ERUM

Enhancing Research Understanding through Media

IO4

Policy Recommendations

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”Freedom of opinion is a farce unless factual information is guaranteed and the facts themselves are not in dispute.”

Hannah Arendt

CONTENT

Acronyms and abbreviations

AI	Artificial Intelligence
CDC	Competences for Democratic Culture
ERUM	Enhancing Research Understanding through Media
HEI	Higher Education Institution
MIL	Media and Information Literacy
OER	Open Educational Resource
OSCE	Organisation for Security and Co-operation in Europe
R&I	Research and Innovation

Introduction

About the ERUM project

Started in 2019, the project Enhancing Research Understanding through Media (ERUM) aimed to develop a relevant transversal educational offer on the topic of "quality of information between mis- and disinformation today" for higher education students who are shaping the present and future of the information and knowledge society. Furthermore, the intention was to foster a shift in the way higher education institutions and media are collaborating vis-a-vis evidence- and research-based communication.

This EU-funded project benefited from the collective effort of the University of Vienna (Austria), the University of Alcalá (Spain), the Aristotle University of Thessaloniki (Greece), the University of Versailles Saint-Quentin-en-Yvelines (France), the Vytautas Magnus University (Lithuania), the Cyprus University of Technology (Cyprus), and the European University Foundation.

Following the outbreak of COVID-19, the phenomena of mis- and disinformation gained further momentum thus revealing how important and relevant it was for ERUM project partners to address such issues. Therefore, the pandemic and other controversial topics, like migration and climate change soon started to be at the forefront of the discussions and of the analysis conducted throughout the course of the project. By dealing with these topics, ERUM project partners sought to align with the trends that were not only unfolding under their eyes but also having considerable repercussions on the media as well as the academic fields.

In a nutshell, what has happened in the past couple of years has underlined even more how urgent it was and still is to achieve ERUM project goals: that is (1) improving journalistic work and quality of information; (2) developing strategies for students to raise awareness on critical media consumption; (3) equipping them with relevant skills to recognise and question false content.

What do we talk about when we talk about dis-/misinformation?

Nolens volens, misinformation and disinformation have become part of our daily life. Even if these phenomena are not new, and many examples can be detected throughout history – one of the earliest cases of content manipulation has been traced back to Roman times to the smear campaign orchestrated by Octavian at the expenses of Marc Anthony – what has changed is the pace at which they spread and their dangerous consequences to our society. The spread of false content can undermine the democratic process, have an impact on decision-making, or polarise public discourse around issues of migration, climate change, etc.

The 21st century and the tremendous advancements in communication technologies have ushered in new pathways for disinformation and misinformation. We are witnessing "*the weaponization of information on an unprecedented scale*"[1], whereby fabricating and distributing false content has never been simpler and amplified thanks to online social networks. Indeed, misinformation and disinformation thrive in the social network and social messaging era, where content consumption is so fast paced that the wealth of information people digest daily might feel overwhelming at times. It is, therefore, increasingly challenging for readers to distinguish between false information and legitimate factual news.

It would be overly simplistic to analyse the problem of mis-/disinformation only just by looking at a single root cause. In Europe, disinformation has multiple layers, stemming from political, social, civic and media issues.

The most recent case of a disinformation campaign is the one set up by Russia's propaganda discourse to give legitimacy to its invasion against Ukraine. Examples of misinformation, disinformation and media manipulation have overflown the internet[2], resulting in the European Union limiting access to the Russian owned state media outlets, RT and Sputnik. Additionally, plenty of videos and images have been misattributed so much so that next to the traditional warfare, analysts and journalists have been referring to what is happening as information warfare.

No topic is immune to disinformation, not even topics that pertain to the scientific field, such as COVID-19, vaccines, and climate change.

In the midst of this new information *disorder*, journalism and traditional news media have not only seen an erosion of trust and the loss of the monopoly of information, but they are also coming under existential attacks. Bearing in mind the press and news media role as the "fourth estate" and as the watchdog of public interest, it is extremely worrisome how, by questioning the purpose and effectiveness of journalists, disinformation and misinformation are threatening the civic discourse of democratic countries.

