

## THE CHALLENGES OF MISINFORMATION AND THE IMPERATIVE FOR MEDIA LITERACY IN EASTERN EUROPEAN DEMOCRACIES

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**Abstract.** This paper explores the crucial role of media literacy in countering disinformation within the context of modern liberal democracies. As the digital landscape evolves, disinformation – both intentional and unintentional – poses significant challenges to democratic processes, public health, national security, and social cohesion. The study emphasizes that media literacy is not merely an educational tool but a vital defense mechanism, equipping citizens with the critical thinking skills necessary to navigate a complex information environment. By analyzing European Union initiatives, such as the European Democracy Action Plan and the Audiovisual Media Services Directive, the paper highlights the importance of promoting and integrating media literacy across all societal sectors. The research concludes that media literacy is essential for fostering informed, active participation in democracy and ensuring resilience against increasingly sophisticated disinformation campaigns, including those powered by artificial intelligence.

**Keywords:** *Media Literacy Index; Disinformation; Public Resilience; European Union Initiatives; Populism; Information Disorder*

### *Introduction*

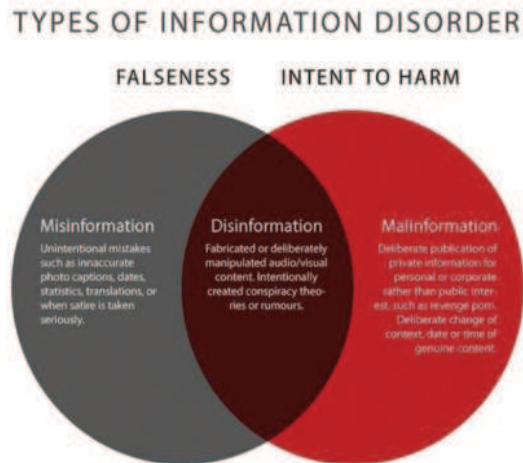
In a public speech in October 2023, European Commission Vice-President Vera Jurová emphasized that “the fight against misinformation is bigger than the online world” and that education and “media literacy” “are the best antibodies against the misinformation virus”.<sup>1</sup> These statements come in a context where the phenomenon of disinformation and malign external interference poses serious threats to stability and security in Europe and have become major concerns (became a major concern) for Member States and the European Union as a whole.

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<sup>1</sup> European Commission, Speech by Vice-President Jurová at Fighting Misinformation Online 2023 Event, October 26, 2023, available at: [https://ec.europa.eu/commission/presscorner/detail/ro/speech\\_23\\_5353](https://ec.europa.eu/commission/presscorner/detail/ro/speech_23_5353), accessed November 3, 2023.

However, a more distinct and operational concept than "disinformation" is that of "information disorder", as conceptualized by Claire Wardle and Hossein Derakhshan, and refers to the following notions: 1) "intentional disinformation" (disinformation); 2) "unintentional misinformation" (misinformation); and 3) "malinformation". By measuring two variables of the notions, the authors of the study identified the following differences:

- *Disinformation* — "information that is false and intentionally created to harm a person, social group, organization or country";
- *Misinformation* — "information that is false but not created with the intention to cause harm";
- *Malinformation* — "factually based information used to cause harm to a person, organization or country".<sup>2</sup>



*Figure 1. Graphical representation of how 'unintentional misinformation' (misinformation), 'intentional disinformation' (disinformation) and 'malicious misinformation' (malinformation) intersect and in the context of the intensity of the variable's 'falsehood' and 'harm caused'. Claire Wardle and Hossein Derakhshan have also included some forms of hate speech and harassment in the category of malicious information, as people are often targeted because of their personal history or personal affiliations. Even though the information may be based in reality (e.g. targeting someone because of religion), the information is used strategically to cause harm.<sup>3</sup>*

In this context, the spread of (un)intentional misinformation can have harmful consequences, such as eroding public trust in democratic systems, polarizing public debate, endangering health, safety and the environment. Jean-Baptiste Jeangène

<sup>2</sup> Claire Wardle, PhD and Hossein Derakhshan, *Information Disorder: Toward an Interdisciplinary Framework for Research and Policy Making*, 2<sup>nd</sup> revised edition, Council of Europe, Strasbourg, 2018, 20.

<sup>3</sup> *Ibidem*.

Vilmer and other contributors open their work with a verdict of an age in which people are questioning the very existence of truth: “We find ourselves not in an ideological age, in which we replace one truth with another, but rather in a skeptical or relativist age, in which we question the very existence of truth”.<sup>4</sup>

To address this problem, the European Commission has developed several initiatives:

- The Commission’s April 2018 Communication “Fighting online misinformation: a European approach” includes tools to combat misinformation and protect EU values;<sup>5</sup>
- Action plan on disinformation developed to strengthen EU capacity and cooperation in combating disinformation;
- Action Plan for European Democracy provides guidance on the responsibility of online platforms in eliminating malicious content and disinformation;
- Disinformation Monitoring Program in the context of the COVID-19 pandemic as a transparency measure to ensure the accountability of online platforms in combating disinformation;
- The creation of EDMO as an independent observatory bringing together fact checkers and researchers specialized in detecting and combating online misinformation, journalists and other professionals involved in the field;
- Consolidated Code of Practice on Misinformation,<sup>6</sup> signed on June 16, 2022, involves a wide range of actors making voluntary commitments to combat disinformation.

For example, in its Communication “Fighting online misinformation: a European approach”, the European Commission addresses at length the challenges and threats that misinformation brings to the European Union and its Member States:

“Disinformation erodes trust in institutions, as well as in digital and traditional media, and has damaging effects on our democracies by impairing citizens’ ability to make informed decisions. [...] Various domestic and foreign actors widely use online mass disinformation campaigns to sow mistrust and create societal tensions, with potentially serious consequences for our security. In addition, disinformation campaigns initiated by third countries can be part of hybrid threats to internal security, including electoral processes, in particular in combination with cyber-attacks. The spread of disinformation also affects policy-making processes by distorting public opinion. Domestic and foreign actors can use disinformation to

<sup>4</sup> Jean-Baptiste Jeangène Vilmer *et. al*, *Information Manipulation: A Challenge for Our Democracies*, The Policy Planning Staff (CAPS, Ministry for Europe and Foreign Affairs), The Institute for Strategic Research (IRSEM, Ministry for the Armed Forces), Paris, 2018, 36 *apud* Bogdan Oprea, *Fake news și dezinformare online: recunoaște și verifică: manual pentru toți utilizatorii de internet*, Polirom, Iași, 2021, pp. 18-19.

<sup>5</sup> European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Combating online misinformation: a European approach*, COM(2018) 236 final, April 26, 2018, Brussels, available at: <https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:52018DC0236>, accessed on November 4, 2023.

