and essentially the limits of the state in terms of responses. Moreover, they underscore the importance of preserving democratic values, such as the rule of law and governance legitimacy (Memoli, 2024). A citizen-based perspective on crisis management, observed approximately two years into the pandemic, can provide valuable insights into broader democratic challenges and inform future strategies to balance public health protection with the preservation of democratic values and human rights.

Theory of Reasonableness

Our study focuses on two conditions that illuminate the implications of pandemic management strategies adopted by the Nordic countries. Firstly, we explore the concept of reasonableness within legal scholarship and by ordinary citizens, leading to expectations related to citizens' assessments of human rights and regulatory stringency. Secondly, we discuss other influencing factors, such as pandemic exposure, local performance, and trust as demonstrated in the hypotheses.

Reasonableness, as conceptualized at the intersection of legal and political philosophy, is described as a complex mix of features exercised at both institutional and individual levels (Grossmann et al., 2020; Weinstock, 2006; Young, 2017). It enters the scene when formal or instrumental rationality cannot provide solutions acceptable to individuals and communities (Mangini, 2022). Crucial criteria for decision-making according to reasonableness include proportion and balance (Mangini, 2022, p. 938). Reasonableness within legal scholarship involves the soundness of reason and judgment (Borriello, 2021) and is closely connected to the "culture of justification," which emphasizes substantive reasoning in decision-making processes (Möller et al., 2011).

In public administration, reasonableness is a constitutional imperative, ensuring that administrative actions are reasonable and protecting individuals against arbitrary decisions (Borriello, 2021, p. 155; Brynard, 2013, p. 69). The underlying values to determine reasonableness are identified in a state's constitution, which implies a standard for reasonable decision-making during crises (Brynard, 2013, p. 71).

During the pandemic, legal scholars frequently criticized regulations that wrongfully suspended core human rights enshrined in several national constitutions (Cathaoir, 2021; Høgberg et al., 2023; Lebret, 2020; Maria et al., 2021; Spadaro, 2020). People's experiences during the pandemic varied at national, local, and individual levels, affecting how they perceive the reasonableness of measures (Spruill & Lewis, 2023). National preparedness plans and risk assessments articulate important societal values to be protected during emergencies, creating "priors" that influence judgments about reasonableness (Lidén, 2022; Spruill & Lewis, 2023).

Taken together, citizens' perceptions of the reasonableness of measures depend on expectations about societal values and priorities, constitutional provisions, and awareness of

their rights. Human rights by virtue of being unversal, and constitutional rights set expectations for citizens and regulate government actors, establishing standards for reasonable decision-making during crises (Garrett, 2017, p. 78).

Hypothesis Formulation

As shown in the section above, reasonableness is a demanding concept but suitable for capturing people's attitudes towards pandemic measures. Below, we present four main hypotheses to identify predictors of people's perceptions of the reasonableness of pandemic measures. Each hypothesis has the potential to explain the variation in citizens' perceived reasonableness of the pandemic measures.

Hypothesis 1: Regulatory Regimes

Building on the previous sections regarding legal perspectives and the concept of reasonableness, we formulate two sub-hypotheses relating to regulatory regimes. We predict that the type of measure implemented influences citizens' perceptions of its reasonableness. This prediction is based on the presumption that the more sensitive the regulatory issue is, the higher the benchmark is for perceiving it as reasonable.

> ***H1.1 Human Rights****: Measures infringing upon human rights are less likely to be perceived as reasonable by citizens compared to other measures.*
>
> ***H1.2 Stringency****: Less stringent regulation (i.e., soft law) is likely to positively influence the perception of reasonableness among Swedish citizens compared to other Nordic countries.*

Hypothesis 2: Exposure

Our second hypothesis explores the relationship between exposure to the pandemic and the perception of various measures intended to mitigate its impact. Several studies have investigated this connection, including during the pandemic (Jørgensen et al., 2021; Lindholt et al., 2021; Siegrist & Bearth, 2021). To test this specific relationship, we developed the following sub-hypotheses:

> ***H2.1 Health Exposure****: There is a positive relationship between the extent of residents' exposure to various health-related problems due to the pandemic and their perception of reasonableness of restrictions.*
>
> ***H2.2 Work Exposure****: Exposure to work-related pandemic impacts, such as remote work, furloughs, or job or business loss, will diminish citizens' perception of the reasonableness of regulations.*
>
> ***H2.3 Family and Social Exposure****: Increased exposure to strict measures affecting family and social life will result in greater dissatisfaction with authorities' measures, thereby negatively impacting the perception of the reasonableness of these measures.*
>
> ***H2.4 Fear****: Individuals with greater fear of the virus will perceive infection control measures as more reasonable.*

Hypothesis 3: Performance

In our third hypothesis, we propose a relationship between citizens' local experiences with municipal performance during the pandemic and their perceptions of the reasonableness of measures. Previous research indicates that citizens' views on policies that restrict civil liberties are influenced by objective performance information and data on socioeconomic inequities (Amirkhanyan et al., 2023; Memoli, 2024). Based on these findings, we developed the following sub-hypotheses:

> ***H3.1 General Performance****: Citizens' dissatisfaction with local performance of infection control measures will diminish their perception of the reasonableness of these measures.*
>
> ***H3.2 Local Adaptation****: Citizens' satisfaction with the perceived level of local adaptation of measures will increase their perception of the reasonableness of these measures.*
>
> ***H3.3 Elderly Care Experiences****: Citizens' satisfaction with the perceived level of protection of the elderly in care homes will increase their perception of the reasonableness of COVID-19 measures.*

Hypothesis 4: Trust

Our final hypothesis posits a relationship between trust and perceptions of reasonableness. Trust has been considered a key component of increased social cooperation and effective governance for a long time (Rothstein & Uslaner, 2005; Vasilopoulos et al., 2023).Jennings et al., (2021) argue that in the context of the pandemic, "trust is both needed to respond to the pandemic and is under threat due to it" (p. 1174). Thus, its importance for tackling the COVID-19 pandemic where threat, uncertainty, and the need for urgent action challenged governments and citizens alike cannot be overstated. Respondents to our survey were able to score their trust in various local administrative institutions and services during the pandemic, as well as interpersonal trust. We can thus distinguish between two different types of trust:

> ***H4.1 Trust in Municipal Services****: Higher levels of trust in municipal services lead to increased perceptions of the reasonableness of infection control measures among Nordic citizens.*
>
> ***H4.2 Interpersonal Trust****: Higher levels of interpersonal trust lead to increased perceptions of the reasonableness of infection control measures among Nordic citizens.*

The four main hypotheses above form the basis of our analytical model, which seeks to provide a comprehensive understanding of the factors influencing citizens' perceptions of the reasonableness of pandemic measures in the Nordic countries.

Data and Methodological Approach

To test the extent to which "ordinary citizens" assess the pandemic measures as reasonable, we presented representative population samples in all five Nordic countries (N = 5674) with the following text two years into the pandemic: "The health authorities have recommended or imposed a series of restrictive measures to contain the spread of COVID-19 but have also sought to compensate individuals and businesses for losses incurred. These measures have varied over time." Then, we asked them the following question: "How reasonable or unreasonable do you think the following restrictive measure has been in view of the hardships experienced by individuals and society at large?" We explicitly guided the respondents to think about the individual and societal level. They were then confronted with a total of 17 measures implemented during the pandemic. This data is the foundation for this study.

The surveys conducted via web panels targeted representative samples of residents, yielding approximately 1300 completed responses per country (with Iceland yielding 549 responses). The data file represents a broad cross-section of the population in each country, aged 18 and older, and maintains quotas for gender, age, and geographic region. The total number of responses collected was 5,674. The survey was provided in the respective Nordic languages, with English as a common reference, ensuring the concept of "reasonableness" maintains consistent meaning across all countries. Each country's final net dataset was weighted to account for inconsistencies with population statistics, ensuring nationally representative comparisons (Haug, 2024).

Variables

Reasonableness

We developed a framework consisting of two types of outcomes, the first, **Reasonableness I** is comprised of measures that infringe upon human rights. The index is calculated by the sum of six different items: propagation of vaccination, restrictions on travels in and out of the country, prohibition against visiting care homes for the elderly, homeschooling or closing down of schools, limits on guests in private homes, and restrictions on leisure activities for children and young persons. These are all examples of violations of especially protected rights (Table 1).

Table 1. Restrictions on ECHR and Constitutional Rights

Survey items	Especially protected rights
Restrictions on travel into and out of the country	Right to freedom of movement; right to work; right to family life; right to education; right to seek asylum; right to health
Prohibition against visiting care homes for the elderly	Right to family life; right to health; rights of the elderly; right to non-discrimination; right to mental and physical integrity
Limits on guests in private homes	Right to privacy and family life; right to freedom of assembly; right to non-discrimination; right to property
Restrictions on leisure activities for children and young persons	Right to play and leisure; right to education; right to health; right to socialize and freedom of association; right to non-discrimination
Propagation of vaccination	Right to health; right to life; right to benefit from scientific process; right to informed consent; right to privacy; right to non-discrimination
School closure	Right to education; right to non-discrimination; rights of the child; right to work; right to an adequate standard of living

Note. These measures were implemented in all Nordic countries, with the important exception of kindergarten and vacation homes in Sweden, which were not closed, and vacation homes in Denmark which were not closed (Haug 2024 p. 212).