Counteracting the spread of disinformation and misinformation requires an active engagement and concerted efforts from multiple stakeholders, including the media industry, Higher Education Institutions, and policymakers.

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[1] *Journalism, Fake News and Disinformation, Handbook for Journalism Education and Training, UNESCO, 2018.*

[2] *EUvsDisinfo website has a special section on "Disinformation targeting Ukraine" containing all the major articles on the topic: https://euvsdisinfo.eu/category/ukraine-page/*

A democracy that withstands the threats posed by the current information disorder needs well-informed citizens who are aware of how online platforms work and of the processes behind information consumption and interpretation. For this to happen, it is crucial that they have the necessary tools to make informed decisions, particularly in the form of transversal skills. Developing transversal skills is nowadays one of the most important acquis. This is where universities come in. As one of the main *fora* of education, universities have a responsibility towards their students to help them to grow into independent and critical citizens, regardless of the field of studies they decide to pursue.

Furthermore, for citizens to exercise their rights, it is essential that quality information and knowledge is provided. In general, this type of trusted information is provided by professional journalists, and in the case of science-related information by scientists and researchers. Indeed, claiming the relevance of scientific knowledge and effective science communication is tantamount to fighting against these phenomena.

Finally, as clearly stated in Article 3 of the "Joint Declaration on Freedom of expression and fake news, disinformation and propaganda" from 2017[3], as well as in Article 10 of the "European Convention for the Protection of Human Rights and Fundamental Freedom", states play an essential role in protecting the right of freedom of expression and have the duty to promote a free, independent and diverse communications environment, including media diversity, which is key to addressing disinformation and propaganda. In this sense, the European policy framework includes several important documents, such as the "Code of Practice on Disinformation"[4], the "European Democracy Action Plan"[5], the "Digital Services Act"[6] (DSA) and the "Digital Markets Act"[7] (DMA) proposals or the "European Media Freedom Act", to name only a few.

For the past 2 years, ERUM project partners put particular focus on analysing the evolving trends on disinformation and misinformation in the academic and media landscapes. The lessons learnt, the insights gathered, and the resources produced deserve to be converted into an actionable set of recommendations targeting the above-mentioned stakeholders' groups. Indeed, it would be a pity if all the valuable knowledge falls into the oblivion of the theoretical world.

[3] https://www.oas.org/en/iachr/expression/showarticle.asp?artID=1056&IID=1
[4] https://digital-strategy.ec.europa.eu/en/policies/code-practice-disinformation
[5] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2020%3A790%3AFIN&qid=1607079662423
[6] https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/digital-services-act-ensuring-safe-and-accountable-online-environment_en
[7] https://ec.europa.eu/info/strategy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en

Policy recommendations

Part 1 - Recommendations for HEIs

1. **Introduce Media and Information Literacy (MIL) courses in the curricula catalogue and in advanced training for staff**

   Seminars or workshops on disinformation, misinformation or media literacy are not enough, especially if they are held at intervals. They could serve to introduce the topics and explain their relevance in daily life, but they should be complemented with fully fledged, semester-long courses.

   Multiple declarations at international and European level[8] recognise the strategic importance of Media and Information Literacy as stepping stones for developing critical thinking. MIL acts as a preventive rather than reactive solution, aiming at building a citizenship based on fundamental rights like freedom of expression and at enabling an active and responsible participation in the online public sphere[9].

   Students with MIL competences turn into critical readers, developing resilience in the face of information overload characterised by the day-to-day use of the internet and social media. Furthermore, they demand media companies to uphold high journalistic standards and ethics, and more generally high-quality and rights-respecting services from all content providers.

   Students should not be the only recipients of MIL courses. Lecturers and professors should also be able to enhance their media and information skills, developing themselves the competences they expect their students to have. For this reason, it is just as important to implement advanced training courses on MIL for staff.