<sup>6</sup> European Commission, *2022 Strengthened Code of Practice on Disinformation, Shaping Europe’s digital future*, June 16, 2022, available at: <https://digital-strategy.ec.europa.eu/en/library/2022-strengthened-code-practice-disinformation>, accessed November 4, 2023.

manipulate policies, societal debates and behaviors in areas such as climate change, migration, public security, health and finance. Misinformation can also contribute to undermining trust in science and empirical evidence.”<sup>7</sup>

In the same document outlining the mechanisms for dealing with disinformation, the European Commission also provides a definition of disinformation: “Disinformation is understood as a set of verifiably false or misleading information which is created, presented and disseminated for economic gain or deliberately to mislead the public and which may cause public detriment”<sup>8</sup>, and with regard to the concept of ‘public harm’, it is operationalized as ‘threats to democratic political and policy-making processes, as well as threats to public goods such as the protection of EU citizens’ health, the environment or security’.<sup>9</sup>

In this context, the most frequently asked question is: What can we do? And then, how can European democracies act to help the citizens of the Member States to cope with disinformation, propaganda and fake news? As mentioned earlier, media literacy has become an increasingly widely used concept as a universal response to this highly complex phenomenon. Disinformation as a type of threat to liberal democracies is not new, but it will become increasingly sophisticated with the development of artificial intelligence, which will bring more technological possibilities for multiplying and sharing messages on a larger scale, or for creating new automated artificial intelligence-based software capable of generating news, voices or images. Related to this, some researchers have concluded that “falsehoods spread significantly farther, faster, deeper and wider than truth across all categories. The effects were more pronounced for false political news than for news about terrorism, natural disasters, science, urban legends, or financial information.”<sup>10</sup> The role of media literacy is also becoming increasingly important, especially in a context where the development of the fake news phenomenon is creating a crisis for contemporary society and threatening the proper functioning of liberal democracies. At present, disinformation and hate speech are being used as negative campaign strategies, particularly by extremist and populist anti-system movements.

### *The Evolution of Media Literacy and its Applicability in the EU*

The concepts of media literacy or media education are not new to the Western world. The beginnings of media literacy can be traced back to the first half of the 20<sup>th</sup> century, when Leavis & Thompson proposed in 1933 to teach pupils to

<sup>7</sup> European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Combating online misinformation: a European approach*, COM(2018) 236 final, April 26, 2018, Brussels, pp. 1-2, available at: <https://eur-lex.europa.eu/legal-content/RO/TXT/PDF/?uri=CELEX:52018DC0236>, accessed November 4, 2023.

<sup>8</sup> *Ibidem*, p. 4.

<sup>9</sup> *Ibidem*.

<sup>10</sup> Soroush Vosoughi, Deb Roy, and Sinan Aral, *The Spread of True and False News Online*. MIT Initiative on the Digital Economy, 1, available at: <https://ide.mit.edu/sites/default/files/publications/2017%20IDE%20Research%20Brief%20False%20News.pdf>, accessed November 4, 2023.

distinguish between high culture and popular culture through education in the UK.<sup>11</sup> This approach had a rather protectionist character, in the sense of protecting high society culture from the encroachment of popular culture, which was increasingly felt in the age of printing.<sup>12</sup> And in the 1950s, media literacy began to gain popularity in the United States, as awareness of the increasingly significant impact of mass media, including radio and television, on both the daily lives and educational process of Americans grew.<sup>13</sup> A general trend in the evolution of media literacy, as well as the new media literacy (the latter emerging in the context of the development of new technologies), is that the importance of media literacy is back on the educational agenda when a new media technology emerges that causes collective unrest in society.<sup>14</sup>

The digitization process and the development of information and communication technologies at the beginning of the 21<sup>st</sup> century have had a significant impact on the media and their relationship with users, which has led to a change in the fundamental principles of media literacy. Today, the focus is no longer only on educating individuals as critical receivers, but also on preparing citizens as responsible producers in virtual and hybrid environments. Media literacy currently addresses phenomena such as social networking, virtual communities, big data, artificial intelligence, cyber surveillance, etc., and aims to train individuals to critically analyze information on mobile devices of various types.

Thus, a first attempt to define media literacy as a broader conception of literacy in general, which refers to the ability to “access, analyze and practice critical thinking about the variety of messages people receive and send so that they can make informed decisions about everyday issues related to health, work, politics and leisure”.<sup>15</sup> In the view of the cited author, Renee Hobbs, a media and digitally literate person should possess a range of skills including the ability to:

- “Make responsible decisions and access information by identifying and sharing materials as well as understanding information and ideas;
- Analyze messages in various forms by identifying author, purpose and point of view and evaluate the quality and credibility of content;

<sup>11</sup> Frank Raymond Leavis, Denys Thompson, *Culture and environment: The training of critical awareness*, Chatto & Windus, London, 1933, *apud* Tzu-Bin Lin, Jen-Yi Li, Feng Deng and Ling Lee, “Understanding New Media Literacy: An Explorative Theoretical Framework”, *Journal of Educational Technology & Society*, Vol. 16, No. 4 (October 2013), 161, available at: <https://www.jstor.org/stable/10.2307/jeductechsoci.16.4.160>, accessed November 5, 2023.

<sup>12</sup> David Buckingham, *Media education: Literacy, learning and contemporary culture*, Polity, Cambridge, Massachusetts, 2003, *apud* Tzu-Bin Lin et al., *op. cit.*, 161.

<sup>13</sup> Gretchen Schwarz & Peter Brown (Eds.), *Media literacy: transforming curriculum and teaching*, Blackwell Publishing, Malden, Massachusetts, 2005, 5-17 *apud* Tzu-Bin Lin et al., *op. cit.*, 161.

<sup>14</sup> Tzu-Bin Lin, “Conceptualising media literacy: Discourses of media education”, *Media education research journal*, 1(1), 2010, 29-42 *apud* Tzu-Bin Lin et al., *op. cit.*, 161.

<sup>15</sup> Renee Hobbs, *Digital and Media Literacy: A Plan of Action*, The Aspen Institute Communications and Society Program, Washington, D.C., 2010, vii, available at: [https://www.aspeninstitute.org/wp-content/uploads/2010/11/Digital\\_and\\_Media\\_Literacy.pdf](https://www.aspeninstitute.org/wp-content/uploads/2010/11/Digital_and_Media_Literacy.pdf), accessed November 5, 2023.