The second is **Reasonableness II** and is comprised of measures that do not infringe upon human rights. The index includes eight infection control measures: prohibition of alcohol in restaurants and bars, imposition of work-from-home orders, recommendations to avoid public transport, guidelines on the use of face masks, reduction of social contacts, limits on participants in public events, and compensation to businesses for losses incurred due to COVID-19 measures. Response categories were specified on a scale from 0 to 10, where 0 means completely unreasonable and 10 completely reasonable. For each aggregated index, we divided the total score by the number of items. As we will demonstrate, the descriptive analyses of both dependent variables reveal variations in perceptions of types of measures and between countries.

Exposure

The survey was extensive and posed a range of questions related to various forms of exposure from the sole existence of the pandemic such as illness, but also exposure related to measures that were implemented, such as ban on visiting old care homes, job loss, fear and had to restrict contact with family, to name some. Some of these are closely related to each other, such as exposure to illness and hospitalisation. Therefore, we have developed three indexes to capture three groups of exposure. The first group comprises the health index is calculated by the sum of five items based on the question "have you or your spouse/partner or children experienced the following: had the corona illness, been admitted to hospital, been quarantined or isolated, experienced that planned medical treatment has been postponed because of the pandemic, taken the COVID vaccine" (Cronbach's alpha = .492).

The second group is the 'work index' and is calculated by the sum of six items based on the question "have you or your spouse/partner or children experienced the following: been requested to work from home, been furloughed, lost your job, had to close down own business, received compensation for closedown of business, received public benefit pay" (Cronbach's alpha = .699).

The final group is exposure related to family and social relations. This index is calculated by the sum of four items based on the question "have you or your spouse/partner or children experienced the following: been prevented from visiting elderly relatives in care homes, had to reduce other contacts with friends and relatives, had to stay home from work or school in periods, or had children who had to stay away from school or kindergarten, cancelled planned vacation or trip abroad" (Cronbach's alpha = .448).

Performance

We propose a relationship between citizens' local experiences with municipal performance during the pandemic and their perceptions of the reasonableness of measures. Previous research indicates that citizens' views on policies that restrict civil liberties are influenced by objective performance information and data on socioeconomic inequities (Amirkhanyan et al., 2023; Lazarus et al., 2020). Research also suggests that political trust is positively affected by institutional performance and, to some extent, by public perceptions of policy measures (Memoli, 2024).

Based on this, we posit that citizens' personal experiences with the practical handling of the pandemic at the local level influence their perceptions of reasonableness. Thus, the first performance sub-hypothesis is based on *general satisfaction with local performance*, calculated by the sum of a list of negatively formulated statements (index). The general performance index is calculated by the sum of a list of statements: "Please indicate how much you agree or disagree with the following statement on pandemic measures in your municipality: The municipality could have done more to keep schools and leisure activities open; guidelines on visits to care homes have been too restrictive; too many businesses (stores, restaurants etc.) were closed down during the pandemic; more stringent controls should have been imposed on travelling in and out of the municipality; and employees in vulnerable groups in my municipality were vaccinated too late". (Cronbach's alpha = .647).

Additionally, we included two more performance related variables emphasizing the role of local governments. Local governments were crucial in implementing infection control measures and adapting to national level recommendations and coordination activities (Farris et al., 2023; Haug, 2024; Kuhlmann & Franzke, 2022). The second measure of performance at the local level is how well the municipalities *adapted infection control measures to local conditions*. Recognizing the vital role of local governments generally, local governments demonstrated how important they have been, "based on proximity to citizens, to address effectively and efficiently the social and economic impacts of this global [..] crisis" (Silva, 2022, p. 2). The variable 'Good with local adaptations' is based on agreement with the statement: "Please indicate how much you agree or disagree with the following statement on pandemic measures in your municipality: The municipality has been good at adapting infection control measures to local conditions", scale 1, strongly agree, 5 strongly disagree, and could also answer 6, don't know.

The third and final performance measure relate to municipalities protection of old people in old care institutions. An early stated aim for most governments in the pandemic was to protect old- and vulnerable people. Subsequently, there was a need to protect people in long-term care facilities as well as the caregivers (Bergqvist et al., 2023; Lazarus et al., 2020), which is a responsibility of the municipalities in the Nordic countries. Thus, the variable is based on agreement with the statement: "Please indicate how much you agree or disagree with the following statement on pandemic measures in your municipality: The municipality has been good at protecting the elderly in institutions from infection", scale 1, strongly agree, 5 strongly disagree, and could also answer 6, don't know. See appendix 2 for coding and observations for the included variables.

Trust and fear

Previous studies have identified a positive association between trust in public institutions and perceived reasonableness of policy measures (Memoli, 2024; Siegrist & Bearth, 2021). Trust is often coined as the 'Nordic gold' and used as an explanation for the foundation of- and continuity of the welfare state institutions in the Nordic countries (Joly & Witoszek, 2023; Martela et al., 2020). However, trust, such as that in institutions may not always be a force of

good. For example, the trust in municipal services index is based on the sum of five variables: trust in schools, kindergartens, care for the elderly, health services, and waste collection and treatment. (Cronbach's alpha = .908). The respondents were asked to indicate their trust on a 10-point scale, from 'absolutely no trust'(0) to 'complete trust'(10). The item in the questionnaire was referring to the pandemic, and the wording in the questionnaire was "Based on your own experiences during the pandemic, how much trust do you have in the following authorities or organizations? By trust we mean your belief in their ability to deliver the services needed by local citizens."

In addition, we include a measure of interpersonal trust, also on a 10-point scale. The phrasing for this item was "Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?"

Perceived reasonableness of measures aimed at controlling the spread of the virus may also vary with fear of getting ill from the virus (Jørgensen et al., 2021). As a measure of this, the respondents' answer to the survey item "Have you or your spouse/partner or children experienced the following? Experienced fear of the consequences of COVID-19 illness?" is included in the model (binary).

Control variables

Perceptions of reasonableness can differ by socio demographic background variables, such as gender, age, housing facilities, education and employment (Cardinal et al., 2022; Falk et al., 2023; Siegrist & Bearth, 2021). To account for this, we include gender, age, type of residence (3 categories), and level of education (4 categories) in all our models.

Analytical approach

This article employs a quantitative comparative design, using survey data collected from citizens across all five Nordic countries in spring and summer 2022. The unit of analysis is the citizens of these countries.

We aim to identify and explain variation using theoretically derived hypotheses and statistical hypothesis testing (OLS regression models). However, inferring causal relationships between different independent variables and citizens' perceptions of reasonableness is not possible given the nature of our data. We establish associations but can only theorize about causality (i.e., the potential direction of causality). For instance, it is debatable whether trust drives perceptions of reasonableness or vice versa (Esaiasson et al., 2021; Fimreite et al., 2024). Given our data structure, we deem the OLS model an appropriate statistical technique to answer our research question and test our hypotheses.

Our analysis involved two steps. First, we examined the distribution of perceived reasonableness by country and measure (Table 2). Second, we estimated linear regression models to test our hypotheses, identifying variables that explain the perceived reasonableness of specific measures and the composite indexes (RI and RII). We estimated models on the dependent variables for all countries, with Sweden as the reference (Appendix 4). Furthermore, separate country-wise regressions allowed examination of country-specific dynamics (Appendix 1).

To address multicollinearity, we utilized the Variance Inflation Factor (VIF), with no scores higher than 1.8, well below the standard threshold of 10. Furthermore, endogeneity is a potential issue in studies with cross-sectional data. Performance ratings are likely to correlate strongly with perceptions of reasonableness, as well as between trust, particularly in municipal services, and perceptions of reasonableness.

Regarding H3 and H4, we performed correlation analyses (Appendix 3). All performance variables (H3) are moderately to strongly associated with Reasonableness I and Reasonableness II. In the correlation analysis for trust (H4), the coefficients indicate a moderate correlation between trust and perceptions of reasonableness (e.g., 0.4279 for Reasonableness I and Municipality; 0.2215 for Reasonableness II and Interpersonal trust). While this suggests a relationship, it does not imply causation. We aim to capture the multifaceted nature of citizens' perceptions by considering a range of factors beyond trust and including variables such as fear, as well as control variables. We include control variables to mitigate against the possibility of

omitted variable bias and to address weaknesses in the data (i.e., information that we do not have) (Bartram, 2021; Bernerth & Aguinis, 2016). Given the correlations, there may be reverse causality between trust and RI and RII. We could address this issue with the Instrument variable method. However, finding an instrument that is correlated with the endogenous variables but not with the error term in the regression model within this specific dataset is a challenging task that risks complicating the model and exacerbate potential existing bias (Borgen, 2013). Thus, to address potential endogeneity, including omitted variable bias and reverse causality, we use control variables.