2. **Exploit the wealth of educational resources developed by relevant EU-funded projects as teaching material.**

   In the past years, particularly after the outbreak of the pandemic, millions of euros have been mobilised via different EU-funding sources, such as Horizon Europe and Erasmus+, to support projects focused on fighting mis- and disinformation[10]. The wealth of tools, resources and platforms that have been developed are not only extremely valuable but also easily available online. Consequently, HEIs should take advantage of the results and outcomes produced within the framework of EU-funded projects, like ERUM.

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[8] *The importance of MIL competences has been enshrined by the UNGA Resolution A/RES/75/267 of March 25, 2021 which proclaims the Global Media and Information Literacy week as an annual event to be held between October 24th and 31st.*

[9] *Multidimensional approach to disinformation, 2018, p.25.*

[10] *https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/fighting-disinformation/funded-projects-fight-against-disinformation_en*

The mission of the ERUM consortium was to contribute to the strengthening of students´ transversal skills. Therefore, project partners authored a considerable number of resources, such as the Guidelines for evidence-based communication[11], a report focusing on controversial topics represented by the media[12] targeting issues such as climate change, migration, COVID-19 or 5G technologies. Additionally, fifteen learning modules tackling different aspects related to misinformation and disinformation have been created. The latter will be available on the ERUM Open Educational Resources repository. All these resources have specifically been compiled for educational purposes and can either be used as a package as they are or tailored to the needs and levels of the students.

3. **Introduce science communication courses**

   A considerable amount of research has revealed that science and scientific content appear obscure and unintelligible to lay people. Making scientific content more accessible and easily understandable should be an objective all scientists and researchers strive for, especially if they want to prevent cases of scientific misinformation. Scientists and researchers should not only focus on knowledge production but also on knowledge communication.

   Therefore, science communication should not be overlooked. On the contrary, it should be part and parcel of any scientific curriculum. By training students on how best to share scientific findings with the intended audience, equipping them with the skills necessary to deliver effective methods of science communication, and making it easier for them to collaborate with journalists.

4. **Harness the role of the communications team**

   Being at the forefront of scientific discoveries, universities recognised their third mission towards society on knowledge expansion and knowledge transfer.

   A great part of disseminating the newly acquired knowledge to lay people usually is left to the media and journalists. However, it is crucial that the University Communication teams act as liaison between the researchers/scientists and journalists. On the one hand, this allows universities to contribute to the popularisation of scientific content. On the other hand, it ensures that, by receiving information directly from scientists/researchers, journalists are able to disseminate it accurately to their audience, hence leaving little or no room for misinterpretation.

   The communication team can pro-actively liaise with journalists and recommend trusted and reliable sources. A noteworthy example for good practice has been developed at the University of Vienna, where at regular intervals information emails in connection with recent events and topics that are socio-politically relevant are compiled and sent to journalists. These mails contain information on relevant research projects, researchers and other activities implemented by

[11] https://projects.uni-foundation.eu/erum/wp-content/uploads/sites/2/2021/05/ERUM-IO2-CommunicationGuidelines_compressed.pdf

[12] https://projects.uni-foundation.eu/erum/wp-content/uploads/sites/2/2020/08/ERUM-IO1-General-Report_final.pdf

the university. Often the information contained is summarised and ready to use for journalistic purposes.

5. **Create new avenues of collaboration with journalists and the media industry**

   Apart from the liaising role of communication departments, new opportunities of collaboration with journalists and media industries should be promoted in different forms, i.e. fostering the creation of experimental labs to test alternative models of teaching as well as doing journalism.

   For example, the University of Alcalá has sponsored several radio programmes and other informative formats so that citizens can get acquainted with the latest scientific advances in a comprehensible manner.

   Another notable example of targeted cooperation with the media is provided once again by the University of Vienna. Each semester, the University of Vienna poses its academics a question that is of particular relevance to today's society. The University of Vienna runs this project in cooperation with the Austrian daily newspaper "Der Standard" – starting with online contributions and ending with a closing event at the end of the semester.

