

How to assess national resilience to online disinformation?

Comparing Finland and Lithuania

Policy brief

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Executive summary

This policy brief stems from a research collaboration between two projects of the European Digital Media Observatory EDMO: DIGIRES (Lithuania) and NORDIS (Finland, Denmark, Norway, and Sweden). The brief discusses the components and indicators of what constitutes resilience to disinformation from the following perspectives:

1. How resilience against online disinformation can be understood;
2. What indicators could be used to measure national resilience to online disinformation, and
3. How comparative analyses can inform policies in terms of common practices and nationally-specific characteristics.

Based on an analysis of 30 comparative indicators of Finland and Lithuania, depicting socio-political context, media landscape, and media use, and reflecting the findings on some qualitative expert interviews conducted within the project, the brief recommends the adaptation of a complex understanding of national resilience to online disinformation: Not only are descriptive indicators central to understanding systemic factors of resilience but the concrete attitudes, values, and capacities of those executing actions to build resilience are central – and the overlooked aspect in policymaking and research.



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1. Introduction

Significant alterations in public discourse characteristics have occurred in all European countries and globally. In just a few years, the publics have been confronted with a myriad of uncertainties concerning immediate requests to respond to changing economic and social environments and changed health conditions. The influx of disinformation, hate speech, fake narratives, instigations of conflict, radicalization, and the growth of threatening stances in discourse – are only examples of the changed informational environment that calls the attention of scholars and governments in Europe.

The erosion of liberalism and liberal democratic ideals is among the most disturbing trends in contemporary Europe. Populist discourses flourish, instigated by digitalization and platformization, and as a response to deeper trends activating societal divisions. Younger democracies of Europe, such as Lithuania, appear to be especially vulnerable in such a framework of political and social developments and populist movements. But even in more mature European democracies like Finland, with high levels of institutional trust, press freedom, and media literacy, online disinformation poses challenges to national security and social confidence. These challenges have become especially pertinent for both countries in light of their relationship with Russia and their responses to the current war in Ukraine. Especially the information warfare related to the war in Ukraine has prompted national debates about resilience to disinformation.

This policy brief stems from a research collaboration between two projects of the European Digital Media Observatory EDMO: DIGIRES (Lithuania) and NORDIS (Finland, Denmark, Norway, and Sweden). Specifically, the interest in assessing resilience to online disinformation is based on the relative geopolitical similarities of Finland and Lithuania and possible vulnerabilities to Russian information attacks. Still, neither country has an explicit policy approach to neither defining nor assessing the level of resilience to online disinformation. Against this backdrop, this brief discusses the components and indicators of what constitutes resilience to disinformation from the following perspectives:

1. How resilience against online disinformation can be understood;
2. What indicators could be used to measure national resilience to online disinformation, and
3. How comparative analyses can inform national policies in terms of common practices and nationally-specific characteristics.



2. Defining and studying resilience to online disinformation

Today's media landscapes in Europe and elsewhere face profound problems in terms of business models and governance. Namely, the line between platforms and media is blurred, and that calls for a reorganization of the ways in which media and communication policies and regulations should exist.¹ These complex problems contribute to significant, multidimensional harms to democracy and cannot be discussed simply as the spread of false and misleading information. Often this complex situation is referred to as **information disorder**, indicating all forms of false and misleading information created for profit or to provoke social conflicts.²

Information disorder intensifies during turbulent times, as evidenced by the global rise of xenophobic movements, disbelief in science (including climate change and vaccination), and beliefs in conspiracies.³ The term highlights the structures, preconditions, and practices that produce and facilitate the circulation of disinformation, which make some societies, media structures in societies, and subpopulations in those societies vulnerable to false and misleading information. The term has also been used to distinguish misinformation (unintentional false information) from disinformation (purposefully created false information) and malinformation (targeted malicious content).⁴ In this brief, the term **disinformation** is used to refer to purposefully created false information that is intended to manipulate audiences.⁵

Research that directly addresses resilience against harms caused by information disorder (including factors that seem to protect audiences from disinformation) or studies resilience indirectly (that is, factors of information disorder that make people vulnerable to false information and that prompt sharing and believing disinformation) has manifolded in the past years.⁶ Perceptions, reception, and impacts of misinformation⁷ and the impact of the business model of the global tech giants on the viral spread of disinformation⁸ have been

¹ Bechmann, 2022.

² Benkler et al., 2018.

³ Swami & Furnham, 2014.

⁴ Wardle & Derakshan, 2017.

⁵ See also, Humprecht et al., 2020.

⁶ See, e.g., Google scholar on studies tackling disinformation, also, e.g., the Harvard Kennedy School Misinformation Review: <https://misinforeview.hks.harvard.edu/>

⁷ E.g., Hameleers et al., 2022; Knuutila et al., 2022.

⁸ Zuboff 2019



focused upon, including in case studies of different platforms and campaigns in various countries. Still, we know relatively little about how to define resilience to (online) disinformation and how to assess it: Are there general, universal principles and factors that build resilience in the global online environment, and to what extent is resilience possibly dependent on contextual factors, including national contexts?