Given the reverse coding of the performance index, it is important to interpret the correlations appropriately. The negative correlations with Reasonableness I and Reasonableness II suggest that poorer perceived performance is associated with lower perceived reasonableness of both human rights-infringing and non-infringing measures. This highlights the role of perceived performance in shaping perceptions of reasonableness. Additionally, the timing and context of the survey are critical for evaluating the impact of trust on perceptions of reasonableness. Our data is cross-sectional, meaning it captures respondents' views at a single point in time. Consequently, we lack information on respondents' levels of trust or satisfaction with local government before the pandemic and during different waves of COVID-19 infections caused by new variants of the virus. Despite this limitation, we employ a comprehensive approach aimed at ensuring robust and accurate analysis based on our available data, capturing the multifaceted nature of citizens' perceptions during the pandemic.

Results

Table 2 presents the means of perceptions of the reasonableness of various infection control measures in the Nordic countries during the COVID-19 pandemic. The scale ranges from 0 (completely unreasonable) to 10 (completely reasonable). Measures likely to be temporary violations of human rights (Reasonableness I) are marked with an asterisk (*).

On average, over half of the measures score at or above 7, indicating a high level of acceptance. This is evident for both measures that temporarily violate human rights and other measures. The highest mean score across all countries is for propagation of vaccination and social distancing (7.77), followed by recommendation of use of face mask (7.60) and travel restrictions (7.50). The lowest mean score is for the prohibition on stays in vacation/summer houses (5.63), indicating this measure was perceived as the least reasonable among the respondents.

Comparing countries, Iceland almost consistently has the highest mean scores, indicating that its citizens perceived the measures as more reasonable. Finland generally has the lowest scores. Variations between countries are significant on some measures, assigned with an asterisk in total mean. The measures in the table are listed in descending order, with the measure receiving the highest mean scores at the top.

Table 2. Perceptions of the Reasonableness of Infection Control Measures in the Nordic Countries

Reasonableness per regulation by country	NO	SE	DK	FI	IS	Total Mean	Total *N*	Total Std. Dev.
Propagation of vaccination*	7.94	7.52	7.44	7.46	8.19	7.77*	5674	2.70
Social distancing ("the meter")	7.52	7.64	7.44	7.65	8.18	7.77	5674	2.49
Recommendation on use of face masks	7.51	6.88	7.11	7.46	7.97	7.60	5674	2.74
Restrictions on travels in and out of country*	7.46	7.38	7.37	7.34	7.78	7.50*	5674	2.60
Keeping schools and kindergartens open for children with parents performing "socially critical" functions	7.31		7.13	7.35	7.76	7.40*	4370	2.46
Reducing social contact	7.43	7.30	7.14	7.17	7.55	7.39*	5674	2.57
Limits on participants in public event	7.24	7.25	7.04	7.23	7.86	7.38	5674	2.59
Imposition of work from home	7.03	7.27	6.94	6.87	7.60	7.07*	5674	2.47
Prohibition against visiting care homes for elderly*	6.80	7.18	6.71	6.83	7.83	7.03	5674	2.72
Compensations to businesses for losses incurred by COVID measures	6.89	6.62	6.90	7.05	6.72	6.99*	5674	2.65
Recommendation to avoid public transport	6.97	7.16	6.86	6.59	7.20	6.88*	5674	2.57
Prohibition of alcohol in restaurants/bars	6.63	6.82	6.93	6.45	7.29	6.69	5674	2.90
Limits on guests in private homes*	6.73	6.64	6.24	6.25	6.76	6.62*	5674	2.93
Home schooling or closedown of schools*	6.41	6.75	6.64	6.46	6.98	6.57	5674	2.52
Closedown of kindergartens	6.32		6.54	6.21	6.73	6.39*	4370	2.76
Restrictions on leisure activities for children and young persons*	6.28	6.41	6.66	6.11	6.88	6.39*	5674	2.84
Prohibition on stays in vacation/summer houses	5.61			5.29	5.90	5.63	3078	3.26
Total mean (violating human rights)	***7.17***	***7.14***	***7.05***	***6.89***	***7.53***	***7.11***	***5674***	***2.73***
Total mean (other)	***7.21***	***7.27***	***7.22***	***7.01***	***7.49***	***7.15***	***5201***	***2.68***
Total mean (all)	***7.19***	***7.22***	***7.16***	***6.96***	***7.51***	***7.13***	***5368***	***2.70***

Note. Respondents were asked: "How reasonable or unreasonable do you think the following measures have been?" Measures that are most likely to be temporary violations of human rights are marked with an asterisk (*). Representative population surveys in all the Nordic countries. Mean score. ($N = 5368$). ANOVA, significant differences between countries on Kindergarten, Home office, public transport, Travel restrictions, social contacts, Critical workers, Private home limitations, Leisure activities, compensation to businesses and vaccination.

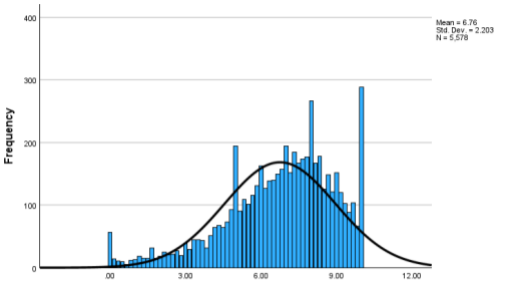
The propagation of vaccination and travel restrictions was viewed as highly reasonable by respondents across all countries. However, there are exceptions. In Iceland, the ban on visiting care homes for the elderly was seen as slightly more reasonable than travel restrictions. Similarly, Swedish respondents also viewed the ban on visiting care homes as more reasonable than travel restrictions, unlike respondents in Finland, Norway, and Denmark.

Measures such as home schooling, closedown of kindergartens, and limitations or suspension of leisure activities for children and young people were perceived as less reasonable. Notably, perceptions on the reasonableness of limitations in private homes and limitations or suspension of leisure activities varied among countries. In Denmark and Iceland, limitations on visits in private homes were seen as less reasonable than the limitations or suspension of leisure activities. Conversely, in Norway, Sweden, and Finland, the limitation or suspension of leisure activities were viewed as less reasonable than limits on visits in private homes.

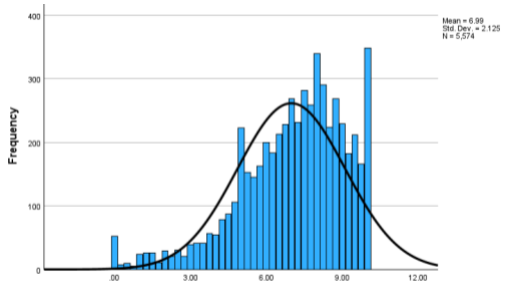
While the average scores are broadly similar, the scope and severity of the restrictions varied, as did the institutional choices and strategies for their implementation. Therefore, it is expected that citizens' perceptions of these measures would vary accordingly. To illustrate individual-level variation in perceptions of human rights-related measures versus other measures, we present a histogram in Figure 1**.**

Figure 1. Histogram: Dependent variables

Reasonableness (I)
COVID Measures That Violated Human Rights



Reasonableness (II)
Other COVID Regulations



Note. Reasonableness I calculated by the sum of six measures that were clear impediments on human rights, and Reasonableness II by the sum of measures that did not. The distribution of responses from Nordic residents regarding their perceptions of reasonableness of measures that infringe on rights (Reasonableness I *N=5049*) and other measures (Reasonableness II *N* = 4993).

Note that the y-axis in the figure shows the number of respondents in all countries combined, and the x-axis represents the score on the dependent variable (Reasonableness I and Reasonableness II). As shown in Table 2, the distribution is skewed to the right; most respondents find the measures quite reasonable in both categories. The maximum score is 10; the average for Reasonableness I is 6.963, with a standard deviation of 2.11; and the average for Reasonableness II is 7.099, with a standard deviation of 2.05. The correlation between the variables (indices) is very high (.891**).

Based on Table 2 above and the histograms, we find no support for our assumption about human rights (H1.1). However, the mean is indeed lower for RI than RII, so we performed a paired t-test for the index variables. The paired t-test results, presented in Appendix 3, reveal a statistically significant difference between the perceived reasonableness of measures infringing on human rights (RI) and other measures (RII). Specifically, the mean difference of -0.136 (Std. Err. = 0.013) between RI and RII is statistically significant, with a t-value of -10.591 and a p-value of 0.000, indicating strong evidence against the null hypothesis that the means are equal. The 95% confidence interval for the difference ranges from -0.161 to -0.111, further reinforcing that measures perceived to infringe human rights are indeed considered less reasonable by citizens. All in all, we cannot reject H1.

Additionally, the figures illustrate significant variation in policy perceptions between the Nordic citizens. The question is, what drives this variation in perceptions of the reasonableness of COVID measures?