- Create content in various forms using language, images, sound and new digital tools and technologies;
- Reflect on own conduct and behavior in communication by applying social responsibility and ethical principles;
- Intervene socially, working individually and collaboratively to share knowledge and solve problems at home, in the workplace and in the community, and by participating as a member of a community”.<sup>16</sup>

In parallel, W. James Potter provides a definition of media literacy as “the set of perspectives that we actively use to expose ourselves to the media and interpret the meaning of the messages we encounter”. In contrast, the independent British organization Ofcom defines media literacy from a more personal skills perspective: “the ability to access, understand and create communications in diverse contexts”.<sup>17</sup>

All these mentioned skills also have a huge practical value, as they would be core competences of the citizen in the digital age. For example, in order to be able to apply for a job online, skills to select relevant information are needed. And to get that relevant information, people need the skills to distinguish between the marketing tactics of nutritional supplements, for example, and products that have evidence-based studies behind them.

Thus, media literacy is not limited to a single means of communication, but can be understood as a set of skills that are essential for preparing members of society to integrate into the workforce and become full members of the community. Furthermore, media literacy is also a process used to develop media literacy skills, with the aim of promoting awareness of media influence as well as creating a pro-active attitude towards media consumption and content creation.

Being media literate implies having and/or acquiring the ability to discern and critically filter information conveyed in the media. Conceptually, media literacy is seen in close relation to communication, the knowledge society and the information society, and is included by the European Union among the key competences for the 21<sup>st</sup> century.

From a personal perspective, we consider media literacy to involve: understanding and using media(s); understanding and being able to make critical judgments about media content; creating/producing communication in a variety of contexts (using the diversity of media). By media we mean: television/cinema, radio, audio-video, print, internet and new digital technologies. Moreover, the European Commission also considers media literacy to be a fundamental skill needed by the younger generation, but also by adults and the elderly, as well as other professional groups, especially as it also helps to counter or limit the effects of disinformation, propaganda and manipulation campaigns, including fake news and conspiracy theories.

<sup>16</sup> *Ibidem*, viii.

<sup>17</sup> Ofcom, *Making Sense of Media: Ofcom's programme of work to help improve the media literacy of UK adults and children*, s.a., available at: <https://www.ofcom.org.uk/research-and-data/media-literacy-research>, accessed November 5, 2023.



At EU legislative level, the main piece of legislation in this area is the Audiovisual Media Services Directive (AVMSD, revised in 2018)<sup>18</sup> which reinforces the role of media education. It requires Member States to promote measures to develop media literacy skills (Art. 33a).

The European Directive also provides:

- Strengthening the country-of-origin principle, with more clarity on Member State rules, alignment of derogation procedures for TV broadcasters and on-demand service providers, and possibilities for derogation in the case of public safety concerns and serious risks to public health;
- Extending certain audiovisual rules to video-sharing platforms and social media services;
- Better protection of minors from harmful content online, including strengthened protection for video on demand services;
- Strengthened protection of TV content and video on demand against incitement to violence or hatred and public incitement to commit terrorist offenses;
- Increased obligations to promote indigenous European content for on-demand services;
- More flexibility in TV advertising, allowing broadcasters to freely choose when to show ads throughout the day. The overall limit is set at 20% of broadcasting time between 6:00 and 18:00;
- Strengthen provisions to protect children from inappropriate audiovisual commercial communications. Video-sharing platforms must also comply with certain obligations for commercial communications.
- Independence of audiovisual regulators.

The Directive also establishes an obligation for video-sharing platforms to provide effective media literacy measures and tools. This is an essential requirement given the central role that these platforms play in providing access to audiovisual content. Platforms are also obliged to raise users' awareness of these measures and tools (Article 28b).

The European Commission brings together media literacy stakeholders in the form of a Media Literacy Expert Group.<sup>19</sup> This group meets annually to:

- Identify, document and expand best practices in education in the targeted area;
- Facilitate networking between different stakeholders;
- Explore ways to coordinate EU policies, support programs and media literacy initiatives.

<sup>18</sup> EUR-Lex, 'Directive (EU) 2018/1808 of the European Parliament and of the Council of November 14, 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of evolving market realities', Official Journal of the European Union, 2018, available at: <https://eur-lex.europa.eu/legal-content/RO/TXT/?uri=celex%3A32018L1808>, accessed on November 5, 2023.

<sup>19</sup> European Commission, *First report on the State of the Digital Decade calls for collective action to shape the digital transition*, n.a., available at: <https://digital-strategy.ec.europa.eu/en>, accessed November 5, 2023.

Currently, media literacy is part of the curriculum in the USA and some EU countries such as Austria, Croatia, Bulgaria, Finland, Poland, the Netherlands, etc., and globally there are many researchers, teachers and media experts actively involved in promoting the concept of “media literacy” and its development through publications in scientific journals, international projects, public policies, etc.

There is a large number of organizations and individuals involved in media literacy work, including policy makers, educational bodies, regulators, researchers, schools, libraries, activists, NGOs, news organizations (especially public service media), technology companies and many others.

At the European level, there are many stakeholders in the field of media literacy. For example, some European Commission departments, including: the Directorate-General for Communications Networks, Content and Technology (DG Connect) and the Directorate-General for Education, Youth, Sport and Culture (DG EAC).

We mention the Commission’s partner initiatives such as Better Internet for Kids, which runs Safer Internet Centers across Europe (co-funded by the European Commission in the Member States and also operating in Iceland, Norway, Russia and the UK, Safer Internet Centers is dedicated to the mission of keeping children and young people safe online through a range of specific actions and initiatives).

And finally, the rapid development of digital content and increasing consumption of online content, new communication platforms, decreasing security of cyberspace (risks of unsafe, misleading information) point to the need to focus on new or less emphasized (so far) knowledge, skills and attitudes such as digital literacy and media literacy.

### *Media Literacy Index in the Post-Truth Era*

The spread of misinformation and fake news has significantly altered both public discussions and the way we make decisions. Compared to news based on emotions and beliefs, the relevance of data and proven facts is undervalued. The authenticity of a piece of information no longer matters as long as it confirms our beliefs (also known as confirmation bias),<sup>20</sup> it becomes credible.