To date, many studies and policy briefs either refer to resilience to disinformation in general terms when discussing false information as a general problem to democratic societies or discussing a particular country case.⁹ Another strand of research features pedagogical, cognitive, and psychological conceptualizations and models to address individuals' literacy skills to detect false information.¹⁰

The major contribution to comparative studies on **national** resilience against online disinformation comes from a team of scholars in Switzerland and Belgium.¹¹ Their **definition of national resilience** is straightforward: **National resilience means a structural context in which disinformation does not reach a large number of citizens**; that is, a system provides a safety net.¹²

In the first study, the researchers used cluster analysis based on statistics of political, economic, and media environments in 16 countries. They found three distinct country clusters: the media-supportive, consensual cluster of Western European democracies and Canada; the polarized cluster consisting of Southern European countries; and the low trust, politicized, and fragmented environment of the United States.¹³ This study suggested that the political environment and news consumption are, unsurprisingly, essential considerations in terms of resilience: Polarization and populist politics diminish trust in legacy journalism and prompt social media as a news source. Also, the national media market size matters: For instance, in smaller markets, public service media may have a significant role in providing trusted information.¹⁴

The second study looked at the audiences' capacities for resilience based on their propensity to share disinformation. This analysis was based on national surveys in six European countries and, to a great extent, confirmed the earlier structural analysis:

⁹ E.g., Filipec, 2019; Golob, 2021. Sanchez 2021.

¹⁰ E.g., Golob et al., 2021; McDougall 2019; Leet et al., 2022; Rodrigo et al. 2022.

¹¹ Humprect et al., 2020; Humprect et al., 2021.

¹² Humprect et al., 2020.

¹³ Humprect et al., 2020: 507-508.

¹⁴ Humprect et al., 2020: 509.



Resilience factors are **greatly dependent on specific national contexts**. The cross-national resilience factors seem to be relatively few, including the extent of social media use and the use of alternative media, as well as the extent of support for populist politics.¹⁵

These findings have since been partly confirmed, partly contested, by survey-based research on the US, Canada, the UK, and France.¹⁶ This study argued, for instance, that the role of public service broadcasters is not as evident in contributing to resilience as suggested earlier. The study concludes that:

a richer conception of resilience requires additional theoretical work investigating the relationships (a) between macro-level covariates and micro-level indicators of resilience and (b) between variables within these analytic categories. This broader agenda can identify resilience with less focus on the overarching goal of preventing exposure to misinformation and more focus on a larger set of individual- and system-level capacities required for minimizing its impact.¹⁷

A richer definition of national resilience against disinformation can, in fact, be found in a policy brief co-authored by one of the leading Swiss disinformation scholars. The brief defines resilience as **societies' ability to maintain their democratic structure and to resist and/or oppose misleading information and anti-democratic influences**. It posits that resilience consists of three layers of factors: macro-level structural factors, meso-level organizational factors, and micro-level factors pertaining to individuals¹⁸

This policy brief draws from the above-cited research, including three-tiered definition and understands resilience to online disinformation as follows (Figure 1):¹⁹

¹⁵ Humprecht et al., 2021.

¹⁶ Boulianne et al., 2022.

¹⁷ Boulianne et al., 2022: 180.

¹⁸ Frischlich & Humprecht, 2021.

¹⁹ Instead of focusing on political populism specifically, this brief uses the broader indicator of societal, political, and media trust.



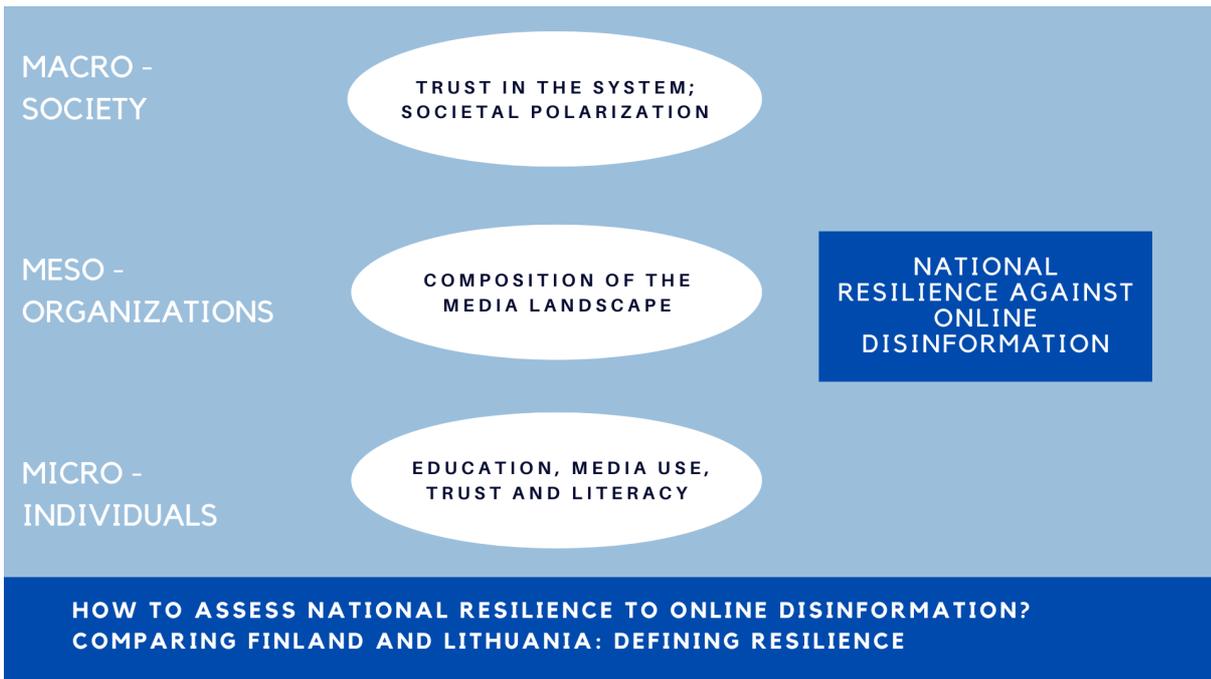


Figure 1. A framework for defining national resilience to online disinformation

3. Comparing national resilience to online disinformation: suggested indicators

Different approaches and disparities in assessing structural resilience to online disinformation in different studies highlight how definitions, approaches, methods, and data points influence, to an extent, the results of the comparisons and conclusions of the factors of resilience.