6. **Support scientific staff in strengthening their science communication skills and possibilities**

   Quite often researchers do not have sufficient time nor resources. What is more, competitive and structural reasons demand that outreach is focused primarily on the academic community. However, universities have a third mission to fulfil and should strive to make research-based findings visible.

   It is therefore recommended that the communications team at university level, the heads of faculties and departments along with the scientific staff convene to discuss ways to communicate scientific findings, jointly developing effective strategies that keep an eye on the limited availability of resources. For instance, events could be organised by universities and faculties to engage with audiences beyond the typical target groups; training and workshops on how best to use social media for science communication could also be foreseen.

Part 2 - Recommendations for policymakers

1. **Mainstream the DigComp and the CDC framework in education plan and design.**

   The recent release of the Digital Competence Framework for Citizens (DigComp) 2.2[13] update takes stock of the newly emerged technologies, such as Artificial Intelligence, Virtual and Augmented Reality, the Internet of Things, along with the phenomena of mis- and disinformation.

   The advent of new technologies calls for increased digital literacy requirements on the part of citizens in general and students in particular. Hence, policymakers both at European and national level should mainstream the DigComp 2.2 and any of its future updates with policies that support digital as well as MIL competence building in HEIs.

   Digital literacy should however go hand in hand with the development of democratic values, attitudes, skills and critical thinking which will equip citizens with the awareness needed for an active participation in society. Hence, policymakers should also put an emphasis in disseminating and mainstreaming the Reference Framework of Competences for Democratic Culture (RFCDC)[14] developed by the Council of Europe beyond the realm of compulsory education.

2. **Support and fund R&I activities on disinformation and misinformation**

   Neuroscience has been fundamental in shedding a light on why, as humans, we tend to fall into the disinformation and misinformation trap. Still, further research is needed to counterbalance the effects of these phenomena.
   Public authorities both at EU and national level should keep supporting the network of independent European Centres for (academic) research on disinformation, such as the European Digital Media Observatory[15].
   Additionally, they should stay committed to sufficient independent funding for the operation of such a network as well as increase R&I funding in critical fields. More specifically, such funding should target fact checking tools, artificial intelligence, augmented newsrooms, conversation journalism, language technologies and big data for media.

3. **Support cooperation between media organisations and academia**

   The European Commission, together with Member States, should support cooperation avenues primarily between media organisations and academic researchers, but also with platforms, fact- and source checkers, advertising industry and civil society organisations to ensure the necessary level of public scrutiny and balance in the definition of transparency standards.
   The European Commission should also create incentives for cross border collaboration on best practices and knowledge sharing among academia, civil society organisations, educators and the media. This would contribute to overhauling the silo approach adopted so far. Furthermore, the creation of more

[13] https://publications.jrc.ec.europa.eu/repository/handle/JRC128415
[14] https://www.coe.int/en/web/reference-framework-of-competences-for-democratic-culture
[15] https://edmo.eu

institutionalised channels to favour the knowledge exchange at a European level would allow to scale up good practices and innovative solutions in the fight against misinformation and disinformation.
Strengthening cooperation between some of the above-mentioned actors was, for example, the result of the multistakeholder approach adopted by the Organisation for Security and Co-operation in Europe in the development of the Spotlight on Artificial Intelligence and Freedom of Expression (SAIFE): A Policy Manual[16]. During the course of two years, the SAIFE project brought together more than 120 stakeholders. Hence, the OSCE played a crucial role in bridging the gap, by putting the different stakeholders involved in contact with one another who, in turn, were able to develop stronger relations and networks going well beyond the scope of the OSCE project.

4. **Keep an open dialogue with all key stakeholders**

Higher Education Institutions and the media landscape should be constantly consulted during the developing stage of policy making, even more so when the policies are going to have direct implications on the single industries. Although stakeholder engagement has become the international standard, it is important that it is promoted not only on paper but that the views of the consulted parties are fully integrated and reflected in decision making.

