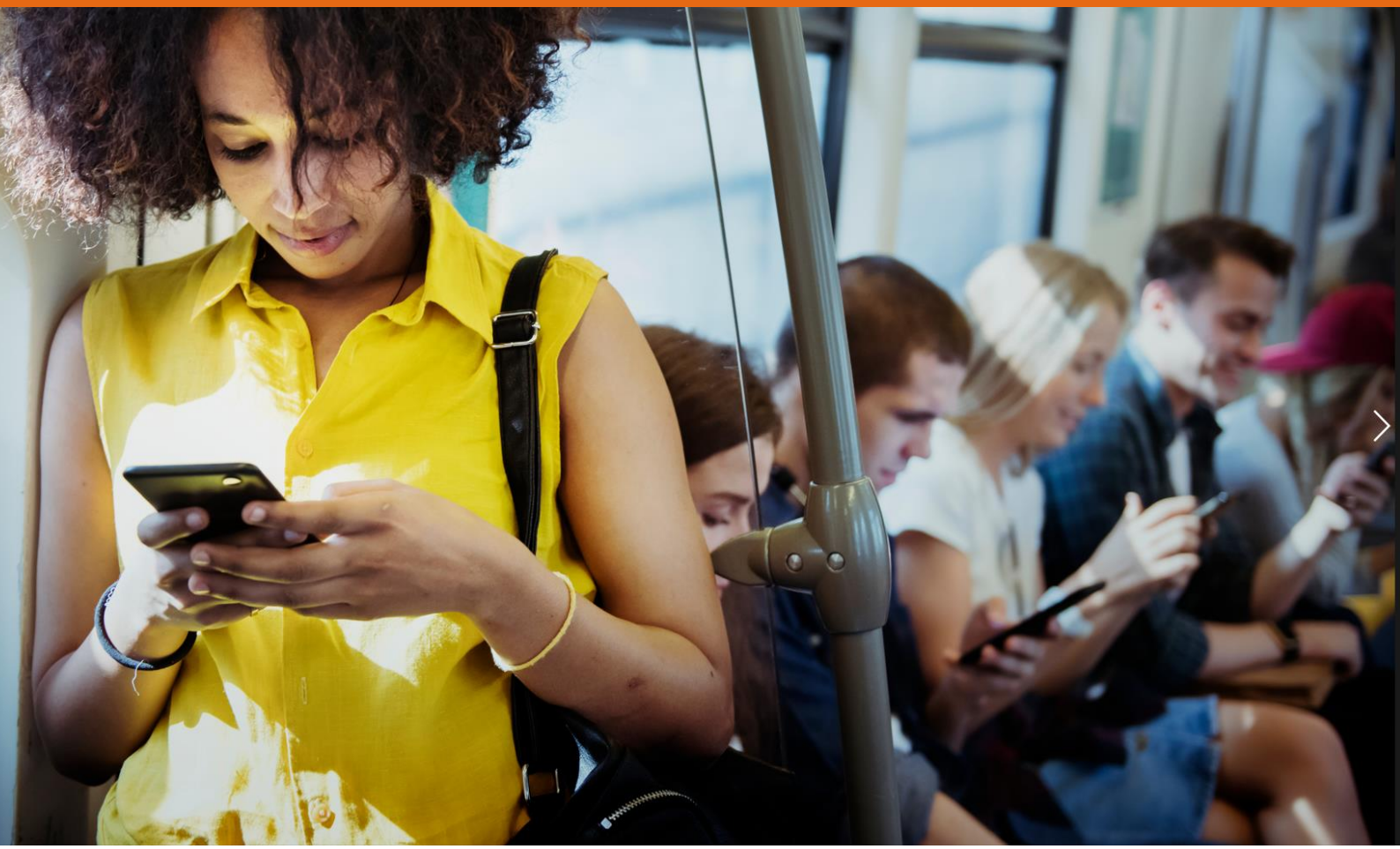
DIGITAL MEDIA LITERACY BASICS

INFORMATION DISORDER AND DISINFORMATION IN THE CONTEXT OF BOSNIA AND HERZEGOVINA



COUNCIL OF EUROPE
CONSEIL DE L'EUROPE

This study has been done with the support of the Council of Europe and its action “Media and information literacy: for human rights and more democracy”, within the framework of the Council of Europe Action Plan for Bosnia and Herzegovina 2018-2021. Action Plan level funding is provided by Luxembourg and Norway.