To test different comparative statistics and indices on different aspects with potential impact on resilience, this policy brief features 30 comparative statistics and indices from a total of eight sources. They are chosen based on the following criteria:

1. They are based on, but significantly extend, the aforementioned comparative study on structural resilience.²⁰
2. They speak to contextual-structural, media-institutional, and individual-consumption – macro, meso and micro-level – aspects of the existence and spread of disinformation and, ultimately, resilience to online disinformation. By doing so, they combine expert assessments and survey data, rankings, indices, and statistics.
3. They are from well-known, vetted, and widely used open-access sources, accessible to policy-makers and scholars alike.

The selection of the 30 indicators is not intended to be exhaustive;²¹ rather, the idea is to highlight different dimensions with various comparative data. In the following, the indicators are first listed by dimension (Table 1; macro, meso, and micro), and the sources and figures are then described in more detail.

Issue	Source
MACRO: Political context - structures	
State of democracy	The Economist Intelligence Unit Democracy Index ranking (EIU, 2022)
Trust in the government	% Summer Eurobarometer (Eurobarometer 2022b)

²⁰ Humprecht et al., 2020.

²¹ For instance, the Digital Society Project/V-Dem Digital Society Survey index (Mechkova et al., 2022) alone includes 33 questions that could be argued to potentially indicate national resilience to online disinformation. Also, some of the chosen indicators are statistics, others indicators that combine those statistics. Again, this variety intends to capture a wide view on potential factors of national resilience to online disinformation.



Trust in the parliament	% (Eurobarometer, 2022b)
Trust in the EU	% (Eurobarometer, 2022b)
Online national government disinformation	Digital Society Project/V-Dem Digital Society Survey, index (mean) (Mechkova et al., 2022)
Government cybersecurity capacity	Digital Society Project/V-Dem Digital Society Survey, index (mean) (Mechkova et al., 2022)
Online foreign interference	Digital Society Project/V-Dem Digital Society Survey, index (mean) (Mechkova et al., 2022)
Polarisation of society	Digital Society Project/V-Dem Digital Society Survey, index (mean) (Mechkova et al., 2022)
MESO: National media landscape - institutions	
Press freedom	World Press Freedom Index ranking (RSF, 2022)
Online content diversity of views	Digital Society Project/V-Dem Digital Society Survey, index (mean) (Mechkova et al., 2022)
Online media fractionalization	
Risk to media pluralism: fundamental protection	% Media Pluralism Monitor 2022 (For Finland: Mäntyoja & Manninen 2022; Lithuania: Balčytienė et al., 2022)
Risk to media pluralism: market plurality	% Media Pluralism Monitor 2022
Risk to media pluralism: political independence	% Media Pluralism Monitor 2022
Risk to media pluralism: social inclusiveness	% Media Pluralism Monitor 2022
MICRO: Media use - individuals	
Internet access: penetration of population	% (Eurostat, 2022)
Daily internet use	% (Eurostat, 2022)
Expressing (civic/political) opinions online	% (Eurostat, 2022)
Civic/political participation online	% (Eurostat, 2022)
Disinformation as a problem for democracy	% Eurobarometer 2021–22 (Eurobarometer, 2022a)

Disinformation as a problem for one's own country	% (Eurobarometer, 2022a)
Often exposed to disinformation	% (Eurobarometer, 2022a)
Confidence in own ability to detect disinformation	% (Eurobarometer, 2022a)
Media literacy	Media Literacy Index ranking (Lessenski 2022)
Trust in media - high	% The EBU Net Trust Index (EBU, 2022)
Trust in media - medium	% The EBU Net Trust Index (EBU, 2022)
Trust in media - low	% The EBU Net Trust Index (EBU, 2022)
Radio - tend to trust	% The EBU Net Trust Index (EBU, 2022)
TV - tend to trust	% The EBU Net Trust Index (EBU, 2022)
Press - tend to trust	% The EBU Net Trust Index (EBU, 2022)
Internet - tend to trust	% The EBU Net Trust Index (EBU, 2022)
Social networks - tend to trust	% The EBU Net Trust Index (EBU, 2022)
Trust in national news	high-medium-low The EBU Net Trust Index (EBU, 2022)
Public service media the most trusted news source	yes-no The EBU Net Trust Index (EBU, 2022)

Table 1. Comparative indicators

Overview of the indicator sources:

The Digital Society Project

provides global data based on an expert questionnaire that covers questions on online censorship, polarization and politicization of social media, disinformation campaigns, coordinated information operations, foreign influence in and monitoring of domestic politics, and candidates' social media presence. The questions use a scale of 0-4, with 4 indicating the best score and 0 the worst.²²

The Economist Intelligence Unit's Democracy Index

“provides a snapshot of the state of democracy worldwide in 165 independent states and two territories (...). The ranking “is based on the ratings for 60 indicators, grouped