The term ‘post-truth’ was coined precisely to describe these new situations facing humanity. It was coined as far back as the 1990s, but only entered the popular lexicon in 2016, after the UK’s decision to leave the European Union

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<sup>20</sup> Confirmation bias is the cognitive tendency to give more weight and credibility to information or arguments that support or confirm our own beliefs, views or preconceptions, while ignoring or dismissing information that contradicts them. This phenomenon can lead to a subjective and distorted assessment of information and can create a vicious circle in which people seek out and expose only information that reinforces their point of view, ignoring information that might provide a more balanced or correct perspective on a situation. Confirmation bias can affect decision-making processes and can contribute to maintaining and reinforcing biases. See also Bradley Busch, “Cognitive biases can hold learning back – here’s how to beat them”, *The Guardian*, March 31, 2017, available at: <https://www.theguardian.com/teacher-network/2017/mar/31/cognitive-biases-can-hold-learning-back-heres-how-to-beat-them>, accessed November 9, 2023.



and the US presidential election. Then, it became so popular that the Oxford English Dictionary declared it the “word of 2016”, especially as it became applied in several fields, notably politics.<sup>21</sup>

The concept of Media Literacy Index was created in 2017 by Marin Lessenski – Program Director at the Open Society Institute – Sofia in response to the “post-truth” phenomenon. In fact, it is about measuring the resilience of societies to “post-truth”, “fake news” and their consequences in several European countries and providing a useful tool for identifying solutions. The measurement model, suggested by Lessenski, uses several indicators that correspond to different aspects of media literacy and the post-truth phenomenon. Educational attainment, media status, trust in society and use of new participatory tools seem to be predictors of media literacy. As they are of varying importance, the indicators are included with an appropriate weight. The indicators on media freedom and education are given the highest weight, with relatively more importance given to reading. Indicators of trust and political e-participation are given the remaining weight (see *Table 1*).

<b>Media Literacy Index</b>	
<b>Indicators</b>	<b>Weight</b>
<b>Media Freedom indicators</b>	
Freedom of the Press score by Freedom House	20%
Press Freedom Index by Reporters without Borders	20%
<b>Education indicators</b>	
PISA score in reading literacy	30%
PISA score in scientific literacy	5%
PISA score mathematical literacy	5%
Share of population (%) with university degree	5%
<b>Trust</b>	
Trust in People	10%
<b>New forms of participation</b>	
E-participation	5%

*Table 1. The indicators (press freedom, education, trust and new forms of participation) used by Marin Lessenski to measure the media literacy index, and the weights assigned to each: 1) press freedom score given by Freedom House – 20%; 2) press freedom index given by Reporters Without Borders – 20%; 3) PISA test score in reading literacy – 30%; 4) PISA test score in science – 5%; 5) PISA test score in math – 5%; 6) share of population with higher education – 5%; 7) trust in people – 10%; and 8) new forms of political participation – 5%.<sup>22</sup>*

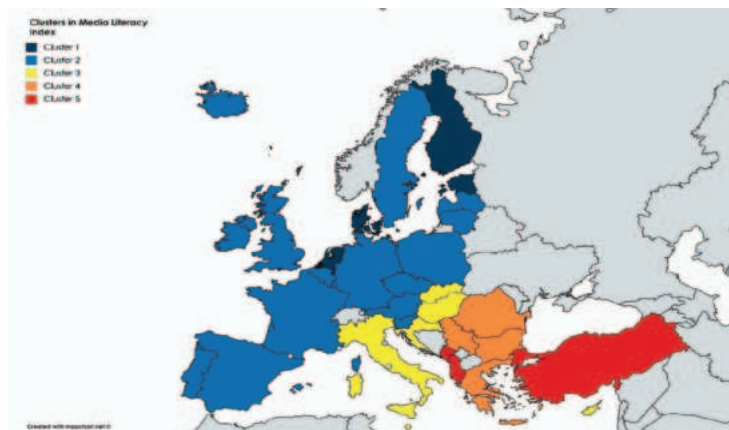
<sup>21</sup> Mauro Munafò, *Fake news, hateri și cyberbullying: cui servesc și cum să te ferești*, Curtea Veche Publishing House, Bucharest, 2021, 25.

<sup>22</sup> Marin Lessenski, *Can it be true? Predictors of media literacy and resilience to the post-truth phenomenon in Europe*, Policy Brief 52, October 2017, European Policies Initiative of Open Society Institute – Sofia, 2017, 2, available at: <https://osis.bg/?p=437&lang=en>, accessed November 9, 2023.

The suggested model assumes that societies with freer media, better education and greater trust among citizens would lead to higher media literacy and thus those societies would be better equipped to cope with the “post-truth” phenomenon. According to the first Open Society Institute – Sofia report, the combined indicators provided average scores for each country, as well as rankings ordered into five clusters. At the country level, among the 33 European countries included in the model, several distinct patterns could be identified. The countries that scored better on all indicators (media, education, trust, etc.) are from the North and West of the European continent. For example, Finland, the Netherlands and Denmark ranked in the top three in 2017. This also coincides with the best practice example of Finland, mentioned above, as the country best prepared to face such challenges, thanks to its top-notch education system and educated population. It is worth mentioning that Estonia is ranked 4<sup>th</sup> in the ranking, with the best PISA results in Europe and one of the freest media, along with a free media. These countries also have the highest level of trust between people, which makes their societies better at handling any challenges. They also tend to have higher levels of political e-participation, as is the case in Estonia, the Nordic countries and the other top European countries in the use of ICT solutions.

The scores obtained by individual European countries provide an opportunity for further analysis of trends in the media literacy index. A cluster analysis grouped by results was also carried out, dividing countries into five groups with similar characteristics, as follows:

- Dark blue area (cluster 1) – score 100-69
- Blue area (cluster 2) – score 70-51
- Yellow zone (cluster 3) – score 50-32
- Orange zone (cluster 4) – score 31-26
- Red zone (cluster 5) – score 25-0.



*Figure 2. Distribution of European countries by cluster according to their media literacy score in 2017<sup>23</sup>*

<sup>23</sup> *Ibidem*, 5.

The clusters, plotted on a map of Europe, show a clear geographical pattern (see Figure 2). A number of northern and north-western countries are at the top, followed by the other western European countries. There is an intermediate transition group between Italy and Slovakia, comprising neighboring countries such as Hungary and Croatia. Western Balkan countries, including Greece and Turkey, remain in the last two clusters (orange and red zones).