The results from the OLS regressions are presented below. As discussed earlier, we developed two dependent variables. Table 3 show the regression outputs by Reasonableness I and Reasonableness II. Note that all regression tables include representative samples of the entire Nordic citizenry (18+). In Appendix 1, the complete suggested model is run by separate country-wise OLS regressions, which will be referred to when relevant. The independent variables were detailed previously (cf. methodology and data) and further elaborated in Appendix 2. The table below presents the results from an OLS regression with robust standard errors, in parentheses, for both endogenous and exogenous explanatory variables. The table also includes the model's adjusted R-square (total explanatory power) and the number of respondents (N). Collinearity is satisfactory (no VIF higher than 1.8), and all indices have a satisfactory Cronbach's alpha. The citizen survey provides insights into factors influencing the perceived reasonableness of COVID-19 measures in the Nordic countries.

Table 3. Nordic Residents' Assessment of perception of reasonableness by dependent variables Reasonableness I and Reasonableness II

	(1)	(2)
VARIABLES	**Reasonableness I**	**Reasonableness II**
H1: Regulatory regime		
Norway	-.434***	-.210**
	(.108)	(.105)
Denmark	-.263**	-.0917
	(.104)	(.101)
Finland	-0.403***	-.168*
	(.101)	(.0976)
Iceland	-.381***	-.328***
	(.130)	(.126)
H2: Exposure		
Exposure health [index]	.362***	.456***
	(.140)	(.135)
Exposure work [index]	-.242*	-.309**
	(.146)	(.141)
Exposure family/social [index]	.222**	.176*
	(.103)	(.0994)
Exposure fear	.631***	.575***
	(.0622)	(.0603)
H3: Performance		
General performance [index] (1 – strongly agree)	-.430***	-.340***
	(.0424)	(.0411)
Good with local adaptation (1 – strongly agree)	-.0908***	-.0551*
	(.0319)	(.0310)
Good at protecting elderly (1 – strongly agree)	-.229***	-.176***
	(.0364)	(.0353)
H4: Trust		
Trust municipal services [index]	.452***	.477***
	(.0203)	(.0197)
Interpersonal trust	.0273*	.0274*
	(.0152)	(.0148)
Control variables		
Gender 'Female'	.166***	.265***
	(.0583)	(.0566)
Children 'Presence of children >18 years old' Yes/No	-.0759**	-.0440
	(.0326)	(.0311)
Marital status 'Married/cohabitin' Yes/No	-.00686	-.0105
	(.0619)	(.0599)

Education (4 categories, 1= lowest)	.00648	.0374
	(.0311)	(.0301)
Residence (3 categories, 1 = biggest)	-.0378	.00903
	(.0338)	(.0328)
Age group (1 = youngest, 20-29)	.165***	.169***
	(0.0202)	(.0196)
Size (number of municipal inhabitants)	3.56e-05*	4.36e-05**
	(2.01e-05)	(1.95e-05)
Constant	**4.694*** **	**3.581*** **
	(.336)	(.325)
Observations	**3,219**	**3,190**
R-squared	**0.366**	**0.371**

*** Sig. ≤ .001, ** Sig. ≤ .01, * Sig. ≤ .05. Collinearity Statistics: Good (no VIF beyond 1.8).

As shown in the histograms in Figure 1, respondents do not seem to differentiate between measures that conflict with rights and other measures (H1.1). The regulatory strategy (stringency H1.2) is represented by dummy variables for each country (with Sweden as the reference category). Negative coefficients for Denmark, Finland, Iceland, and Norway suggest that respondents in these countries perceived the measures as less reasonable compared to those in Sweden, potentially due to differences in implementation and communication of COVID-19 measures. However, two-sample t-tests on RI and RII indicate no statistically significant difference in the perceived reasonableness of measures between Swedish respondents and those from other Nordic countries for both indices. The p-values for all tests are greater than 0.05, indicating a failure to reject the null hypothesis. Therefore, hypothesis H1.2, which posits that less stringent regulation positively influences the perception of reasonableness among Swedish citizens compared to other Nordic countries, is not supported by the data.

The impact of COVID *exposure* (H2) on the perceived reasonableness of the measures is mixed. Personal exposure to health-related consequences or fear, in addition to exposure related to family and social activities of the pandemic increased the perceived reasonableness of the measures (positive coefficients), while exposure to work-related consequences decreased it (negative coefficients). This suggests that the perceived reasonableness of the measures is influenced by the personal impact of the pandemic on respondents. Those who experienced or feared severe health consequences or family and social impact were more likely to find the measures reasonable, while those who experienced negative work were less likely to do so. The hypotheses (H2) are supported, particularly regarding the effect of fear. However, there are significant variations between countries regarding health exposure (H2.1), with Swedish residents being more positive about regulations, even those that restrict human rights (RI). This is presumably a reaction to the significant consequences of the pandemic in Sweden at the time of data collection, combined with a relatively relaxed COVID-19 management approach (Appendix 1).

Regarding *performance* (H3), negative experiences with local COVID management or disagreement with local authorities' actions (H3.1) decreased perceived reasonableness (negative coefficients). As coded (see Appendix 2), this suggests that the perceived effectiveness and appropriateness of local responses (adaptation – H3.2) to the pandemic play a significant role in shaping perceptions of reasonableness, as demonstrated in the regression for both RI and R11 with significant coefficients on all performance variables. In short, local performance significantly affects ordinary people's perceptions of reasonableness, supporting hypotheses H3.

Higher levels of *trust in municipal services* or other people (H4.1) increased the perceived reasonableness of the measures, as shown with strong positive coefficients on both RI and RII. Moreover, the interpersonal trust variable (H4.2) is significant, although not as strong. Altogether, our findings indicate that trust – both in local authorities/services and interpersonal trust– is important for shaping perceptions of reasonableness. Our hypotheses on trust (H4) are supported. Yet, here too, there is variation by country, and the effect of interpersonal trust is particularly strong in Sweden (see Appendix 1).

Among the *control variables*, gender, presence of children age group and municipality size (2022) all had significant effect (positive or negative) on the perceived reasonableness of the

measures. On gender the results suggest a positive association between being female and perceptions of reasonableness: *women* generally tend to perceive the measures more positively, which is particularly evident for Sweden, (.385***) (See Appendix 1). *Age group* had a significant positive effect on perceived reasonableness (.165*** and .169***), suggesting older respondents were more likely to find the measures reasonable. This could be due to older individuals being at higher risk from COVID-19 and therefore more likely to appreciate the importance of the measures. Presence of children under the age of 18 in the household also seem to be associated with lower perceptions on high-cost measures, RI (-.0759**), but not regarding RII. This is likely due to the character of the measures that are included in the RI index such as school closure, limitations on leisure activities and limitations on guests in private home, which likely had strong negative bearings on the parents in addition to the children themselves. The *size of the municipality* (number of inhabitants) also had some influence on RI and RII, yet it was not very strong. This nevertheless suggests that respondents in larger municipalities found COVID-19 regulations slightly more reasonable.

Discussion

A central aspect in the literature on COVID-19 concern the consequences of infection control measures, derogations of rights, and declared states of emergency on 'the health of democracy' (Katsanidou et al., 2022). The pandemic provided a context where liberal democratic norms could be – and arguably were – undermined (Arceneaux et al., 2021). The question of how citizens view control measures and derogations of rights is an important factor influencing the legitimacy of crisis governance. Thus, citizens' policy perceptions can inform us about the state of the relationship between citizens and the government (Fimreite et al., 2024).

We have analysed citizens' policy perceptions and the extent to which they were willing to support policies that violate their civil liberties in a crisis. Our study employed a framework containing four main hypotheses to explain this variation, focusing on measures that violated human rights (RI) and other COVID-19 regulations (RII). The explanatory variables highlighted the importance of national regulatory strategies, personal exposure to the pandemic, local performance, trust, and demographic factors.

With an average score of about 7 out of 10 across 17 measures implemented during the pandemic, people perceive these measures as highly reasonable, indicating a willingness to sacrifice significant freedoms in pandemic crises. This acceptance largely applies to both measures that violate human rights and other measures. On the surface suggesting that citizens do not differentiate between the two categories. However, this mean score conceals individual variation that corresponds with Boin and 't Hart's argument about how compliance with – and hence acceptance of measures – can reflect people's life situations where individuals discriminate between regulations according to their own circumstances (Boin & 't Hart, 2024).

The least reasonable measure overall was the ban on staying in vacation homes with a mean of 5.63, which is relatively well below the overall mean. The ban on staying in vacation homes was criticized in Norway and became a sensitive issue for municipalities as well as the government. The perception that this ban was perceived as the least reasonable among respondents can be perhaps understood by analysing through the framework of critical compliance in how the ban suspended several rights simultaneously but importantly the right to one's own property. The Norwegian Institute of Human Rights (NIM) argued in a letter to the Government that the ban constituted an intervention in the freedom of movement and the right to property (Mestad & Nystuen, 2020, p. 9; cf. Nordensvärd et al., 2023, pp. 7-8). Furthermore, the enforcement of the ban in the first months of the pandemic involved the Norwegian National Home Guard, who assisted municipalities in preventing people from traveling to and staying in their vacation homes (Nordensvärd et al., 2023, p. 8). Thus, both the nature of the ban and its enforcement likely affected perceptions negatively.