5. **Mandatory MIL training for educators**

Undeniably, educators are invested with the immense responsibility of knowledge transfer. However, how could they perform such a role if they themselves are incapable of navigating in the current information technology environment? To properly educate their students on MIL competences, they are required to have a deep understanding of the subject matters.
For this reason, European institutions and national governments should mandate teacher training colleges to include critical media and information literacy modules and encourage critical media literacy to become an integral part of all subject-learning as well as lifelong learning for teachers and educators.

6. **Commit to long-term support of independent journalism**

The current "clickbait" business model puts media organisations committed to delivering quality and independent journalism under considerable pressure. Nowadays, journalists are expected to deliver more than "simple" article pieces. They have to juggle among multiple tasks, such as taking care of newsletters, producing behind-the-scenes content, being active on social media, particularly on Twitter etc. All of this, just so their media organisation can stay afloat in a (digital) environment that leaves them bereft of sufficient funding.

It is essential for the state to acknowledge that quality information is a public good. It is not only the responsibility of the individual but also of the state itself to demonstrate a clear commitment to safeguard it. Such a commitment can be shown by mobilising public funds and fair and equitable government advertising to support independent quality journalism. To increase the quality of

[16] https://www.osce.org/representative-on-freedom-of-media/510332

information and presence of evidence-based information, additional measures could be put in place. For example, the Austrian Club of Education and Science Journalists suggests media funding could be tied to the existence of a science desk within the newsrooms.

Part 3 - Recommendations for journalists

1. **Adopt an evidence-based research approach in news reporting**

   Communication of reliable knowledge is an essential asset for societies, even more so in times of crisis. To counteract mis-/disinformation, the expansion of reporting rooted on an evidence-based paradigm could be a model for the future journalism and news media industries. Providing evidence rather than opinions and reporting facts and research transparently may improve the quality and credibility of journalism, reconnect it with the public, and build trust in news media[17]. An example worth mentioning is the Science Media Centre[18], an organisation that is present in countries such as Canada, Germany, New Zealand, Taiwan and the United Kingdom, whose stated mission is: "To provide, for the benefit of the public and policymakers, accurate and evidence-based information about science and engineering through the media, particularly on controversial and headline news stories when most confusion and misinformation occurs.[19]"

   The Guidelines for evidence-based communication conceptualised by the EU-funded ERUM project should be used by journalists and aspiring journalists as an instructive manual to develop their science reporting competencies and skills, with the goal of providing a better understanding of the role of media in communicating science and research to non-scientific audiences.

2. **Create and nourish collaborative relationships with academia**

   Undoubtedly, disinformation and misinformation have a deep and long-lasting impact not only on journalism and the media industry but on society as a whole.

   Therefore, the silo approach that up until now has been the norm to fight these phenomena is no longer a viable alternative. On the contrary, what is needed is a more holistic approach that finds its strength from an alliance between media and academia, an alliance based on mutual trust and respect.

   By seeing in each other their shared mission to serve society, journalists and media professionals should join forces with academics. This rekindling of forces can be executed in different fashions: for instance, a collaboration in co-leading MIL courses aimed at students, journalists[20], and citizens; the establishment and maintenance of regular contacts with Communication teams of the universities aimed at putting journalists in direct contact with trustworthy and reliable sources, i.e. scientists and researchers; working together with academia on new innovative forms of fact-checking; a collaboration on co-developing courses for journalists, journalism trainers and educators (along with their students) on

[17] This also seems to be the view held by the majority of the respondents (journalists and media professionals) of the survey which was conducted in the framework of the ERUM project and that informed the Guidelines for evidence-based communication.

[18] https://www.sciencemediacentre.org

[19] https://www.sciencemediacentre.org/about-us/

[20] The Aristotle University of Thessaloniki for example has organised life-long courses on MIL for professional journalists in the past.

disinformation, propaganda, etc. as historical features of the communications ecology.

3. **Uphold the ethical values of journalism**

In the annual Reuters Memorial Lecture, Allessandra Galloni, Reuters Editor in Chief, proclaimed: "For the public to trust us, we need to be trustworthy".[21]

As mentioned in the introduction, throughout the 21st century trust in the media has been in steady decline, even before the consolidation of social media platforms in the news arena. The negative trend however seems to have been halted by the pandemic outbreak. Indeed, according to the Reuters Institute, trust in news grew by six points on average during the COVID-19 pandemic, with 44 % of the total sample of reference[22] saying they trust news most of the time.