²² <http://digitalsocietyproject.org/>



into five categories: electoral process and pluralism; civil liberties; the functioning of government; political participation; and political culture.” The overall Index is the simple average of the five category indices, and the countries are then ranked based on the overall score.²³

The EBU Media Trust Index

by the European Broadcasting Union (EBU) measured the level of trust each country’s citizens have in the different types of media. The Index is based on the Eurobarometer on trust and ranges from a minimum value of -100 to a maximum value of +100.²⁴

The Eurobarometer

is a public opinion survey by the European Union.²⁵

The Eurostat

statistics are the official statistics of the European Union.²⁶

The Media Literacy Index

covers 35 European countries, using several indicators from existing studies. The ones used to depict press freedom (Freedom House and Reporters without Borders) and the education indicators (PISA) have more weight. In contrast, the e-participation indicator (UN) and trust in people (Eurostat) have smaller weights than the other indicators. The Index is calculated and reported by the Open Society Institute – Sofia.²⁷

The Media Pluralism Monitor

is a tool to assess the potential weaknesses in national media systems that may hinder media pluralism. Based on expert analyses in 32 European countries and on 20 indicators that summarize 200 variables, it covers risks to pluralism in four areas: fundamental protection, market plurality, political independence, and social inclusiveness. The Monitor is coordinated by the European University Institute, the Centre for Media Pluralism and Media Freedom.²⁸

²³ EIU, 2022: 3, 67.

²⁴ EBU, 2022: 3.

²⁵ <https://europa.eu/eurobarometer/screen/home>

²⁶ <https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Eurostat>

²⁷ <https://osis.bg/?p=4243&lang=en>

²⁸ <https://cmpf.eui.eu/media-pluralism-monitor/>



The World Press Freedom Ranking by Reporters without Borders

compares the level of press freedom in 180 countries. The score is calculated on the basis of a quantitative count of abuses against journalists and a qualitative analysis based on an expert questionnaire. The rankings use a scale of 0 to 100 that is assigned to each country or territory, with 100 being the best possible score and 0 the worst.²⁹

²⁹ https://rsf.org/en/index-methodologie-2022?year=2022&data_type=general



4. Similar and different: Comparing the indicators for Finland and Lithuania

Finland and Lithuania provide an interesting case study to think about a richer understanding of resilience. They are both small nations with small national, dual-system media markets, including commercial and public service media. They are both EU member states and share the same policy guidelines to counter disinformation.³⁰ They also share the proximity to Russia – a factor that has prompted concerns about foreign interferences and (online) propaganda, especially in the context of the Ukrainian war. At the same time, Finland represents an older democracy with strong alliances with the other Nordic countries, while Lithuania’s independence of more recent and aligns itself with the other Baltic countries. Lithuania has been a full NATO member since 2004, while Finland, in late 2022, is still an applicant. In more societal-cultural terms, Lithuania is characterized by a legacy of skepticism, particularly against Russian politics and related communications, that stems from the nation’s history. In contrast, in Finland, the war in Ukraine has prompted the revisiting and critiquing its close history of consensus-oriented Russian relations and related political decisions.

When assessed against the variety of indicators described in section 3, the countries indeed appear similar, especially regarding indicators depicting the media landscape, but notably different if compared at the macro and micro-levels (Table 2; notable differences marked with highlight):

Issue	Finland	Lithuania
MACRO: Political context		
State of democracy	3	40
Trust in the government	68	36
Trust in the parliament	70	22
Trust in the EU	60	69
Online national government disinformation	4 (0-4)	4 (0-4)
Government cybersecurity capacity	2.8 (0-4)	3 (0-4)
Online foreign interference	3.2 (0-4)	2.5 (0-4)
Polarisation of society	2.7 (0-4)	1.3 (0-4)

³⁰ E.g., <https://digital-strategy.ec.europa.eu/en/policies/online-disinformation>

MESO: National media landscape	Finland	Lithuania
Press freedom	5 (2021: 4)	9 (2021: 28)
Online content diversity of views	3.5 (0-4)	3.3 (0-4)
Risk to media pluralism: fundamental protection	26% - low	29% - low
Risk to media pluralism: market plurality	64% - medium	64% - medium
Risk to media pluralism: political independence	44% - medium	35% - medium
Risk to media pluralism: social inclusiveness	44% - medium	37% - medium
MICRO: Media use	Finland	Lithuania
Internet access: penetration of population	98%	88%
Daily internet use	92%	82%
Expressing (civic/political) opinions online	14%	16%
Civic/political participation online	26%	21%
Disinformation as a problem for democracy - totally agree or tend to agree	82%	89%
Disinformation as a problem for one's own country - totally agree or tend to agree	52%	80%
Often exposed to disinformation - totally agree or tend to agree	58%	71%
Confidence in own ability to detect disinformation - totally agree or tend to agree	77%	65%
Media Literacy	1 (score: 76)	17 (58)
Trust in media - high	27%	21%
Trust in media - medium	55%	31%
Trust in media - low	18%	48%
Radio - tend to trust	76%	46%
TV - tend to trust	76%	45%
Press - tend to trust	79%	37%
Internet - tend to trust	35%	37%

Social networks - tend to trust	11%	22%
Trust in national news	high	low
Public service media the most trusted news source	yes	yes

Table 2. Comparison of indicators: Finland vs. Lithuania

Finland and Lithuania fall in different positions regarding the overall “state of democracy” assessment. A closer look at the index reveals that Lithuania fares well in electoral pluralism and civil liberties but falls behind many EU countries in the functioning of the government, political participation, and political culture.³¹ The statistics show that, indeed, Lithuanians trust their own government and parliament notably less than Finns do theirs. In addition, the Digital Society Project scores suggest that Lithuania faces more foreign influence and struggles more with societal polarization than Finland.