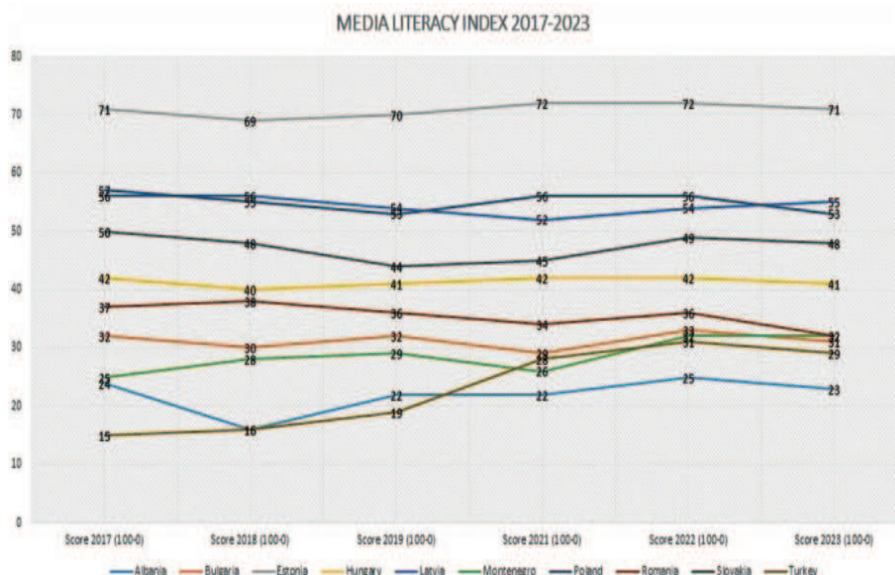
Thus, poor performers tend to have more controlled environments, lower levels of education and a greater lack of trust between people. These are predictors of poorer media literacy and a greater susceptibility of societies to ‘post-truth’ phenomena, where in the political area ‘post-truth’, disinformation, so-called ‘alternative facts’ and conspiracy theories predominate.

Finally, the reports compiled by Marin Lessenski of the Open Society Institute – Sofia on the media literacy index are also valuable in that they have been published every year from 2017 to the present (except 2020), thus providing an exhaustive statistical picture for any researcher interested in comparatively analyzing the evolution of trends on the European continent. All six reports provide relevant empirical data with which new research hypotheses or secondary analyses can be constructed.

### *Analysis of Media Literacy Trends in 10 Eastern European Countries*

With a history of significant political and social change, Eastern European countries have undergone substantial transformations in the last seven years. Against this backdrop, it is of particular interest to examine how these changes have influenced the media literacy of citizens in ten Eastern European states (Albania, Bulgaria, Estonia, Hungary, Latvia, Montenegro, Poland, Romania, Slovakia, and Turkey). Through comparative-descriptive and statistical analyses, I aim to provide a comprehensive perspective on the state of media literacy in Eastern Europe, highlighting both progress and challenges in promoting a critical and responsible approach to media content.

By analyzing each Media Literacy Index report published from 2017 to date by the Open Society Institute – Sofia for the 10 aforementioned countries, we were also able to track the evolution of this index over 7 years. Below you can find the graphical representation of the longitudinal analysis of the Media Literacy Index 2017-2023:



*Figure 3. Distribution of the media literacy index of the populations of Albania, Bulgaria, Estonia, Hungary, Latvia, Montenegro, Poland, Romania, Slovakia, Bulgaria, Slovenia, Turkey, and Hungary, according to Lessenski in the period 2017-2023*

If we look closely at the evolution of the index for each of the 10 countries analyzed, we can observe a relatively minimal decrease of -1 point in the media literacy index for countries in the blue (Latvia), yellow (Slovakia and Hungary), orange (Bulgaria) and red (Albania) zones in 2017. While Estonia has maintained a stable level of its media literacy index over these years, Romania (yellow zone in 2017) and Poland (blue zone in 2017) are the only countries to have experienced significant decreases of -5 and -4 points respectively in 2023. Only two countries recorded a significant advance in the index – Montenegro and Turkey.<sup>24</sup> The following table highlights these trends for each country analyzed:

<sup>24</sup> The good results on the media literacy index achieved by Montenegro and Turkey should be viewed with a large dose of skepticism, as we might be dealing with the provision of false/manipulated data by the hybrid democratic regimes in the two countries. Hybrid regimes are characterized by the combination of democratic processes, such as elections, with significant shortcomings in democratic governance, erosion of the rule of law, limitation of press freedom, and endemic corruption. For example, in recent decades, Turkey has experienced a significant deterioration in the quality of its democratic institutions, affected by authoritarian tendencies under the leadership of President Recep Tayyip Erdoğan.

MEDIA LITERACY INDEX 2017-2023								
#	Country	Score 2017 (100-0)	Score 2018 (100-0)	Score 2019 (100-0)	Score 2021 (100-0)	Score 2022 (100-0)	Score 2023 (100-0)	Change in score 2023 vs 2017
1.	Albania	24	16	22	22	25	23	-1
2.	Bulgaria	32	30	32	29	33	31	-1
3.	Estonia	71	69	70	72	72	71	0
4.	Hungary	42	40	41	42	42	41	-1
5.	Latvia	56	56	54	52	54	55	-1
6.	Montenegro	25	28	29	26	32	32	7
7.	Poland	57	55	53	56	56	53	-4
8.	Romania	37	38	36	34	36	32	-5
9.	Slovakia	50	48	44	45	49	48	-2
10.	Turkey	15	16	19	28	31	29	14

Table 2. Analysis of the evolution of the media literacy index scores accumulated by the 10 countries between 2017-2023

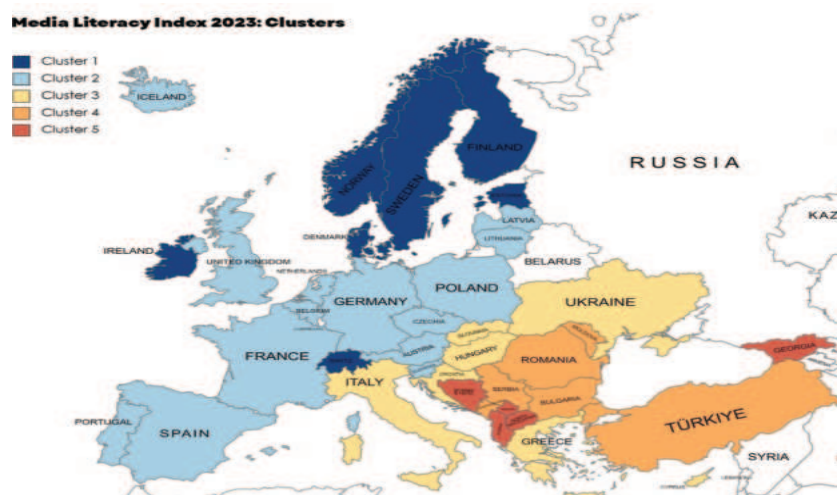


Figure 4. Distribution of European countries across the 5 clusters according to their accumulated media literacy score in 2023<sup>25</sup>

Given that we are facing a real crisis of trust in institutions, associated with a resurgence of Euroscepticism and populism, I set out to analyze the scores of the media literacy index as an explanatory factor of the perceptions of the societies in the countries analyzed. In this context, I correlated variables such as the 2023 index and the trust of the populations of the 10 selected countries in the European Union (as measured by Eurobarometer data from May/June 2023).