Nevertheless, it would be wishful thinking to believe the problem has been tackled once and for all. Ethical, and professional standards of journalism should always be upheld. Although it is undeniable that practitioners are fully aware of the existence of a deontological code of conduct, the current media landscape has shown time and again how herculean it is for media companies in general and journalists in particular to abide by such standards.

However, strong ethical journalism should be seen as an antidote to the *infodemic*. Balanced and fair reporting, accuracy and precision, trust and respect – those are true and timeless values that help to make a distinction between true professional journalism and amateurism or treacherous attitudes. They build trust, credibility, and confidence in the industry.

4. **Train (specialised) journalists on science literacy**

Learning how to explain science to lay people is a crucial skill for journalists who wish to convey clear and accurate scientific messages to their non-specialised audiences. Moreover, another important corollary that a journalist involved in science reporting should have internalised is to make science relatable by using the power of storytelling.

Science and environment journalism are not immune to misinformation and disinformation. Examples where climate change and the pandemic have been grossly misrepresented are widespread and appear on the news arena on a regular basis. It is hence important for science-savvy journalists to not take over the narrative that has been contaminated with mis-/disinformation, especially when science tells us that humans learn faster and more easily through emotions. If a fact touches us in any way, it will remain engraved in our memory,

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[21] *Galloni A., "Reuters Memorial Lecture. Tanks, TikTok and trust: journalism in a time of Turmoil", Reuters Institute, March 7th 2022*

[22] *Samples were assembled using nationally representative quotas for age, gender, region in every market, and education in all markets except Bulgaria, Croatia, Greece, India, Indonesia, Kenya, Malaysia, Mexico, Nigeria, Philippines, Romania, South Africa, Thailand, and Turkey. For more details about the research, please consult The Reuters Institute Digital News Report 2021.*

and will convert into knowledge. This is also why "clickbait" articles and shocking titles are extremely successful and appeal to the masses.

Moreover, training journalists on science literacy can contribute to reinforcing trust in the news industry. Indeed, as the Reuters Institute seems to suggest, one of the reasons for the increased trust in media could be found in the fact that, during the pandemic, journalists quoted more scientists and doctors, sources that are considered more reliable than politicians.[23]

5. **Invest in journalists specialised on disinformation**

Professional news organisations should continue to invest in their own journalists as well as interdisciplinary fact-checking groups and verification teams that are specialised in identifying disinformation.

Among the existing initiatives, the Spanish non-profit news organisation, Maldita[24], deserves a special mention. Launched in 2017, Maldita is powered by a team of journalists who spend approximately 700 hours per week[25] on fact-checking and debunking a variety of topics ranging from politics, to social issues (migration, gender), science, technology and everything else that's relevant.

Moreover, news organisations should strive to train journalists in a way that they can verify information in the fast-evolving technological and platform landscape.

"The post-Covid-19 media world – like the rest of society – is going to be more data-driven, more algorithmically-powered. So it's vital for journalists to get across these trends. But they can't do it alone anymore. They need support to protect journalism values and to innovate."[26]

6. **Engage in societal dialogue**

As with the news media, for journalism schools and their students, along with media trainers and their learners, the current times are a major opportunity for strong civic engagement with audiences.

Findings from the survey conducted within the ERUM Guidelines on Evidence-based communications show that journalists recognise the urgency to reduce the gap with their audiences. By striving to engage in direct dialogue with their audiences, journalists are also more likely to adopt and intensify accountability and transparency practices with the intention to improve the information environment for their public. For example, Katharina Kropshofer, science journalist at the Austrian newspaper Falter, revealed during the ERUM final conference, that she has the habit of answering emails whenever her readers reach out to her.