Cover design and layout: Information Society Department, Council of Europe

Photos: ©Shutterstock

This publication has not been copy-edited by the SPDP Editorial Unit to correct typographical and grammatical errors.

DIGITAL MEDIA LITERACY BASICS

INFORMATION DISORDER AND DISINFORMATION IN THE CONTEXT OF BOSNIA AND HERZEGOVINA

December 2021

Authors:

Martina Chapman

is an independent consultant in media literacy, based in Ireland. She provides advice and guidance on media literacy related research, policy and project management.

Ricardo Castellini da Silva

is a media literacy educator and a postdoctoral researcher at Dublin City University – Institute for Future Media and Journalism (FuJo), where he coordinates media literacy activities for European Digital Media Observatory (EDMO) Ireland Hub.

Ioana Avadani

Is the president of the Centre for Independent Journalism in Bucharest Romania. She has over 25 years of experience in the field of media and has published numerous articles and studies on media development in Romania and SEE region.

Council of Europe

Table of Content

Abbreviations

AVMSD	European Union Audiovisual Media Services Directive
BAI	Broadcasting Authority of Ireland
BiH	Bosnia and Herzegovina
CH	Children
CM/Rec	Council of Ministers Recommendation
CoE	Council of Europe
CPCD	Center for the Promotion of Civil Society
CRA	Communication Regulatory Agency
DML	Digital Media Literacy
EU	European Union
LSE	London School of Economics
MSI-JOQ	Council of Europe Committee of experts on quality journalism in the digital age
OP	Old people
RISJ	Reuters Institute for the Study of Journalism
TY	Teens and Young Adults

I. Executive Summary

As technology is continually evolving, new opportunities to connect, create, engage and share information have also emerged. Easy access to digital communications technology and a converged media and communications landscape means individuals are no longer just receivers of media content: they now have the potential to be content creators and distributors.

However, these opportunities come with challenges too – such as the threat of disinformation and the current global Information Disorder. While the threats linked to the problem of disinformation are well documented, how to counter those threats is less well documented. Having said that, the evolution of digital technologies and the contexts and manner in which we use them are also prompting questions about concepts such as trust, privacy, freedom of expression, and democracy itself.

Bosnia and Herzegovina has a fractured and polarised media sector, with faults along ethno-national and religious lines and marked by visible political influence over some media outlets. This is fertile ground for the circulation of biased, sensationalistic or unprofessional content to an audience who increasingly turns to the internet, a medium prone to disinformation spread, to satisfy their media appetite.

Digital Media Literacy is emerging on policy agendas across the world as a bourgeoning counter-balance to the problem of Disinformation and the perceived threat that mis-, dis- and mal-information can pose to health, well-being and the democratic functioning of society.

This study explores how the development of basic Digital Media Literacy skills can help empowering citizens to make informed choices about the content they consume, share and create – and by extension help to counter the issue of Disinformation in the Digital Age. It provides practical guidance on how to communicate the principles that underpin Digital Media Literacy – such as the development of critical thinking skills.

The problem of disinformation is complex and multi-faceted and the solution to disinformation is also likely to be complex and multi-faceted. While Digital Media Literacy is likely to be an important weapon in the fight against disinformation, it is unlikely to be the solution in itself.

The effective implementation of digital media literacy initiatives and projects may require significant levels of coordination, funding, monitoring and evaluation which can be particularly challenging when a complex network of institutions and jurisdictions are involved – such as in the case of Bosnia and Herzegovina.

Digital media literacy should not be presented as a prescribed set of skills or competencies. Instead, it must constantly evolve to respond to factors such as changes in technologies, social and cultural norms and even in politics. As such digital media literacy should be viewed as a life-long learning journey and may require the provision of different supports for different people and at different stages of their personal learning journey.

II. Introduction

The study on “Digital media literacy basics: information disorder and disinformation” forms the basis for the development of informative and educational content, aimed at improving Bosnia and Herzegovina citizens’ access to information, and enhancing their understanding of the main issues related to digital literacy, the influences of information disorder and disinformation on people’s lives in today’s digital world, as well as their effect on the media environment.

The study explores the Wicked Problem of Information Disorder by analysing the existing media landscape and elaborating on the meaning of information disorder, the infrastructure underpinning it as well as looking at the specific situation in Bosnia and Herzegovina. In addition, the study delves into the meaning of digital media literacy and its role in countering disinformation, again focusing on the situation in Bosnia and Herzegovina.

Finally, it provides in-depth practical advice and guidance for educators to illustrate how learning activities can be designed to address the most pressing issues of disinformation in the context of Bosnia and Herzegovina.