<sup>25</sup> Marin Lessenski, “‘Bye, bye, birdie’: Meeting the Challenges of Disinformation. The Media Literacy Index 2023”, Policy brief, June 2023, Open Society Institute – Sofia, available at: <https://osis.bg/wp-content/uploads/2023/06/MLI-report-in-English-22.06.pdf>, accessed on August 15, 2024.



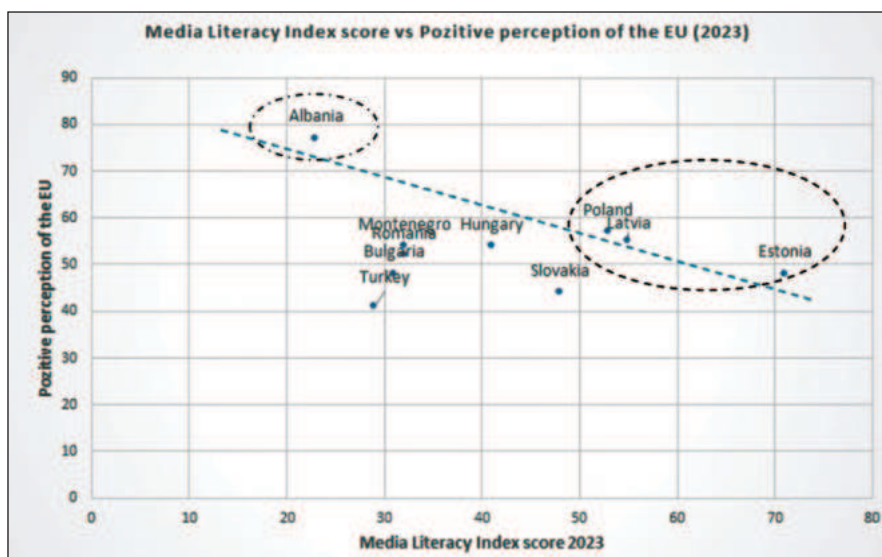


Figure 5. Correlation plot between the media literacy index and trust in the EU of the populations of the 10 countries analyzed (after the Eurobarometer of May/June 2023 and The Media Literacy Index 2023 of June 2023).

We can observe that the two variables are negatively correlated, with the exception of Estonia, which is more distant from the central group of countries in terms of the correlation between the media literacy index and the population's trust in the EU. However, we should consider that the two variables are not associated in a cause-effect pair, as the relationship between the two variables includes also relationships due to other factors that covary with the respective variables. For example, since not all the 10 Eastern European countries analyzed are not members of the EU, the correlation does not reflect the influence of membership of the European area on trust in the EU. Or, if we choose to introduce other variables, such as the economic situation, the level of education, the degree of absorption of European funds, the political and social context (economic crises, migration or regional conflicts), demographic changes, etc., we can see that they are strongly interrelated and may vary according to the national and regional context.

Thus, the case of Albania (a candidate country since 2014) emerges from the descending point cloud with a low media literacy score, while trust in the European Union scores high. Another separate cluster is formed by Poland, Latvia and Estonia (EU members), where we find populations with high media literacy index scores (>50), but with levels of trust in the EU similar to low media literate populations in other countries in the region (Figure 4).



**Correlations**

		Media Literacy Index score 2023 (100-0)	Pozitive perception of the EU (Eurobarometer May/June 2023)
Media Literacy Index score 2023 (100-0)	Pearson Correlation	1	-,282
	Sig. (2-tailed)		,429
	N	10	10
Pozitive perception of the EU (Eurobarometer May/June 2023)	Pearson Correlation	-,282	1
	Sig. (2-tailed)	,429	
	N	10	10

Table 3. Correlation table – SPSS output

In the table above, we can see that the value of the Pearson Correlation generated by SPSS<sup>26</sup> is -0.282 (negative coefficient). This means that higher numerical values of the Media Literacy Index score 2023 (100-0) would more often correspond to lower numerical values of the Positive perception of the EU (Eurobarometer May/June 2023). Therefore, populations in countries with a higher Media Literacy Index score would more often correspond to lower levels of trust in the EU. However, the statistical significance (or ‘probability of error’)<sup>27</sup>, of this coefficient should not be overlooked. In this case, the probability that the true value of the correlation between the media literacy index and people’s trust in the EU (in 2023) is zero is 42.9% (i.e. 0.429), well above the conventionally accepted threshold of 5%.

We repeated the exercise, this time correlating the media literacy index and the average trust of the populations in national governments and parliaments (as provided by the Eurobarometer May/June 2023) in the 10 countries.

<sup>26</sup> It is a statistical program used in the social sciences. In order to understand the practical functionality of this program I recommend Marian Vasile’s manual: *Introducere în SPSS pentru cercetarea socială și de piață: o perspectivă aplicată*, Polirom, Iași, 2014.

<sup>27</sup> The Statistical significance is represented in the correlation tables generated by SPSS by “Sig. (2-tailed)”. See Cosima Rughiniț, *Explicația sociologică*, Polirom, Iași, 2007, 193-198.

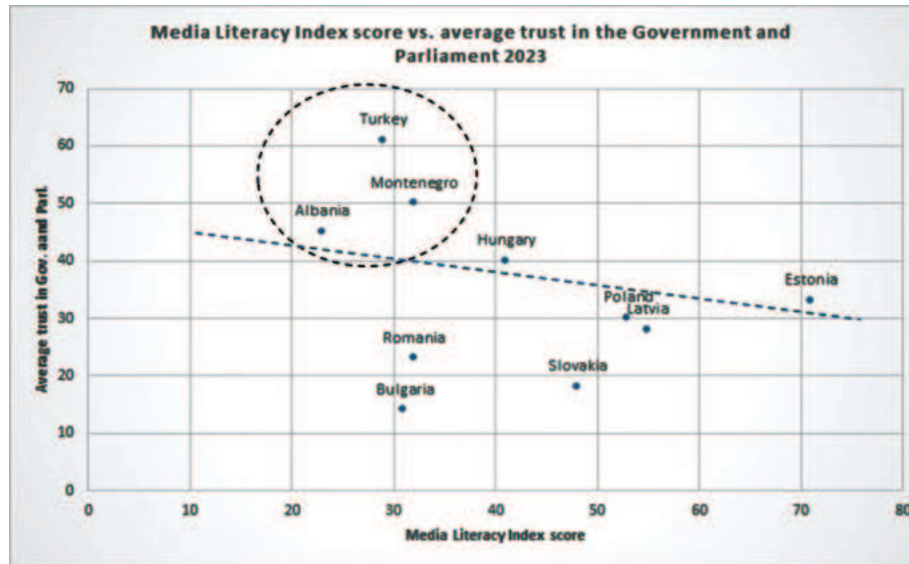


Figure 6. Correlation plot between the media literacy index and public trust in national governments and parliaments in the 10 countries analyzed (after the Eurobarometer of May/June 2023 and The Media Literacy Index 2023 of June 2023).