Interestingly, the chosen indicators suggest that in terms of pluralism, the media landscapes in Finland and Lithuania face similar degrees of risk. All in all, the level of press freedom, too, is similar, with Lithuania having improved its standing significantly in recent years.

It is, however, the indicators of media trust that show the most significant differences across the different indicators: Lithuanians see disinformation as a greater problem in their country than Finns do in theirs; they report to counter online disinformation more often than Finns do, and they are less confident in their ability to detect disinformation than Finns are. In addition, Lithuanians’ trust in national news media is notably lower – than Finns’ trust in their legacy media. In contrast, social media is more trusted in Lithuania than in Finland.

As known, in Lithuania (and other Baltic countries), Russian disinformation seeks two basic aims:³² to discredit the Lithuanian state as much as possible, increasing dissatisfaction with domestic government and democracy, and second, to portray Russia positively. Disinformation causes long-term and profound problems that are not limited to influence in the political sphere; it affects not only the social landscape but also economic development. It echoes the decrease of incentives for domestic investment activities, causes mistrust in the justice system, and reluctance to seek assistance from public institutions.

Undeniably, Lithuania, Latvia, and Estonia have for decades been targets of Soviet propaganda. With the end of the Cold War, however, the Kremlin’s propagandistic system

³¹ EIU, 2022: 12.

³² Morkūnas, M., 2022.

did not take the Baltic countries off its informational radar. Obviously, since then, disinformation has become more substantial and more complex, reflecting narratives that are consistent with the current issues and aims, such as COVID-19-related fears and manipulations, hybrid attacks, environmental disasters, economic and energy crises, etc. In short, with digitalization, disinformation has become more systematic, ubiquitous, contextually adaptable, and combining the latest technologies to augment the planned effect. All in all, this draws attention to the fact that the lower confidence and levels of trust expressed by the Lithuanian respondents may be a consequence of long-term negative informational effects.

One additional and illustrative example of the trends discussed in the studied countries is the Digital Society Project.

The illustrations below reveal a two-decade-long tendency of persistent propaganda and disinformation attacks in the region. The DSP project ranks its indicator measures on a scale to 0-4, with 4 revealing the best situation in a country. According to 2021 data, foreign governments' dissemination of false information in Latvia was 0,9, Lithuania - 2,0, and Estonia - 2,5. These are the lowest scores among the region's countries: false information attacks are and have been a matter of regular occurrence in the Baltic countries (Figure 2):

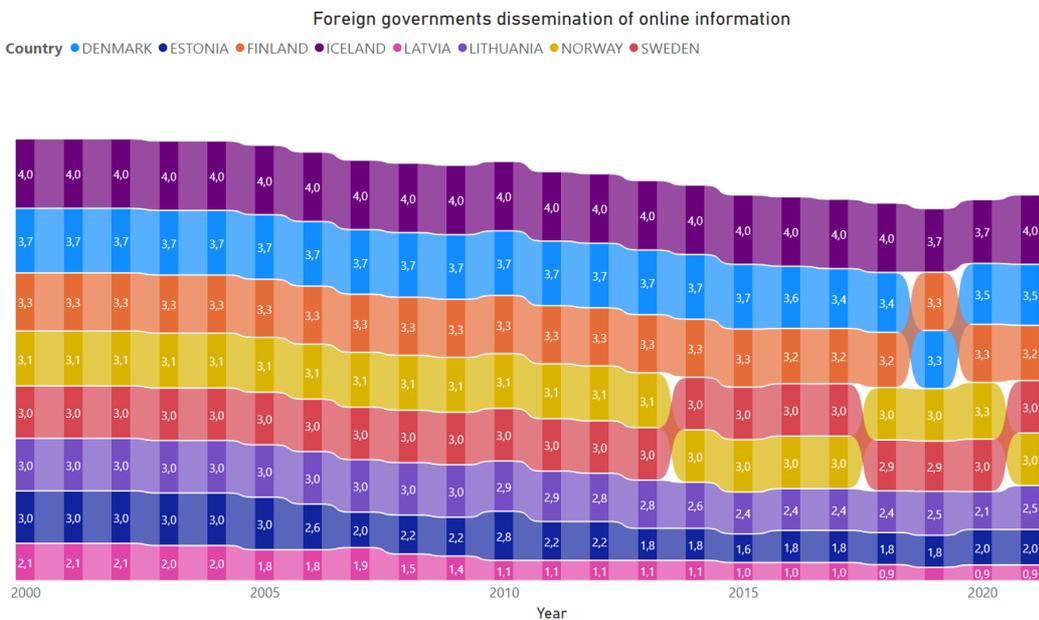


Figure 2. Foreign governments' dissemination of false information



Whereas in another illustration (see Figure 3) discussing Online media fractionalization certain similarities, for example, between Finland and Lithuania, are revealed. Both countries scored with high results, which means that fractionalization is low in both countries (Lithuania 3,7 and Finland - 3,5). A low score would refer to the tendency of different online media to discuss the same political issues while having their own opinion and stance on the matter. Briefly, one could hypothesize that in both countries, professional online media do not expose contradictory and radical views, thus acting as a “protecting net” safeguarding the state’s national interests:

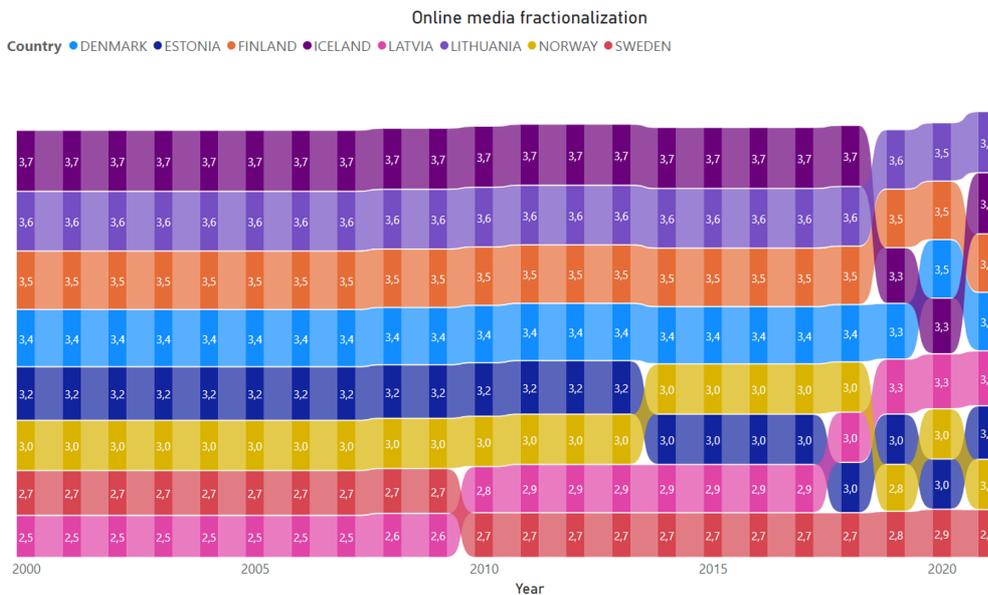


Figure 3. Online media fractionalization

Furthermore, Nordic-Baltic comparisons show similarities and differences – not only between the two regions but within them. For instance, when compared with the indicators of the Digital Society Project that ranks different aspects with a scale of 0-4, with 4 indicating the best situation, differences can be significant. In terms of polarization, the indicators range from Denmark being the least polarized (with a score of 2,8 that still indicates some polarization of society) to Lithuania being the most (1,3), with Sweden faring worse than the other Nordics (1,9; see Figure 4):



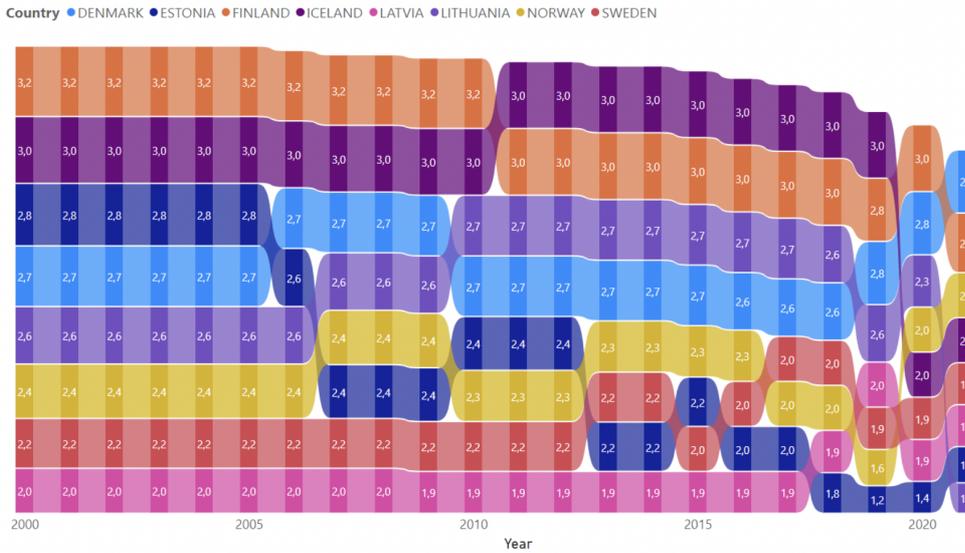


Figure 4. Polarization of society

Another example, an assessment of the respective governments' cybersecurity capacities, depicts a different situation from the one above. Estonia (with a score of 3,8) and Denmark (3,3) fare well, whereas Norway and Iceland receive the lowest scores in this comparison (Figure 5):