III. Methodology

This review is based primarily on qualitative data which capture both the European and international perspectives and the specificities of the society in Bosnia and Herzegovina. Desk research was carried out based on existing documentation.

For the theoretical framework used to describe the current media landscape and the rise of disinformation, various academic works tackling the anthropological and sociological aspects of these matters, as well as the media and economic perspective of the phenomenon were consulted.

In describing the normative frameworks used to define concepts such as disinformation and digital media literacy, programmatic documents produced and adopted by the European institutions were accessed, including the following Council of Europe documents:

- Recommendation CM/Rec(2020)1 of the Committee of Ministers to member States on the human rights impacts of algorithmic systems.
- Draft Recommendation on promoting a favourable environment for quality journalism in the digital age (7th draft, 26 September 2019)[1].
- Recommendation CM/Rec (2018)1 of the Committee of Ministers to member States on media pluralism and transparency of media ownership.
- Recommendation CM/Rec (2018)2 of the Committee of Ministers to member States on the roles and responsibilities of internet intermediaries.

In addition, other Council of Europe commissioned studies, such as the 2020 Study of Council of Europe Committee of experts on quality journalism in the digital age (MSI-JOQ) on "Supporting Quality Journalism through Media and Information Literacy"[2] and the 2017 Report on "Information Disorder: Toward an interdisciplinary framework for research and policymaking"[3] were also consulted.

As Bosnia and Herzegovina has started the process of harmonising its legislation with *acquis communautaire* as part of its bid to join the European Union, EU policy documents were also accessed such as the 2018 Revised European Union Audiovisual Media Services Directive (AVMSD) and the Report of 2016 "Mapping of media literacy practices and actions in EU-28"[4] for the European Commission and the Council of Europe.

The local specificities were documented through consultation of a series of studies produced by authorities in Bosnia and Herzegovina, such as "Children's Media Habits in Bosnia and Herzegovina"[5] (commissioned by UNICEF and the Communications Regulatory Agency,

[1] Recommendation CM/Rec (2022)4 of the Committee of Ministers to member States on promoting a favourable environment for quality journalism in the digital age was adopted on 17 March 2022.

[2] Chapman, M., & Oermann, M. (2020). Supporting Quality Journalism through Media and Information Literacy. (DGI(2020)1). Prepared by the Committee of experts on quality journalism in the digital age (MSI-JOQ), Strasbourg.

[3] Wardle, C., & Derakhshan, H. (2017). Information Disorder Toward an interdisciplinary framework for research and policymaking. Council of Europe Report DGI. Strasbourg.

[4] Council of Europe:European Audiovisual Observatory. (2016). Mapping of media literacy practices and actions in EU-28. Strasbourg.

[5] UNICEF. (2020). Children's Media Habits in Bosnia and Herzegovina. UNICEF and Communications Regulatory Agency in Bosnia and Herzegovina, Sarajevo.

Sarajevo) and "Media Habits of Adults in Bosnia and Herzegovina"[6] (commissioned by Council of Europe in coordination with the Communications Regulatory Agency, Sarajevo). Reports produced by international organisations, such as IREX or Reuters Institute for the study of journalism, or by local organisations, such as MediaCentar, were also used in the preparation of this study, including the "Propaganda, disinformation and hate models of media and communication in Bosnia and Herzegovina"[7] and the "Disinformation in the online sphere: The case of Bosnia and Herzegovina".[8]

In addition, desk research was augmented by a small number of semi-structured qualitative interviews conducted with the Communication Regulatory Agency, NGOs involved in digital media literacy and fighting disinformation, as well as members of the academia. Two interviews were conducted online with representatives of MediaCentar and Zašto ne. A third interview was undertaken in writing with Dr. Dragana Trninić from the University of Banja Luka. The interview was submitted in Bosnian language and translated into English.

The study elaborates also on an Educators' Guide, which provides with a wealth of references to academic literature relevant to critical pedagogy and transformative media education. In addition, it also encompasses a comprehensive collection of teaching resources.

[6] Council of Europe. (2021). Media Habits and Attitudes: Study on Media Habits of Adults in Bosnia and Herzegovina. Council of Europe: Strasbourg.

[7] Sokol, A. (2020). Propaganda, disinformation and hate models of media and communication in Bosnia and Herzegovina. SEENPM, Tirana, Peace Institute, Ljubljana and Foundation MediaCentar Sarajevo.