While trust and fear are significantly associated with higher perceptions, we find significant variation in policy perceptions among Nordic citizens that are seemingly related to individual socio-demographic factors such as gender, age, marital status, residence, and education. The analysis provides a comprehensive understanding of various factors influencing the perceived

reasonableness of COVID-19 measures in the Nordic countries (predictors). The explanatory power of the model is good, with adjusted R-squared values of .366 for Reasonableness I and .371 for Reasonableness II. However, it also underscores the complexity of these influences, with some factors having different effects in different contexts. Regarding regulatory strategies, respondents from Denmark, Finland, Iceland, and Norway perceived the measures as less reasonable than those in Sweden. COVID-19 exposure had a mixed impact.

Key predictors for people's perceptions of the reasonableness of pandemic measures and regulations include trust in local services, fear, local performance, and age. As discussed in the methodology, performance is moderately to strongly associated with Reasonableness I and Reasonableness II, which does not imply causation, and if so, we cannot know the direction of causation. However, the negative correlations with Reasonableness I and Reasonableness II suggest that poorer perceived performance is associated with lower perceived reasonableness of both human rights-infringing and non-infringing measures. This highlights the role of perceived performance in shaping perceptions of reasonableness.

Personal exposure to health-related consequences and fear of the pandemic increased perceived reasonableness, while exposure to work-related consequences or social activity restrictions decreased it. This is potentially associated with variables that interact, such as home office combined with homeschooling and closed kindergartens, and marital status (e.g., single versus married). Experiences with local COVID-19 management and trust in municipal services also increased perceived reasonableness. However, the case with trust is similar to performance: the coefficients in the correlation analysis indicated a moderate correlation between trust and perceptions of reasonableness, suggesting possible reverse causality between trust and RI and RII. Among control variables, gender and presence of children had a significant negative effect on RI and RII while age group and municipality size (2022) had a significant positive effect on the perceived reasonableness of the measures.

Our study emphasizes the importance of a citizen-based perspective. Acceptance of pandemic measures is not solely a state-centered process shaped by state policies but also a citizen-based process shaped by individuals' experiences and life situations, shaping perceptions.. It signals the state of the relationship between citizens and the government, but importantly also that the measures are not uniformly accepted. Although there is substantial support, this support varies by measure and socio-demographic factors.

These results must be discussed as part of the broader debate on the limits of the state and the balance between rights, liberties, and duties, and subsequently for legitimacy in crisis governance, where there is a real risk for temporal democratic backsliding in democracies (Anisin, 2022; Edgell et al., 2021). Political liberalism emphasizes the protection of individual rights and liberties, especially in the face of state power. During the pandemic, the high level of acceptance of regulations that violated human rights is concerning but necessary for effective crisis management (Edgell et al., 2021; Sorsa & Kivikoski, 2023). When infection control measures are perceived as unreasonable, they risk being seen as expressions of lower democratic quality, potentially undermining public trust (Werner & Heinisch, 2024). So, how can policymakers and decision-makers square this equation?

First, it is imperative to recognize the temporary nature of these regulations (Eichler & Sonkar, 2021; Staronova et al., 2023), as all the Nordic countries employed sunset clauses limiting the duration of emergency measures (Nguyen Duy & Stokstad (2024). Furthermore, balancing the need for stringent measures with maintaining the rule of law is a challenge inherent in managing pandemics, but a challenge that can be handled with for instance transparent decision-making processes and communication concerning the justifications for implementing the measures. Here, considerations such as necessity, alternative measures and context (i.e. proportionality) are important to consider for citizens to find them reasonable (Bassan, 2022; Weißschnur, 2021).

Our study contributes to the scholarship on crisis governance and challenges for democracy by documenting substantial support for stringent regulations, but it is not that 'anything goes.' The perception of measures as unreasonable demonstrates that significant segments of the population find the measures unreasonable, such as the example with the ban on vacation homes and are wary of government overreach. This is likely associated with individual-level factors

that we have not examined in this article, e.g. gender, presence of children, and accommodation. However, this reflects sentiments that circulated during the pandemic, highlighting the delicate balance that governments must strike between implementing stringent measures and maintaining public trust.

The findings of our study underscore the importance of balancing the need for stringent measures while protecting individual rights. Too much trust and confidence in the benevolence of the government during a crisis can place the quality of democratic governance at risk. Conversely, too little trust and confidence in the government's intentions also pose a risk for effective crisis governance. This points to the most delicate and important task governments are responsible for during a crisis: balancing the need for stringent measures while also protecting individual rights. This requires careful consideration and transparent communication to citizens.

Limitations

There are limitations to our study. Firstly, we ask about perceptions, not about people's actions and behaviors according to the regulations during the crisis (Fimreite et al., 2024). The second limitation is temporality. We ask about people's perceptions after the fact, which can affect how they respond compared to responses they might have given during the first wave of infection. However, as argued by Fimreite et al. (2024), "perceptions are important on their own, as a precondition for the formulation of public policies" (p. 17). This links to our argument about the importance of both state-centered and citizen-based perspectives in understanding public acceptance of pandemic measures and the importance of the relationship between citizens and the government in crises.

Concluding Remarks

Our study contributes to research that explores and tries to explain the complex relationship between crisis management, public perception, and democratic governance. Our findings underscore the delicate balance that governments must maintain between implementing necessary measures to ensure public safety and preserving individual rights and democratic processes. This balance is critical for maintaining public trust and the legitimacy of governmental actions during crises. The willingness of citizens to accept measures that infringe upon their rights highlights the need for ongoing scrutiny and debate on the limits of state power and the protection of individual liberties. Transparent communication and accountability mechanisms are essential to maintaining public trust and ensuring the legitimacy of emergency measures. As societies continue to face challenges related to crisis governance, it is vital to recognize the role of citizen perceptions in shaping successful policy responses. By understanding the factors that influence these perceptions, policymakers can craft strategies that not only address immediate threats but also uphold democratic values and protect individual freedoms. Future research should continue to explore these dynamics and how combined variables such as gender, marital status, and presence of children are associated with perceptions of specific measures like home office. Studies may also need to explore the behavioral responses of citizens, the temporality of responses, and the potential implications of these findings for other crises. Longitudinal data could provide deeper insights into how trust levels and perceptions evolve over time, especially in response to different phases of a crisis. Further research should also examine the role of political attitudes and cultural contexts in shaping perceptions of reasonableness. This deeper understanding will better inform policy responses to future crises, ensuring that they are both effective and respectful of fundamental democratic principles.

In conclusion, while the pandemic has tested the boundaries of democratic governance and civil liberties, it also offers an opportunity to reflect on the importance of balancing security needs with the preservation of democratic principles.

Acknowledgements/Funding

This article is a product of the research project "Crisis Management in a Polycentric Nordic Local Democracy: Different Governance Structures - Different Results?" funded by the Norwegian Research Council, project number 326136. Drafts of this article have been presented at NORKOM in 2023, in a Ph.D. course on crisis governance at University of California Berkley organized by University of Agder in 2024, and at NOPSA in Bergen in 2024. All comments, including the reviewers' have been helpful and instructive in getting this article to its present form.

References

Amirkhanyan, A. A., Meier, K. J., Song, M., Roberts, F. W., Park, J., Vogel, D., Bellé, N., Molina, A. L., & Guul, T. S. (2023). Liberté, Égalité, Crédibilité: An experimental study of citizens' perceptions of government responses to COVID-19 in eight countries. *Public Administration Review*, *83*(2), 401–418. https://doi.org/10.1111/puar.13588

Anisin, A. (2022). Pandemic surveillance capitalism: authoritarian liberalism or democratic backsliding? *Journal of Political Power*, *15*(2), 262–278. https://doi.org/10.1080/2158379X.2022.2055275

Arceneaux, K., Bakker, B., De Vries, C., & Hobolt, S. (2021). Is COVID-19 a Threat to Liberal Democracy? Kevin Arceneaux. *American Political Science Association*. https://sciencespo.hal.science/CEVIPOF/hal-03953251v1

Bartram, D. (2021). Age and Life Satisfaction: Getting Control Variables under Control. *Sociology*, *55*(2), 421–437. https://doi.org/10.1177/0038038520926871

Bassan, S. (2022). A Proportionality-Based Framework for Government Regulation of Digital Tracing Apps in Times of Emergency A Proportionality-Based Framework for Government Regulation of Digital Tracing Apps in Times of Emergency. *Dickinson Law Review*, *126*(2).