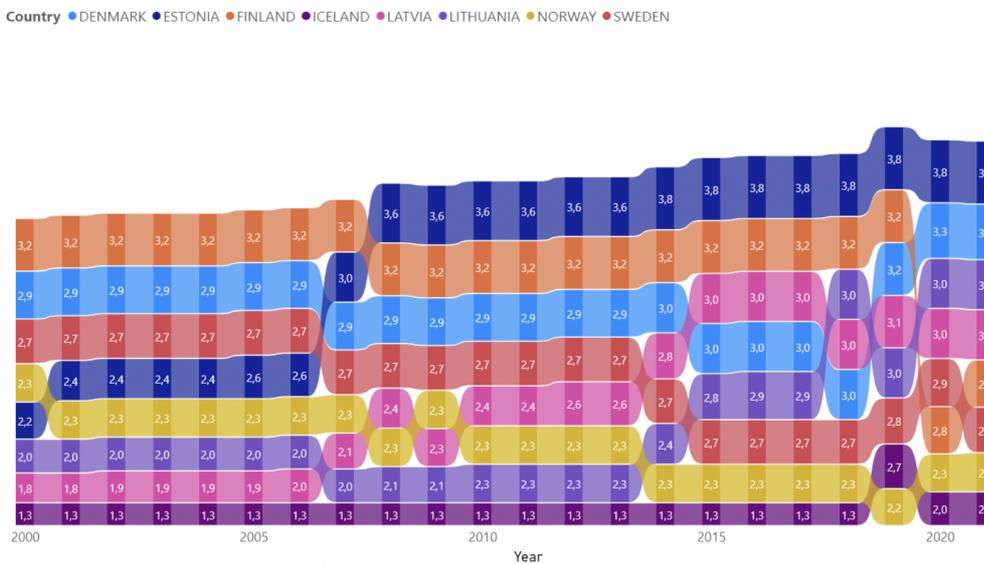


Figure 5. Government's cybersecurity capacity



5. Discussion: Capacity considerations

While the above indicators highlight national differences, it is difficult to assess the degree of national resilience to online disinformation based on the comparisons. What do the 30 indicators, in fact, suggest beyond some significant differences in context and media use between Finland and Lithuania? For instance, to what extent is distrust healthy, suggesting caution with online content? When is it a part of broader distrust of the societal knowledge institutions and legacy media, prompting the use of alternative media online? What explains the similarities and differences between countries?

Given the complex and contradictory findings, the call for a broad set of individual- and system-level capacities³³ to build national resilience seems valid. Qualitative interviews of national experts conducted separately within DIGIRES and NORDIS projects³⁴ reveal more than statistics and indices about the capacity perspective:

Although not directly evident from the statistics and indices, the Finnish expert interviews of journalists, policymakers, and media literacy professionals, suggest that not only national security concerns but the **increased societal inequalities and the fragmentation of the society both culturally and politically** are at the heart of the problem:

We are already differentiated from each other so that we cannot communicate with each other, and that is why misinformation is circulating, also deliberately disseminated disinformation.

- A Finnish expert

What emerges from the interviews as the key solution is transparent, impactful, diverse journalistic content that addresses those in the margins and counters polarization. The sense that the existing high levels of media literacy cannot be used as the catchall solution to disinformation and that the concept and practices of literacy need to be upgraded with the digital developments.

In contrast, one key shared view of the interviewed Lithuanian experts is that education is the solution to resilience. The lack thereof indicates why disinformation is rampant in the country, but focusing on education would be central to building resilience.

³³ Boulianne et al., 2022: 180.

³⁴ For NORDIS, see, e.g., Horowitz, 2022. The interviews were not specifically conducted for this policy brief but addressed the question of national resilience.



The reason why disinformation, in general, is being spread successfully is the lack of education.

- A Lithuanian expert

In Lithuania, the position that media literacy should remain a subject of non-formal education has been maintained for too long. As the comparative studies in the framework of the MPM project show, there are many stakeholders operating in media literacy activities in Lithuania, however, without a clear strategic direction and coordination, their efficiency is not sufficient to gain a more visible impact. It can be assumed that low trust in the media and journalism is due to such an attitude. Only from 2023 competencies in the areas of news literacy and digital skills and related capacities development will be included as horizontal competencies in formal educational programs and teaching subjects in schools.

Furthermore, it is interesting that the Lithuanian experts do not only, or specifically, address media and information literacy. Instead, they refer to civics, learning languages to follow foreign news sources, and lifelong learning to guarantee skills for all ages, according to the changing communication environment.

Combined, the comparative indicators and the expert reflections paint significantly different pictures of the Lithuanian and Finnish challenges and capacities of resilience to online disinformation (Figure 5). What follows is that resilience entails the “human factor”: It matters how experts involved in institutions and decision-making of the different dimensions of resilience understand and act upon building resilience. In other words, societal, organizational, and civic dimensions of resilience interplay with systemic factors (measured by indicators) and “the human factor” of policy and political actions.