[8] Cvjetićanin, T., Zulejhić, E., Brkan, D., Livančić-Milić, B.(2019). Disinformation in the online sphere: The case of Bosnia and Herzegovina. Citizens' Association "Why Not".

IV. The wicked problem of information disorder

4.1 A converged media ecosystem/ landscape

"The digital genie is out of the bottle on a worldwide scale". This was the statement of the philosopher and ethicist James H. Moor, in 1996. He described the world changing because of digital technologies, as "technological revolution" where technologies had a significant social and cultural impact. He thought that, at that time, we had already left behind the first revolutionary stage – the introduction – and had reached to the second one: the technological permeation "in which technology gets integrated into everyday human activities and into social institutions, changing the very meaning of fundamental concepts, such as 'money', 'education', 'work', and 'fair elections'".[9]

Some 20 years later, it would seem that this technological revolution has reached the third predicted revolutionary stage: the power stage.[10] Malleable and capable of converging into mutually enabling conglomerates, the digital technologies fulfilled the revolutionary prophecy: they changed the paradigm in all areas of human lives.

Technology used for communication – public or interpersonal – was no exception. The fundamental concept of communication has been changed by the technologies used to communicate. The internet, its affordability and accessibility by a large number of people "democratised" the public conversation, allowing anybody with a device and a connection to participate.

In 2019, the number of internet users worldwide stood at 3.97 billion, meaning that half of the world population was connected to the world wide web.[11] Social media – platforms claiming to be designed to bring people closer together – expanded to dimensions difficult to fathom even by those who imagined "the global village". In 2020, over 3.6 billion people were using social media worldwide, a number projected to increase to almost 4.41 billion in 2025.[12]

"We live in media, rather than with media. (…) Media are becoming invisible, as media are so pervasive and ubiquitous that the people [...] do not even register the presence of media in their lives."[13] Such a profound immersion brought about equally profound changes. Scholars suggest that the discursive architecture of the web has deeply affected the textual character of our communication that marked human history since the invention of the printing press by Gutenberg.[14] In this post-Gutenberg era, digital technologies slowly bring us back to the initial orality of knowledge formation and communication. The trend is currently discernible in today's media with the widespread use of features such as informal, conversational tones and a propensity for ephemeral soundbites and gossip, as well as in the success of social storytelling and use of microblogging, vlogging and podcasting.

---

[9] Moor, J. H. (1998). Reason, relativity, and responsibility in computer ethics. ACM Sigcas Computers and Society. 28. 14-21.

[10] Moor, J. H. (2005). Why we need better ethics for emerging technologies. *Ethics and information technology*, *7*(3), 111-119.

[11] See: Statista, available at https://bit.ly/2GZCVb7, last accessed on 9.11.2021.

[12] See: Statista, available at https://bit.ly/3OL7Ryo. last accessed on 09.11.2021.

[13] Deuze, M., Blank, P., & Speers, L. (2012). A life lived in media. *Digital humanities quarterly*, *6*(1).

[14] Pettitt, T. (2012). Bracketing the Gutenberg parenthesis. *Explorations in media ecology*, *11*(2), 95-114.

How digital technologies have evolved and how we use them has forced us to revisit fundamental concepts such as:

- Trust – how it is gained or given: authority or notoriety?
- Privacy – does it exist in an environment where data is collected and shared on a massive scale?
- Body – are my data part of me the way my limbs are?

The digital revolution has also affected the economy. For example, the advertising-and-sales business model that the traditional media (print, radio, television) relied on for over 100 years was demolished in a few short years by the Internet-based model of cascading free-of-charge information.

Media consumption patterns changed too. People have become more mobile and expect their content to be mobile too. They want interaction, personalisation, real-time updates, real life-like experiences and instant gratification. The traditional platforms, unable to respond adequately to these needs, gradually lost the privileged position they held in the information economy, with digital media filling the gap and securing the attention of the audience.

As the volume of information targeting people increased exponentially, the media gradually moved from a money-based economy, in which buying a paper or paying for a TV subscription had the moral value of a contract, to an attention-based one, where the currency is the user's attention and every click is seen as a micro-transaction. The monetisation of attention brought into existence the monetisation of the audience's data and emotions. An "everything goes attitude" underpinning the economic models of many media today is leading to several problems affecting the sector, including lack of public trust, erosion of the audience figures, impostor content, and disinformation.

4.2 The media landscape in Bosnia and Herzegovina

The media sector in Bosnia and Herzegovina is diverse and reflects the complex dynamics of the society of Bosnia and Herzegovina. The media is divided along geographic, political and ethnical lines with large numbers of both legacy media (print, radio, TV) and digital media, offering a wealth of media products to consumers in Bosnia and Herzegovina.