Bergqvist, M., Bastholm-Rahmner, P., Gustafsson, L. L., Holmgren, K., Veg, A., Wachtler, C., & Schmidt-Mende, K. (2023). How much are we worth? Experiences of nursing assistants in Swedish nursing homes during the first wave of COVID-19. *International Journal of Older People Nursing*, *18*(1), 1–11. https://doi.org/10.1111/opn.12498

Bernerth, J. B., & Aguinis, H. (2016). A Critical Review and Best-Practice Recommendations for Control Variable Usage. *Personnel Psychology*, *69*(1), 229–283. https://doi.org/10.1111/peps.12103

Boin, A., & 't Hart, P. (2024). Pandemic challenges for public managers: Juggling parallel crisis playbooks. In H. Dickinson, S. Yates, J. O'Flynn, & C. Smith (Eds.), *Research Handbook on public management and COVID-19* (pp. 19–30). Edward Elgar Publishing Ltd.

Borgen, N. T. (2013). Instrumentvariabler: en introduksjon for samfunnsforskere. *Sosiologi i Dag*, *43*(3).

Borriello, F. (2021). Principle of Proportionality and The Principle of Reasonableness. *Review of European Administrative Law*, *13*(2), 155–174. https://doi.org/10.7590/187479820x15930701852292

Brynard, D. J. (2013). Justifying administrative action for reasonableness. *Administratio Publica*, *21*(1), 69–83.

Cardinal, C. G., Bunn, J. A., Schley, I., Fulton, D. S., & Keathley, R. (2022). American Women's Perceptions of Pandemic Policies and Regulations. *Health Behavior and Policy Review*, *9*(2), 751–764. https://doi.org/10.14485/HBPR.9.2.3

Cathaoir, K. (2021). Human rights in times of pandemics: Necessity and proportionality. In *COVID-19 and Human Rights* (pp. 35–51).

Christensen, T., & Lægreid, P. (2023). Assessing the crisis management of the COVID-19 pandemic: a study of inquiry commission reports in Norway and Sweden. *Policy and Society*, *00*(00). https://doi.org/10.1093/polsoc/puad020

Comstock, A. L., Heiss, A., & Chaudhry, S. (2025). Derogations , democratic backsliding , and international human rights during the COVID-19 pandemic. *Journal of Human Rights*, *24*(1), 95–110. https://doi.org/10.1080/14754835.2024.2446854

Edgell, A. B., Lachapelle, J., Lührmann, A., & Maerz, S. F. (2021). Pandemic backsliding: Violations of democratic standards during Covid-19. *Social Science and Medicine*, *285*(January), 1–10. https://doi.org/10.1016/j.socscimed.2021.114244

Egger, C. M., Magni-Berton, R., Roché, S., & Aarts, K. (2021). I Do it My Way: Understanding Policy Variation in Pandemic Response Across Europe. *Frontiers in Political Science*, *3*(March 2020), 1–18. https://doi.org/10.3389/fpos.2021.622069

Eichler, J., & Sonkar, S. (2021). Challenging absolute executive powers in times of corona: re-examining constitutional courts and the collective right to public contestation as instruments of institutional control. *Review of Economics and Political Science*, *6*(1), 3–23. https://doi.org/10.1108/reps-08-2020-0132

Esaiasson, P., Sohlberg, J., Ghersetti, M., & Johansson, B. (2021). How the coronavirus crisis affects citizen trust in institutions and in unknown others: Evidence from 'the Swedish experiment.' *European Journal of Political Research*, *60*(3), 748–760. https://doi.org/10.1111/1475-6765.12419

Eythórsson, G. T. (2024). Iceland: COVID-19 handling strategy in Iceland: centralised and expert-led. In A. V. Haug (Ed.), *Crisis Management. Governance and COVID-19: Pandemic Policy and Local Governments in the Nordic Countries* (pp. 60–67). Edward Elgar Publishing.https://doi.org/https://dx.doi.org/10.4337/9781035336531

Flood, C. M., Macdonnell, V., Thomas, B., Wilson, K., & Hospital, O. (2020). Reconciling civil liberties and public health in the response to COVID-19. 887–898. https://doi.org/10.1139/facets-2020-0070

Falk, L., Neumann-Böhme, S., Sabat, I., & Schreyögg, J. (2023). Public Perceptions Of COVID-19 Lockdown Policies In Europe: Socioeconomic Status And Trust Were Factors. *Health Affairs*, *42*(12), 1706–1715. https://doi.org/10.1377/hlthaff.2023.00707

Farris, E. M., Holman, M. R., & Sullivan, M. E. (2023). Using the Emergency in Emergency Orders: Municipal Policy Action and Federalism during the Covid-19 Crisis. In M. Fiorina (Ed.), *Who Governs? Emergecy Powers in the time of COVID* (pp. 151–171). Hoover Institution Press.

Fimreite, A. L., Løvseth, E. K., Lægreid, P., & Rykkja, L. H. (2024). Fear, trust, and knowledge–understanding Norwegian citizens' perceptions of antimicrobial resistance (AMR). *Journal of European Public Policy*, 1–23. https://doi.org/10.1080/13501763.2024.2360585

Fiorina, M. (2023). *Who Governs? Emergency Powers in the Time of Covid* (M. Fiorina, Ed.). Stanford University Press.

Garcia, F., Järnland, E., Nordensvärd, J., Sommar, C. J., & Wihlborg, E. (2024). Sweden: Relaxed crisis management. In A. V. Haug (Ed.), *Crisis Management. Governance and COVID-19: Pandemic Policy and Local Governments in the Nordic Countries* (pp. 68–76). Edward Elgar Publishing.https://doi.org/https://dx.doi.org/10.4337/9781035336531

Garrett, B. L. (2017). Constitutional reasonableness. In *Minnesota Law Review* (Vol. 102, Issue 1, pp. 61–126). https://doi.org/10.2139/ssrn.2903598

Gjerde, L. E. L. (2021). Governing humans and 'things': power and rule in Norway during the Covid-19 pandemic. *Journal of Political Power*, *14*(3), 472–492. https://doi.org/10.1080/2158379X.2020.1870264

Godenhjelm, S. (2024). Finland: prepared yes, but sufficiently agile? In A. V. Haug (Ed.), *Crisis Management. Governance and COVID-19: Pandemic Policy and Local Governments in the Nordic Countries* (pp. 77–85). Edward Elgar Publishing. https://doi.org/https://dx.doi.org/10.4337/9781035336531

Greene, A. (2022). Emergencies and Illiberalism. In S. Holmes, R. Uitz, & A. Sajó (Eds.), *Routledge Handbook of Illiberalism* (1st ed., Vol. 1, pp. 554–570). Routledge. https://doi.org/10.4324/9780367260569-40

Grogan, J. (2022). COVID - 19 , The Rule of Law and Democracy . Analysis of Legal Responses to a Global Health Crisis. *Hague Journal on the Rule of Law*, *14*(2), 349–369. https://doi.org/10.1007/s40803-022-00168-8

Grossmann, I., Eibach, R. P., Koyama, J., & Sahi, Q. B. (2020). Folk standards of sound judgment: Rationality versus reasonableness. *Science Advances*, *6*(2), 1–14. https://doi.org/10.1126/sciadv.aaz0289

Haug, A. V. (2024). *Crisis Management, Governance and COVID-19: Pandemic Policy and Local Government in the Nordic Countries* (A. V. Haug, Ed.). Edward Elgar Publishing. https://doi.org/https://dx.doi.org/10.4337/9781035336531

Heggebø, K., & Pedersen, A. W. (2024). How severe was the COVID-19 pandemic in the Nordic countries? In A. V. Haug (Ed.), *Crisis Management. Governance and COVID-19: Pandemic Policy and Local Governments in the Nordic Countries* (pp. 17–28). Edward Elgar Publishing. https://doi.org/10.4337/9781035336531

Helsingen, L. M., Refsum, E., Gjøstein, D. K., Løberg, M., & Bretthauer, M. (2020). *The COVID-19 pandemic in Norway and Sweden – threats, trust, and impact on daily life: a comparative survey*. 1–10.https://doi.org/10.1186/s12889-020-09615-3

Høgberg, B. M., Eriksen, C. C., & Holmøyvik, E. (2023). Smitteverntiltakene. In B. M. Høgberg, C. C. Eriksen, & E. Holmøyvik (Eds.), *Kriseregulering. Lovgivning under Koronakrisen* (1st ed., pp. 241–271). Fagbokforlaget.

Houlberg, K., & Foged, S. K. (2024). Who contributed and to what extent? In A. V. Haug (Ed.), *Crisis Management. Governance and COVID-19: Pandemic Policy and Local Governments in the Nordic Countries* (pp. 168–177). Edward Elgar Publishing.https://doi.org/10.4337/9781035336531

Jennings, W., Stoker, G., Valgarðsson, V., Devine, D., & Gaskell, J. (2021). How trust, mistrust and distrust shape the governance of the COVID-19 crisis. *Journal of European Public Policy*, *28*(8), 1174–1196. https://doi.org/10.1080/13501763.2021.1942151

Joly, E., & Witoszek, N. (2023). *Det blåøyde riket - Norske tillitspatologier*. Cappelen Damm Akademisk.