Social listening has also been identified as an important element by Marsha Lulu Ochieng, growth editor at BBC Africa during the 2022 "Trust in Media"

[23] *The Reuters Institute Digital News Report 2021, p. 10.*

[24] *https://maldita.es*

[25] *https://edmo.eu/fact-checking-activities/editorial/#maldita*

[26] *Quote by a freelancer Greek journalist, extracted from the Guidelines of evidence-based communication, p. xviii*

conference[27]. Indeed, she mentioned how in her newsroom journalists strive to pay attention to readers´ questions in order to produce stories that align with their needs and appeals.

[27] *Hosted by the BBC in partnership with the Trusted news initiative, the Trust in News is an annual event aimed at bringing together different stakeholders in order to rebuild trust in the media and tackle the next disinformation challenges.*

Conclusions

Misinformation and disinformation are complex phenomena. As such, they can hardly be solved with a one-size-fits-all solution. On the contrary, what is envisaged is the adoption of a multifaceted approach that requires different responses on multiple levels of the society depending on the nature of mis-/disinformation. By outlining a set of recommendations for policymakers, higher education institutions and media organisations, the ERUM consortium has acknowledged such necessity.

Finally, even if some of the abovementioned suggestions address the individual level, there is no presumption about the fact that the individual alone will not be able to overcome these obstacles. Misinformation and disinformation are systemic challenges. They are the result of commercial and political interests. Their impact transcends the individual level. Therefore, the responsibility should not be put entirely on the shoulders of the individuals. As Julia Haas, assistant project officer at the Organisation for Security and Co-operation in Europe – Representative on Freedom of the Media, declared during the final conference of the ERUM project[28]: "Systemic challenges demand systemic responses."

[28] https://projects.uni-foundation.eu/erum/erums-closing-conference-mil-and-policy-recommendations-revisited/

Bibliography

Bunevičienė I. and Juraitė K. (2021), "Guidelines for evidence-based communication", ERUM project

Coddington M. and Lewis S., "New research shows how journalists are responding and adapting to "fake news" rhetoric", NiemanLab, February 5th, 2021

Directorate-General for Communication Networks, Content and Technology (2018), "A multi-dimensional approach to disinformation Report of the independent High-level Group on fake news and online disinformation", European Commission

European Convention for the Protection of Human Rights and Fundamental Freedom, 1953, Council of Europe

European Democracy Action Plan, EUR-Lex - 52020DC0790 – EN, December 3rd, 2020

Galloni A., "Reuters Memorial Lecture. Tanks, TikTok and trust: journalism in a time of Turmoil", Reuters Institute, March 7th 2022

Grizzle A., Wilson C., Tuazon R., C.K. Cheung, Lau J., Fischer R., Gordon D., Akyempong K., Singh J., Carr P. R., Stewart K., Tayie S., Suraj O., Jaakkola M., Thésée G., Gulston C., "Think Critically, Click Wisely. Media and Information Literacy Curriculum for Educators and Learners", UNESCO 2021, ISBN 978-92-3-100448-3

Joint Declaration on Freedom of expression and fake news, disinformation and propaganda, March 3rd, 2017

Journalism, 'Fake News' & Disinformation, Handbook for Journalism Education and Training, UNESCO, 2018

Matteo Di Rosa, Claudia Iasillo, Ilda Mannino, Alessandra Fornetti, Enrico Costa, Roberta Villa, & Fabiana Zollo. (2021), D4.4: Recommendations on Policies and Incentives for Quality Science Communication. Zenodo. https://doi.org/10.5281/zenodo.5070099

Shizuka K., "How governments and universities can support 21st-century skill development", OECD Education and Skills Today, February 17th, 2022

Vuorikari, R., Kluzer, S. and Punie, Y., "DigComp 2.2: The Digital Competence Framework for Citizens", EUR 31006 EN, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-48882-8, doi:10.2760/115376, JRC128415.

Glossary

Artificial Intelligence

Artificial intelligence (AI) describes computer programs that are "trained" to solve problems that would normally be difficult for a computer to solve. These programs (AI) "learn" from data parsed through them, adapting methods and responses in a way that will maximise accuracy.