According to local studies, there are 103 television stations, 152 radio stations, three public service broadcasters, eight dailies and 181 periodicals[15] currently active in the country. At the same time, there are 615 web portals in Bosnia and Herzegovina with daily or periodical production that cover different topics.[16] While apparently vibrant, this market is rather untransparent, especially in the online sector, which makes the assessment of its independence, diversity, reliability, and sustainability very difficult.

Given the large number of media outlets, a variety of media products are available and accessible, but the media offer is often of uneven quality. The Media Sustainability Index 2019 claims that the media output "might be incomplete, poorly researched, and sometimes

[15] Sokol, A. (2020). Propaganda, disinformation and hate models of media and communication in Bosnia and Herzegovina. SEENPM, Tirana, Peace Institute, Ljubljana and Foundation MediaCentar Sarajevo.

[16] Osmančević, E., et al. (2021). Mapping media web portals in Bosnia and Herzegovina, Centre for the Promotion of Civil Society (CPCD). Available at https://bit.ly/3NiYIfa.

tendentious".[17] Various actors have attributed the questionable quality of the media output to factors such as dependency on politically controlled ownership or funding (including the public funding, often cited as untransparent and arbitrary), the affiliation to certain ethnic, political or business groups, that comes with strong strings attached, and even gender stratification and lack of workplace diversity in media outlets.[18]

This leads to a situation where the media content does not accurately represent or reflect the people, stories and events from Bosnia and Herzegovina. Still, as the IREX study reveals, "most major events receive at least some coverage, and some bloggers contribute to the diversity of presented views".[19]

The audience for media content, and their media preferences, are also diverse. News is on top, with the majority of adults in Bosnia and Herzegovina most likely to watch/listen to/follow the news and informative content (71%). This is followed by entertainment content (64%), and feature films and shows (51%).[20] Younger generations appear equally interested in this kind of content, as only three in ten children (aged over 11) state that they are not interested in news/information on events in the country and the world.[21]

When it comes to channels, the majority of adults in Bosnia and Herzegovina (58%) rely on (only) one or two sources of information about events in the country and the world, usually the television (78%). This is followed by social networks (52%) and online news portals (45%).[22] The young people who view this content usually do so on social networks (53%), on television (25%), and online 5 portals (23%).[23]

4.3 The information disorder

"Fake news" as a phrase was catapulted into the global public discourse in 2016, as a result of the presidential elections in the US. It was selected as the "word of the year 2017" by the Collins Dictionary, which defined it as "false, often sensational, information disseminated under the guise of news reporting". However, a study from the Reuters Institute for the Study of Journalism (RISJ)[24] the same year revealed that defining fake news is not an easy task.

In September 2017, the Council of Europe published its seminal report on "Information Disorder: Toward an interdisciplinary framework for research and policy making"[25] – a valuable attempt to bring clarity to the issue and support meaningful and adequate media

[17] IREX. (2019) Media Sustainability Index. Available at https://bit.ly/3bwpi7s.

[18] Sokol, A. (2020). Propaganda, disinformation and hate models of media and communication in Bosnia and Herzegovina. SEENPM, Tirana, Peace Institute, Ljubljana and Foundation MediaCentar Sarajevo.

[19] IREX. (2019) Media Sustainability Index.

[20] Council of Europe. (2021). Media Habits and Attitudes: Study on Media Habits of Adults in Bosnia and Herzegovina. Council of Europe: Strasbourg.

[21] UNICEF. (2020). Children's Media Habits in Bosnia and Herzegovina. UNICEF and Communications Regulatory Agency in Bosnia and Herzegovina, Sarajevo.

[22] Council of Europe. (2021). Media Habits and Attitudes: Study on Media Habits of Adults in Bosnia and Herzegovina. Council of Europe: Strasbourg.

[23] UNICEF. (2020). Children's Media Habits in Bosnia and Herzegovina. UNICEF and Communications Regulatory Agency in Bosnia and Herzegovina, Sarajevo.

[24] Nielsen, R. K., & Graves, L. (2017). " News you don't believe": Audience perspectives on fake news. Reuters Institute for the Study of Journalism (RISJ).

[25] Wardle, C., & Derakhshan, H. (2017). Information Disorder Toward an interdisciplinary framework for research and policymaking. Council of Europe Report DGI. Strasbourg, France.

policies. It introduced the concept of information disorder as a way to describe the effect of information pollution such as irrelevant, redundant, unsolicited and low-value information.