Jørgensen, F., Bor, A., & Petersen, M. B. (2021). Compliance without fear: Individual-level protective behaviour during the first wave of the COVID-19 pandemic. *British Journal of Health Psychology*, *26*(2), 679–696. https://doi.org/10.1111/bjhp.12519

Katsanidou, A., Kneuer, M., Bensmann, F., Dimitrov, D., & Dietze, S. (2022). Limitations of democratic rights during the Covid-19 pandemic—exploring the citizens' perception and discussions on dangers to democracy in Germany. *Zeitschrift Fur Vergleichende Politikwissenschaft*, *16*(4), 635–661. https://doi.org/10.1007/s12286-023-00556-w

Kuhlmann, S., & Franzke, J. (2022). Multi-level responses to COVID-19: crisis coordination in Germany from an intergovernmental perspective. *Local Government Studies*, *48*(2), 312–334. https://doi.org/10.1080/03003930.2021.1904398

Lazarus, J. V, Ratzan, S., Palayew, A., Billari, F. C., Binagwaho, A., Kimball, S., Larson, H. J., Melegaro, A., Rabin, K., White, T. M., & El-Mohandes, A. (2020). COVID-SCORE: A global survey to assess public perceptions of government responses to COVID-19 (COVID-SCORE-10). *PLOS ONE*, *15*(10), e0240011. https://doi.org/10.1371/journal.pone.0240011

Lebret, A. (2020). COVID-19 pandemic and derogation to human rights. *Journal of Law and the Biosciences*, *7*(1), 1–15. https://doi.org/10.1093/jlb/lsaa015

Lidén, K. (2022). A better foundation for national security? The ethics of national risk assessments in the Nordic region. *Cooperation and Conflict*, *X*. https://doi.org/10.1177/00108367211068877

Lindholt, M. F., Jørgensen, F., Bor, A., & Petersen, M. B. (2021). Public acceptance of COVID-19 vaccines: Cross-national evidence on levels and individual-level predictors using observational data. *BMJ Open*, *11*(6), 1–12. https://doi.org/10.1136/bmjopen-2020-048172

Mangini, M. (2022). In search of reasonableness: between legal and political philosophy. *Philosophy and Social Criticism*, *48*(7), 937–955. https://doi.org/10.1177/01914537211066853

Martela, F., Greve, B., Rothstein, B., & Saari, J. (2020). *The Nordic Exceptionalism : What Explains Why the Nordic Countries are Constantly Among the Happiest in the World*.

Memoli, V. (2024). Citizens' perceptions of policy, policy measures and trust in political institutions after the first wave of COVID-19. *Quaderni Dell'Osservatorio Elettorale*, *87*(1), 59–71. https://doi.org/10.36253/qoe-14642

Mestad, A. M., & Nystuen, G. (2020). Ivaretakelse av menneskerettigheter under covid-19-pandemien. *Norges Institusjon for menneskerettigheter.* Letter to Ministry of Health and Welfare, Ministry of Municipal Affairs and Modernization, The Directorate of Health, The Institute of Public Health 06.04.2020 (Accessed 14 December 2022)

Möller, K., Cohen-Eliya, M., & Porat, I. (2011). Proportionality and the culture of justification. *American Journal of Comparative Law*, *59*(2), 463–490. https://doi.org/10.5131/AJCL.2010.0018

Nguyen Duy, I., & Stokstad, S. (2024). Legal framework and rule of law. In A. V. Haug (Ed.), *Crisis Management. Governance and COVID-19: Pandemic Policy and Local Governments in the Nordic Countries* (pp. 28–52). Edward Elgar Publishing.

Nord, M., Altman, D., Angiolillo, F., Fernandes, T., Good, A. G., & Lindberg, S. I. (2025). *Democracy Report 2025: 25 Years of Autocratization - Democracy Trumped?* https://www.v-dem.net/media/filer_public/f0/5d/f05d46d8-626f-4b20-8e4e-53d4b134bfcb/democracy_report_2020_low.pdf

Nordensvärd, J., Sefton, T., & Godenhjelm, S. (2023). Interpreting the state – citizen nexus in contemporary Nordic legal and social citizenship : the case of divergence in restriction on freedom of movement as a mitigation policy in the COVID-19 pandemic. *Journal of International and Comparative Social Policy*, 1–14. https://doi.org/10.1017/ics.2023.5

Petherick, A., Goldszmidt, R., Andrade, E. B., Furst, R., Hale, T., Pott, A., & Wood, A. (2021). A worldwide assessment of changes in adherence to COVID-19 protective behaviours and hypothesized pandemic fatigue. *Nature Human Behaviour*, *5*(9), 1145–1160. https://doi.org/10.1038/s41562-021-01181-x

Puccinelli, S. M. M., & Freire e Almeida, D. (2021). VIOLATIONS OF HUMAN RIGHTS IN THE COVID-19 PANDEMIC. *Future Challenges of International Law: Internet–Space–Trade–Human Rights*, 231–260.

Rothstein, B., & Uslaner, E. M. (2005). All for All : Equality , Corruption , and Social Trust. *World Politics*, *58*(1), 41–72. https://www.jstor.org/stable/40060124

Schmidt, V. A. (2013). Democracy and Legitimacy in the European Union Revisited: Input, Output and "Throughput." *Political Studies*, *61*(1), 2–22. https://doi.org/10.1111/j.1467-9248.2012.00962.x

Siegrist, M., & Bearth, A. (2021). Worldviews, trust, and risk perceptions shape public acceptance of COVID-19 public health measures. *Proceedings of the National Academy of Sciences of the United States of America*, *118*(24). https://doi.org/10.1073/pnas.2100411118

Silva, C. N. (2022). Local Government and the Covid-19 Pandemic: An Introduction. In C. N. Silva (Ed.), *Local Government and the Covid-19 Pandemic* (pp. 1–23). Springer.

Sommar, C.-J., Nordensvärd, J., Wihlborg, E., & Garcia, F. (2024). Autonomy and paternalism – framing Swedish COVID-19 restriction policy. *Critical Policy Studies*, 1–20. https://doi.org/10.1080/19460171.2024.2307420

Sorsa, V. P., & Kivikoski, K. (2023). COVID-19 and democracy: a scoping review. *BMC Public Health*, *23*(1). https://doi.org/10.1186/s12889-023-16172-y

Spadaro, A. (2020). *COVID-19 : Testing the Limits of Human Rights*. *11*(March), 317–325. https://doi.org/10.1017/err.2020.27

Spruill, M., & Lewis, N. A. (2023). How Do People Come to Judge What Is "Reasonable"? Effects of Legal and Sociological Systems on Human Psychology. *Perspectives on Psychological Science*, *18*(2), 378–391. https://doi.org/10.1177/17456916221096110

Staronova, K., Lacková, N., & Sloboda, M. (2023). Post-crisis Emergency Legislation Consolidation: Regulatory Quality Principles for Good Times Only? *European Journal of Risk Regulation*, 1–19. https://doi.org/10.1017/err.2023.69

Ubaid, R. I. (2023). *Desentralisert pandemihåndtering? En analyse av kriseregulering på kommunenivå i kampen mot Covid-19* [Thesis, Oslo Metropolitan University]. https://hdl.handle.net/11250/3120212

van Loenhout, J. A. F., Levitt, E. E., Gohari, M. R., Syan, S. K., Belisario, K., Gillard, J., DeJesus, J., Levitt, A., MacKillop, J., Blackburn, A. M., Han, H., Jeftić, A., Stöckli, S., Gelpí, R., Acosta-Ortiz, A. M., Travaglino, G. A., Alvarado, R., Lacko, D., Milfont, T. L., … Aujoulat, I. (2022). Predictors of compliance with COVID-19 guidelines across countries: the role of social norms, moral values, trust, stress, and demographic factors. *Current Psychology*, *43*(19), 17939–17955. https://doi.org/10.1007/s12144-023-05281-x

Vasilopoulos, P., Mcavay, H., Brouard, S., & Foucault, M. (2023). Emotions, governmental trust and support for the restriction of civil liberties during the covid-19 pandemic. *European Journal of Political Research*, *62*(2), 422–442. https://doi.org/10.1111/1475-6765.12513

Wallace-Wells, D. (2025). "How Covid Remade Our America, Five Years Later". Opinion. *The New York Times*. Accessed 05.03.2025.