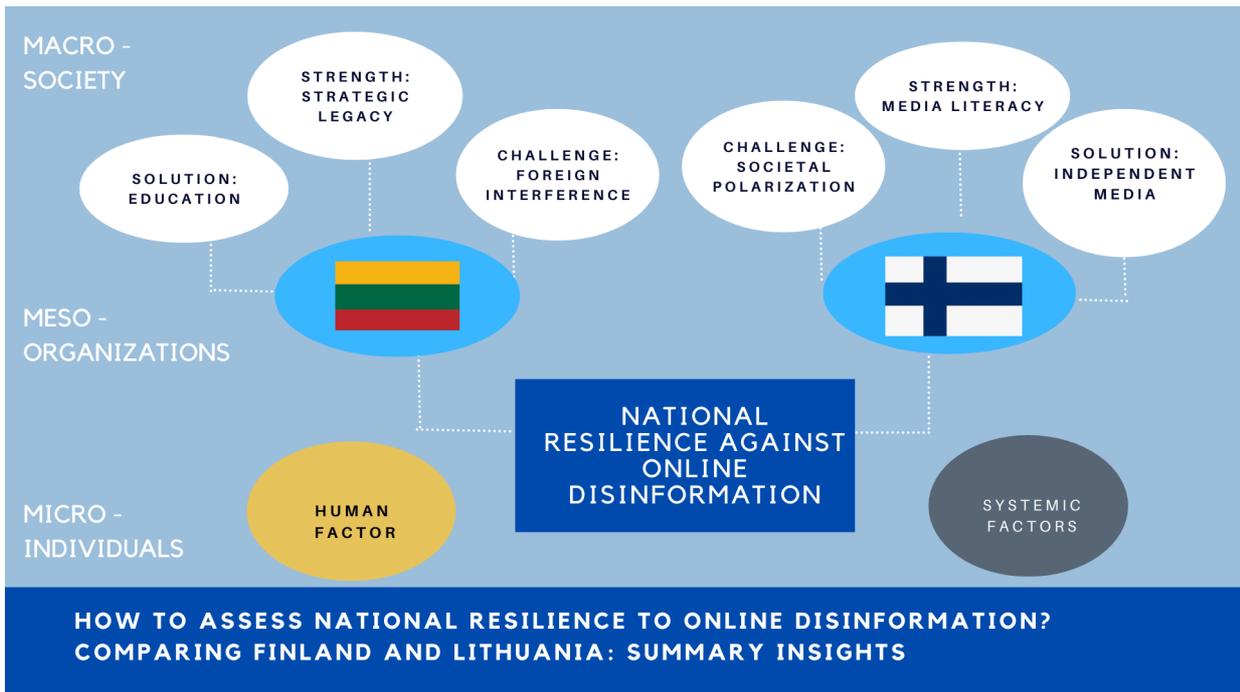


Figure 5. Summary insights



6. Multidimensionality of resilience: Conclusions and recommendations

The recent debates about remedies for disinformation have mostly focused on changes to the governance and regulation of digital platforms and the need to improve the transparency of their actions. At the level of the European Union (EU), this has recently (in Winter 2022) been addressed with the Digital Services Act and the strengthened Code of Practice); the former facilitates combat disinformation on digital platforms, and the latter emphasizes concrete fact-checking and literacy activities. The European approach to disinformation is “balanced and tailored,” with the understanding that geopolitical and contextual variations must be taken into account when seeking remedies to the current situation.³⁵ This policy brief has sought to shed light on how specific national resilience to online information is to its context and how tailored measures to build it should be.

Based on the overview of various indicators – extended from earlier studies – and tested with two countries with similar yet different situations, it seems that an essential question is the human agency factor of those stakeholders that play a strategic role in responses to online disinformation. The relevant issue is not only how the anti-disinformation system with counteracting measures works in a concrete national setting (in practice); but it is also essential to understand the attitudinal perceptions and thinking patterns of different stakeholders (on the one hand, political and media elites, but also ordinary citizens) behind the functioning of certain systems. Not only are descriptive indicators central to understanding systemic factors of resilience but the **concrete attitudes, values, and capacities of those executing actions** to build resilience are central – and the overlooked aspect in policymaking and research.

Recommendations for policy

Policymakers should create systematic monitoring of the available indicators to benchmark national and comparative views on resilience. While the indicators give a complex and even contradictory view on aspects potentially impacting resilience to online disinformation, they nevertheless provide a general roadmap about the factors to be taken into account.

In addition, policymakers should pay close attention to the **human factor**: Only when we know how personal attitudes towards disinformation and countermeasures (such as government acts to directly regulate or promote indirect educational media literacy

³⁵ Jourova, 2022.



initiatives) interact with the structural context will we be able to understand and highlight the specific groups of actors (stakeholders and their interrelations) as well as gaps in the system and means of interventions needed in a concrete national setting.

As known, European policy actions offer strategic directions in the fight against disinformation and resilience building, and these can become very effective strategic guidelines in national politics as well. The question of how these will be reflected in national policy-making and what steps will be taken and on what basis (which values will be emphasized), and by whom (which political and civil actors) remains open.

Recommendations for strengthening the “epistemic structures of knowing”

Despite active investments in immunization, disinformation can have serious long-term outcomes and consequences. Disinformation is aimed at attacking the structure of knowing. Briefly, for disinformation to be in any way effective, there must be an audience that is wittingly or unwittingly receptive to it. Hence, media and education institutions (as an infrastructure of epistemic knowledge) continuously must re-assess the concept and practices of literacy as required capacities to be upgraded with digital developments. This will help raise awareness and empower students to become more media literate and be better prepared to recognize and combat disinformation.

Recommendations for research

Researchers should develop new approaches that not only monitor certain indicators but venture into the richness of resilience as a concept. Capacities should not only be assessed at the micro-level of individuals (literacy) but also as societal and organizational resources of media and other communication stakeholders to understand and combat disinformation.

Communication is a cultural act. So is its reception and interpretation. Research innovations in understanding of the “own” and “other” culture’s communication act are needed to counter propaganda and disinformation effectively.

Hence, focusing on socio-culturally determined specificities of the actual context and its manifestations in legal frameworks and applications could open completely new arenas for analysis and questioning of such a complex phenomenon as “national resilience.” New types of questions must be generated about resilience against the effects of disinformation, specifically whether and how people are deceived or remain resilient to information manipulations and attacks and what kinds of risks must be foreseen for the future.

In confronting information disruptions, rigorous experimental designs and methods are needed to determine how to measure the impact of disinformation on society and on individual groups. As envisaged, new types of *measuring metrics* - for example, new types of qualitative assessments rather than quantitative data collections - must be developed.

Furthermore, it is important to understand that science and research can only provide answers to some identified problems and selected questions, and suggest how to draw public policy guidelines. It is up to politicians to listen to the language of science and make adequate strategic moves and informed decisions.



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