Citizenship (active)

A member of a defined community (political, national or social). Citizenship is usually understood to comprise a set of rights (e.g., voting and access to welfare) and responsibilities (e.g., participation). Active citizenship is the philosophy that citizens should work towards the betterment of their community through participation, public and volunteer work, and other such efforts to improve life for all citizens. Note that legal citizenship of a given country often excludes the many people living in that country, for reasons of age or nationality. The term "citizenship" in MIL is used more broadly than that of "legal citizenship".

Communication

A process whereby content is packaged, channelled and imparted by a sender to a receiver via some medium. Not all forms of communication require a sender, a message and an intended recipient in a linear and intentional way. A receiver need not be present or aware of the sender's intent to communicate at the time of communication in order for the act of communication to occur. Nor is a receiver the end of a stimulus-response process; the act of receiving content involves an engagement which can "decode" the message to have very different meanings to the context in which these were originally created.

Critical thinking

The ability to examine and analyse content in order to understand and assess logical connections as well as values and assumptions, rather than simply taking propositions at face value. It implies scepticism in the form of being questioning, which is different to cynicism (which knows the answers in advance, in other words it makes a priori judgements).

Debunking

The given method of detecting false facts. According to Merriam-Webster online dictionary, it can be defined as a declaration of exposing the sham or falseness of. The intention of journalists is simply to point out that a certain fact is not as important, valuable or true for society as it seems at first glance.

Disinformation

Disinformation is false information that is deliberately created or disseminated with the express purpose to cause harm. Producers of disinformation typically have political, financial, psychological, or social motivations.

Fact-checking

Fact-checking (in the context of information disorder) is the process of determining the truthfulness and accuracy of official, published information such as politicians' statements and news reports. Fact-checking emerged in the U.S. in the 1990s, as a way of authenticating claims made in political ads airing on television. There are now around 150 fact-checking organisations in the world, and many now also debunk mis- and disinformation from unofficial sources circulating online.

Fake news

False stories, often of a sensational nature, created to be widely shared or distributed for the purpose of generating revenue, or promoting or discrediting a public figure, political movement, company, etc.

There are two kinds of fake news:

1. False stories that are **deliberately published** or sent around, in order to make people believe something untrue or to get lots of people to visit a website. These are deliberate lies that are put online, even though the person writing them knows that they are made up.
2. Stories that may have some truth to them, but that are **not completely accurate**. This is because the people writing them - for example, journalists or bloggers - don't check all of the facts before publishing the story, or they might exaggerate some of it.

Media and Information Literacy

Refers to the ability to recognize when information is needed and to locate, evaluate, effectively use and communicate information in its various formats.

Understanding and using mass media in either an assertive or non-assertive way, including an informed and critical understanding of media institutions, their ownership, normative and actual functions, employ and the effects of their content. Also, the ability to read, analyse, evaluate and produce communication in a variety of media forms (e.g., audio-visual, written, graphic, interactive games, etc.).

Misinformation

Misinformation is information that is false, but not intended to cause harm. For example, individuals who don't know a piece of information is false may spread it on social media in an attempt to be helpful.

Open Educational Resource

Open Educational Resources (OER) are teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released

under an open licence that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions.

Scientific literacy

Within the framework of the OECD Programme for International Student Assessment (PISA), scientific literacy is defined as an individual's scientific knowledge and use of that knowledge to identify questions, to acquire new knowledge, to explain scientific phenomena, and to draw evidence-based conclusions about science-related issues, understanding of the characteristic features of science as a form of human knowledge and enquiry, awareness of how science and technology shape our material, intellectual, and cultural environments, and willingness to engage in science-related issues, and with the ideas of science, as a reflective citizen.

Science communication

The practice of informing, educating, raising awareness of science-related topics to the public, along with increasing the sense of wonder about scientific discoveries and arguments.

Verification

Verification is the process of determining the authenticity of information posted by unofficial sources online, particularly visual media. It emerged as a new skill set for journalists and human rights activists in the late 2000s, most notably in response to the need to verify visual imagery during the "Arab Spring".

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