Weinstock, D. M. (2006). A Neutral Conception of Reasonableness? *Episteme*, *3*(3), 234–247. https://doi.org/10.3366/epi.2006.3.3.234

Weißschnur, S. (2021). State Intervention and Principle of Proportionality. In *The Proportionality of State Intervention*. https://doi.org/10.1007/978-3-030-75676-5_3

Werner, A., & Heinisch, R. (2024). Democracy Amid Pandemic: A Survey Experiment on How Covid-19 Affectedness Influences Support for Anti-Liberal Policies. *Politics and Governance*, *12*, 1–18. https://doi.org/10.17645/pag.8469

Young, K. G. (2017). Proportionality, reasonableness, and economic and social rights. In V. C. Jackson & M. Tushnet (Eds.), *Proportionality: New Frontiers, New Challenges* (Vol. 2, Issue 1, pp. 248–272). Cambridge University Press. https://doi.org/10.1017/9781316691724.012

Appendix 1: Country-Wise Regressions

Reasonableness I: COVID measures that **violated human rights**. Representative population surveys in all the Nordic countries. **Country-wise regressions** (OLS).

Reasonableness I	**NO**	**SE**	**DK**	**FI**	**IS**
H2: Exposure					
Exposure Health (index)	.197	**.833****	.564	-.459	.958
	(.250)	(.275)	(.295)	(.259)	(.795)
Exposure work (index)	.281	**-.578***	**-.980*****	**.735***	-.933
	(.255)	(.284)	(.259)	(.304)	(.540)
Exposure family/social (index)	-.080	-.086	**.571****	**.409***	-.214
	(.200)	(.208)	(.210)	(.203)	(.426)
Fear	**.450*****	**.603*****	**.504*****	**.508*****	**.629****
	(.114)	(.125)	(.135)	(.114)	(.218)
H3: Performance					
General performance	-.001	**.405****	.199	**.334****	.047
	(.120)	(.128)	(.133)	(.116)	(.204)
Good with local adaptation (1= strongly agree)	**-.434*****	**-.553*****	**-.544*****	**-.600*****	**-.787*****
	(.079)	(.072)	(.096)	(.073)	(.134)
Good at protecting the elderly (1=strongly agree)	**-.277*****	-.109	**-.238****	**-.265*****	-.288
	(.074)	(.073)	(.090)	(.074)	(.161)
H4: Trust					
Trust municipal services	**.467*****	**.409*****	**.502*****	**.447*****	**.422*****
	(.046)	(.048)	(.053)	(.049)	(.082)
Interpersonal trust	.010	**.105****	**.080***	.057	-.091
	(.033)	(.039)	(.038)	(.032)	(.060)
Control					
Gender (0=male, 1=female)	-.012	**.385*****	.186	.099	.403
	(.108)	(.114)	(.124)	(.115)	(.209)
Children (0=No, 1=Yes)	.119	-.139	-.256	-.177	-.127
	(.135)	(.127)	(.145)	(.145)	(.232)
Married/Cohabiting (0=No, 1=Yes)	-.093	-.140	.125	.074	.067
	(.127)	(.120)	(.127)	(.124)	(.252)
Education (1=lowest level)	-.040	.022	.051	.089	-.066
	(.058)	(.064)	(.068)	(.057)	(.106)
Residence type (1= detached house, 2= semi-detached house, Townhouse, 3= apartment)	.028	-.090	.044	-.101	-.068
	(.064)	(.066)	(.074)	(.068)	(.129)
Age groups (1= Youngest)	**.147*****	**.152*****	.059	**.168*****	**.234****
	(.037)	(.041)	(.047)	(.043)	(.080)
population size (2022)	.000	.000	.000	.000	.000
	(.000)	(.000)	(.000)	(.000)	(.000)

Constant	**4.504*** **	**3.090*** **	**3.073*** **	**3.481*** **	**6.328*** **
	(.625)	(.656)	(.653)	(.655)	(1.543)
N	715	716	670	866	269
r2	.440	.401	.467	.406	.502

* p<0.05, ** p<0.01, *** p<0.001
Standard errors in parantheses

Appendix 2: Coding

Variables	*N*	Min.	Max.	Mean	Standard Deviation	Source (ID reference)	Year
Reasonableness I: Violating human rights	5049	.00	10.00	6.9444	2.1262	Survey	2022
Reasonableness II: Not violating human rights	4993	.00	10.00	7.0952	2.0461	Survey	2022
Exposure health [index]	5674	.00	1	.5115	.2372	Survey	2022
Exposure work [index]	5674	.00	1	.1677	.2256	Survey	2022
Exposure fam/soc [index]	5674	.00	1	.5083	.3203	Survey	2022
Exposure fear	5674	.00	1.00	.5189	.49969	Survey	2022
General negative [index] (1 = strongly agree)	4347	1.00	5.00	3.2059	.7524	Survey	2022
Good with local adaption (1 = strongly agree)	5400	1.00	5.00	2.29	.957	Survey	2022
Good at protecting elderly (1 = strongly agree)	5176	1.00	5.00	2.92	1.2049	Survey	2022
Trust municipal services	4406	.00	10	6.7410	1.9693	Survey	2022
General interpersonal trust	5315	1.00	12	7.2619	2.3513	Survey	2022
Gender (0 = M, 1 = F)	5674	0.00	1.00	.4966	.500	Survey	2022
Children (0 = No, 1 = Yes)	5639	.00	1.00	.3145	.4643	Survey	2022
Married/Cohabit (0 = No, 1 Yes)	5674	.00	1.00	.5641	.4959	Survey	2022
Education (4 categories 1= lowest)	5558	1.00	4.00	2.6097	.9465	Survey	2022
Residence (3 categories, 1 = detached, 2= semi-detached/townhouse, 3= Apartment)	5570	.1.00	3.00	.2.0847	.8894	Survey	2022
Age groups (1 = youngest)	5674	1.00	6.00	3.3191	1.6891	Survey	2022
Size (number of municipal inhabitants)	5674	42.00	975551	159002.55	226101.417	Nordregio	2022

Appendix 3: Correlation matrix

Examining the correlation between the dependent variables and performance indexes, and trust variables.

Matrix of correlations Performance RI

Variables	(1)	(2)	(3)	(4)
(1) Reasonableness I	1.000			
(2) General Performance	-0.161	1.000		
(3) Good with local adaptation	-0.352	-0.025	1.000	
(4) Good at protecting elderly	-0.305	0.714	0.006	1.000

Matrix of correlations Performance RII

Variables	(1)	(2)	(3)	(4)
(1) Reasonableness II	1.000			
(2) General Performance	-0.141	1.000		
(3) Good with local adaptation	-0.340	-0.032	1.000	
(4) Good at protecting elderly	-0.255	0.711	-0.002	1.000

Matrix of correlations Trust RI

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Reasonableness I	1.000						
(2) Trust in Government	0.464	1.000					
(3) Trust in Parliament	0.481	0.852	1.000				
(4) Trust in minster of health	0.496	0.765	0.819	1.000			
(5) Trust in Municipal Organisation	0.440	0.698	0.690	0.659	1.000		
(6) Trust in Municipality	0.440	0.666	0.650	0.624	0.755	1.000	
(7) Interpersonal trust	0.274	0.467	0.439	0.410	0.428	0.431	1.000

Matrix of correlations Trust RII

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Reasonableness II	1.000						
(2) Trust Government	0.465	1.000					
(3) Trust Parliament	0.479	0.852	1.000				
(4) Trust minister of health	0.496	0.765	0.819	1.000			
(5) Trust Municipal organisation	0.442	0.698	0.690	0.659	1.000		
(6) Trust Municipality	0.446	0.666	0.650	0.624	0.755	1.000	
(7) Interpersonal trust	0.289	0.467	0.439	0.410	0.428	0.431	1.000

Appendix 4: OLS regressions country and paired t-test

Linear regression

Reasonableness I	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Norway	-.025	.089	-0.28	.778	-.199	.149	
Denmark	-.166	.088	-1.88	.06	-.339	.007	
Finland	-.233	.088	-2.64	.008	-.406	-.06	**
Iceland	.501	.113	4.43	0	.28	.723	**
Constant	6.99	.062	113.02	0	6.868	7.111	**

Mean dependent var	6.944	SD dependent var	2.126
R-squared	0.009	Number of obs	5049
F-test	11.637	Prob > F	0.000
Akaike crit. (AIC)	21908.333	Bayesian crit. (BIC)	21940.967
VIF	1.47	Prob > chi2	0.0867

*** p<.01, ** p<.05, * p<.1

Linear regression

Reasonableness II	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Norway	.058	.086	0.67	.501	-.111	.227	
Denmark	-.029	.086	-0.34	.733	-.198	.139	
Finland	-.03	.086	-0.34	.73	-.197	.138	
Iceland	.444	.111	4.00	0	.227	.662	***
Constant	7.053	.06	116.69	0	6.934	7.171	***

Mean dependent var	7.095	SD dependent var	2.046
R-squared	0.004	Number of obs	4993
F-test	5.485	Prob > F	0.000
Akaike crit. (AIC)	21306.238	Bayesian crit. (BIC)	21338.817
VIF	1.47	Prob > chi2	0.6055

*** p<.01, ** p<.05, * p<.1

Paired t test: H1.1 RI and RII Full sample

	obs	Mean1	Mean2	dif	St.Err	t value	p value
RI mean - RII mean~	4767	6.963	7.099	-.136	.013	-10.6	0