In the graph above you can see that the point cloud has a downward direction, but it is not tight, which means that there is not a strong correlation (as one of the variables increases, the mean of the other does not change significantly). Therefore, there is a weak correlation between the two variables, which means that there are other causal variables that could influence the public's perception of democratic national institutions (Government and Parliament). A particular cluster is formed by non-EU countries (Albania, Montenegro and Turkey), where we register a relatively high public trust in national governments and parliaments (>45). As a rule, high trust in national authorities is characteristic of countries with “flawed democracies”, with tendencies towards authoritarian political regimes.<sup>28</sup>

<sup>28</sup> See also a report of the Economist Intelligence: “Democracy Index 2023 – Age of conflict”, 50-53, available at: <https://pages.eiu.com/rs/753-RIQ-438/images/Democracy-Index-2023-Final-report.pdf>, accessed on August 15, 2024.

**Correlations**

		Media Literacy Index score 2023 (100-0)	Average trust in the Government and Parliament (Eurobarometer May/June 2023)
Media Literacy Index score 2023 (100-0)	Pearson Correlation	1	-,322
	Sig. (2-tailed)		,364
	N	10	10
Average trust in the Government and Parliament (Eurobarometer May/June 2023)	Pearson Correlation	-,322	1
	Sig. (2-tailed)	,364	
	N	10	10

Table 4. Correlation table – SPSS output

The correlation table of the two variables shows a Pearson coefficient of - 0.322 (negative correlation). This means that higher numerical values of the Media Literacy Index score 2023 (100-0) would more often correspond to lower numerical values of the Average trust in the Government and Parliament (Eurobarometer May/June 2023). In simpler terms, media literate populations show a lower average level of trust in the governments and parliaments of the countries analyzed. Once again, the probability of error is higher than the conventionally accepted threshold – 36.4%, which brings the correlation coefficient value towards 0.



Figure 7. Correlation plot between the media literacy index and the proportion of populations vaccinated with at least one dose of the Covid-19 vaccine in the 10 states analyzed (based on data from the Johns Hopkins Coronavirus Resource Center and The Media Literacy Index 2022 in 2022)

The rising scatterplot in Figure 6 reveals an obvious and strong positive correlation (as one variable increases, the other increases on average). Thus, we can interpret that countries with higher media literacy scores have a population that is much abler to analyze public information and possess more developed critical thinking, and are more likely to immunize in 2022 with the Covid vaccine. Romania, Albania, Bulgaria and Montenegro are in the middle cluster, beyond the regression curve, with low scores for both variables. Countries such as Latvia, Poland, Hungary, Poland, Slovakia and Estonia break away from the cluster, demonstrating positive correlation. A special case is Turkey, where it appears that the vaccination rate of the population was strongly influenced by the political factor.

However, the media literacy index score cannot fully explain people's vaccination decision. It remains to be investigated what other variables can influence this decision; and these can be diverse: level of education, level of trust in institutions, access to information, influence of the group of belonging, accepted social norms, positive experience with the health care system, average monthly income, etc.

		<b>Correlations</b>	
		% of Population receiving at least 1 dose of Covid-19 vaccine (2022)	Media Literacy Index score 2022 (100-0)
% of Population receiving at least 1 dose of Covid-19 vaccine (2022)	Pearson Correlation	1	,556
	Sig. (2-tailed)		,095
	N	10	10
Media Literacy Index score 2022 (100-0)	Pearson Correlation	,556	1
	Sig. (2-tailed)	,095	
	N	10	10

Table 5. Correlation table – SPSS output

The correlation coefficient in this case is positive and strong (0.556), where higher numerical values of the Media Literacy Index score 2022 (100-0) more often correspond to higher numerical values of % of Population receiving at least 1 dose of Covid-19 vaccine (The Johns Hopkins Coronavirus Resource Center). Therefore, a higher media literacy index score in a state may also be associated with a higher proportion of the population vaccinated against Covid-19. Conversely, the proportion of the population vaccinated against Covid-19 in a state also corresponds with a higher media literacy index among the population. Although the statistical significance value ‘Sig. (2-tailed)’ is higher than the 5% threshold (the probability that the true value of the correlation is zero is 9.5%), in this case we can admit this probability of error precisely in order to explore the relationship between media literacy and vaccination rates more deeply. This correlation suggests that, although there is a probability of error, the link between the two variables

is strong enough to warrant further analysis. It is quite possible that countries with higher levels of media literacy have populations that are better informed and therefore more willing to accept vaccination. Hence the conclusion that improving media literacy could contribute to higher vaccination rates and better public health management.

Unfortunately, there are already several alarm signals from specialists in virology and epidemiology. Romania recorded over 760 new cases of measles and 18 deaths, including a 10-month-old unvaccinated baby, within a week in June 2024. In the first half of 2024, 18,146 measles cases were confirmed, most of them in Brasov. Measles is a serious and highly contagious disease, especially in unvaccinated children. In Romania, vaccination rates have been falling for more than 10 years, with 78% of eligible children vaccinated with the first dose and 62% with the second. The epidemic has been declared since December 2023, and the number of cases continues to rise both in Europe and globally.<sup>29</sup>

Analyzing the relationship between Corruption Perception Index scores<sup>30</sup> and those of the Media Literacy Index for the year 2023 highlight an interesting correlation between a society's ability to recognize and evaluate information and the perceived level of corruption. Eastern European countries with high media literacy scores, such as Estonia, Latvia and Poland, are perceived to be less corrupt, while countries with lower media literacy scores, such as Turkey, Albania and Bulgaria, have a higher perceived level of corruption.

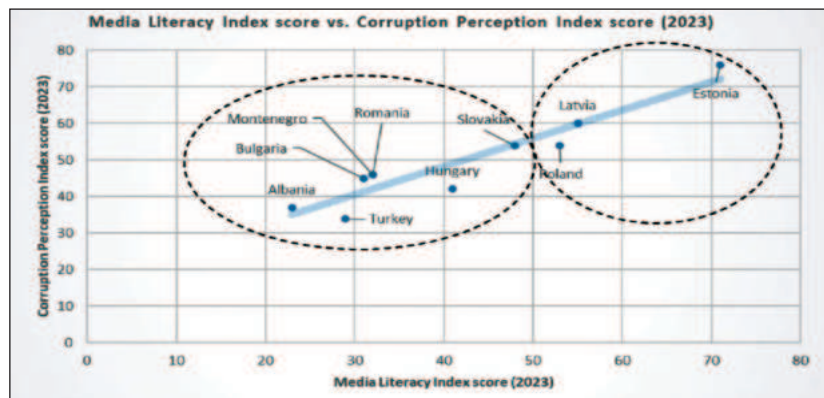


Figure 8. Correlation graph between the media literacy index and the corruption perception index in the 10 states analyzed (based on data provided by Corruption Perception Index 2023 and The Media Literacy Index 2023)

<sup>29</sup> Andreea Ofițeru, "De ce mor atât de mulți copii de rujeolă în România. Harta îmbolnăvirilor", Radio Europa Liberă, 12.16.2024, available at: <https://romania.europalibera.org/a/rujeola-romania-mai-multe-cazuri/32989569.html>, accessed on August 15, 2024.

<sup>30</sup> The Transparency International index, which ranks 180 countries and territories according to the levels of public sector corruption as perceived by experts and business people, uses a scale from 0 to 100, where 0 is very corrupt and 100 is totally free of corruption. More details on the Corruption Perceptions Index are available here: <https://www.transparency.org/en/cpi/2023>.

		Media Literacy Index score 2023 (100-0)	Corruption Perceptions Index 2023 (100-0)
Media Literacy Index score 2023 (100-0)	Pearson Correlation	1	.937 <sup>**</sup>
	Sig. (2-tailed)		.000
	N	10	10
Corruption Perceptions Index 2023 (100-0)	Pearson Correlation	.937 <sup>**</sup>	1
	Sig. (2-tailed)	.000	
	N	10	10

Table 6. Correlation table – SPSS output

The above table again suggests a positive and strong correlation (0.937), where higher numerical values of the Media Literacy Index score 2023 (100-0) are more often matched by higher numerical values of the Corruption Perceptions Index score 2023 (100-0). Moreover, the statistical significance value “Sig. (2-tailed)” is 0% (the probability that the true value of the correlation is zero is 0%). This strong correlation between media literacy and perceptions of corruption suggests that a better-informed society that is able to detect misinformation is less likely to tolerate or enable corruption. This can be explained by the fact that individuals who are more media literate have a greater ability to detect abuses of power and information manipulation and are thus more likely to condemn corruption and demand integrity in public administration and the private sector.

The broader definition of the term ‘corruption’ also brings another angle of analysis. According to the Oxford Dictionaries, corruption is “the abuse of power for personal gain”, but the term can also refer to the process of “falsification”, in the sense of degrading an original piece of information or idea. This interpretation of the term allows a direct parallel between fake news and information corruption. Misinformation is essentially a corruption of the information ecosystem and this type of “corruption” can contribute to weakening democratic institutions and increasing the perception of corruption in society.<sup>31</sup>

Thus, media literacy is no longer just a matter of cultural competence, but becomes an important barrier against corruption, as a media literate population is less vulnerable to manipulation and misinformation, thus reducing the space for corruption in both the public and private sectors.

<sup>31</sup> John Mecklin, “A moment of historic danger: It is still 90 seconds to midnight”, *Bulletin of the Atomic Scientists*, available at: <https://thebulletin.org/doomsday-clock/current-time/>, accessed on September 9, 2024.



This analysis emphasizes that media literacy plays a crucial role in the democratic health of a nation and in fighting corruption. Investing in media literacy and promoting a culture of transparent and verified information can lead to a decrease in corruption and strengthen public trust in institutions.

We are going through a period of crisis of democracy, evidenced by populist movements, growing absenteeism in elections, distrust of elected officials and even a challenge to democratic and liberal values. Thus, the media literacy index can only be used as an explanatory tool of societies' susceptibility to misinformation, populism and information operations if the variables with which it strongly correlates are identified. Otherwise, other causal variables can be considered. The index can also be investigated as a useful tool in the development of a future European index of the resilience of societies to populist discourse, or to disinformation and fake news. However, it should not be considered as the only solution or universally accepted explanatory model, as there may be other explanatory factors that may covary with the variables that, in turn, may generate new indices.

All six Media Literacy Index reports for Europe produced by the Open Society Institute – Sofia (2017-2023) provide relevant empirical data with which new research hypotheses or secondary analysis can be constructed. Finally, the index scores alone cannot explain the different perceptions of the population, but they provide a detailed picture of European regional trends and vulnerabilities of different societies, and can explain certain decisions of the population (e.g. to vaccinate or not), depending on their ability to analyze information about vaccines.

### *Conclusions*

In the complex and dynamic context of the information age, media literacy has become an essential competence for citizens in contemporary society. The phenomenon of disinformation, amplified by new technologies and digital platforms, presents unprecedented challenges to the social stability and integrity of liberal democracies. Disinformation in its multiple forms – intentional, unintentional or malicious – threatens not only the smooth functioning of democratic processes, but also public health, national security and social cohesion.

Media literacy is a key indicator of a population's ability to analyze information, make informed decisions and participate actively in democratic life. The relationship between media literacy and variables such as trust in institutions, immunization rates, or perceptions of corruption suggests that more media literate societies tend to be more critical, more resilient to misinformation and less influenced by corruption or populism.

Thus, a negative correlation is observed between media literacy and trust in institutions (both at national and EU level), which may indicate a critical attitude of better-informed citizens towards the authorities, but also a possible distrust in the

legitimacy of their actions. Also, in the case of vaccination against COVID-19, the positive correlation indicates an increased acceptance of public health measures by populations with a high level of media literacy, demonstrating the importance of critical thinking in evaluating information.

In terms of perceptions of corruption, a very strong correlation suggests that societies with high media literacy are less willing to tolerate corruption and more likely to identify and condemn abuses of power. In this context, media literacy not only protects populations from misinformation, but also contributes to strengthening the democratic health of society, fighting corruption and developing an active civic culture.

In a world where digital technologies are rapidly evolving and generating new ways of creating and distributing content, citizens need to be equipped not only to consume media, but also to produce and share content ethically and responsibly.

Initiatives and regulations at European Union level, such as the Action Plan for European Democracy and the Audiovisual Media Services Directive, underline the imperative need to promote and mainstream media literacy across all sectors of society. These measures not only strengthen citizens' ability to resist misinformation, but also contribute to a more participatory and informed democracy.

As misinformation becomes increasingly sophisticated, including through the use of artificial intelligence, media literacy will play a crucial role in ensuring that citizens are not just passive in the face of the information tidal wave, but are active and well prepared to navigate this complex information landscape. In conclusion, in order to protect democratic values and promote a healthy information space, it is vital that media literacy is recognized and promoted as a core competency of the 21<sup>st</sup> century.

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