In line with the RISJ study, the term "fake news" is recognised as being problematic in that it is woefully inadequate to describe the complex phenomena of mis- and dis-information. It has also "begun to be appropriated by politicians around the world to describe news organisations whose coverage they find disagreeable"[26], thus becoming a mechanism by which the powerful can attempt to limit and stifle the free press.

The report identifies the types of information disorder, judged by two basic criteria: the true or false character of the message circulated and the intention to harm by the agents who created, produced and circulated it. Based on these criteria, the report proposes three types of manifestation of the information disorder:

i. Dis-information: Information that is false and deliberately created to harm a person, social group, organisation or country.

ii. Mis-information: Information that is false, but not created with the intention of causing harm.

iii. Mal-information: Information that is based on reality, used to inflict harm on a person, organisation or country.

While this linguistic distinction is a useful guide to distinguish between the different types of false information, it can be quite difficult to translate into other languages.

It could be argued that not all false information is equal in its impact. Given the potential danger posed by dis-information to societies, especially to the liberal democracies, perhaps it is this category of false information that should be at the focus of counter-measures, preventive and corrective policies.

Despite its clear theoretical and pragmatic advantages, the term "disinformation" makes only a slow progress in the public vocabulary. RISJ warned that "fake news", faulty as it is, "has also become part of the vernacular that helps people express their frustration with the media environment. This is because it resonates with their experience of coming across many different kinds of misinformation, especially online, and because it is used actively by critics of both news media and platforms".[27] Still, perseverance is needed in order to normalise the use of the term "disinformation" and focus the efforts of fighting the real danger to democracy with minimal detriment to freedom of expression.

4.4 The infrastructure of information disorder

A key characteristic of disinformation is its dissemination capacity, or its "shareability". The dissemination of disinformation can be obvious (where false information is created by a bad actor to exploit the opportunities offered by technology and combined with the natural vulnerabilities of the human receptors). However, it must also be much more subtle (where

[26] Ibid.

[27] Nielsen, R. K., & Graves, L. (2017). " News you don't believe": Audience perspectives on fake news. Reuters Institute for the Study of Journalism (RISJ).

members of the public unknowingly amplify and endorse false information with likes, shares, and retweets.

One important actor in this chain of transmission is non-human: algorithms. As software programmes intended to maximise the degree of personalisation of the online experience of each user, algorithms monitor the preferences, habits and routines of internet users and then select and prioritise – an action called filtering – the online content based on the personal profile of each respective user.

In short, algorithms tailor the online world to what the algorithm believes our personal taste is, based on previous activity, in the hope that users will consume more content, spend more time online and, as a result, generate more revenues for the sites they visit.

While algorithms may have been created to maximise user satisfaction and the profit of the Internet economic agents, the resulting narrowing of online experiences (and opinions) that users are exposed to may have negative impacts – such as reinforcing powerful in-built confirmation bias. As humans, we are conditioned to seek information that confirms our existing beliefs and world views – as it requires less cognitive effort.

This has been the case for many years – people used to buy the same newspaper or consistently watch the same TV channels. While the mechanism of selective exposure is the same, the problem is compounded in the online realm as the selection is done for us automatically, at speed and volume.

Another risk associated with digital information infrastructure is the formation and functioning of the so-called echo chambers – virtual communities where a set of ideas and views are accepted, sanctioned, validated and amplified by their peers with no challenge.

While this kind of behaviour is not new, the conditions brought about as a result of digital technology are excellent incubators for disinformation with the potential for viral, voluntary and enthusiastic dissemination in the absence of critical voices.

4.5 Information disorder in the context of Bosnia and Herzegovina

There are a number of factors that contribute to the creation and dissemination of disinformation in Bosnia and Herzegovina.

The online space of Bosnia and Herzegovina is populated with many anonymous websites using multiple ways of spreading disinformation, "clickbait" being the most frequent. Fake news, pseudo-science, sensationalistic news and entertainment-like fabricated stories are adding to the information pollution. The lack of ownership transparency – therefore lack of traceable editorial responsibility – is construed to be an important stimulus for disinformation.

According to a study on mapping the online publications in Bosnia and Herzegovina [28], a lack of ownership transparency is a widespread phenomenon. Out of the 615 web portals identified as news portals, 44% have no statement of ownership or authorship at all; 29% of them have a partial statement of ownership or authorship (only names of editor and/or journalists, and

[28] Osmančević, E., et al. (2021). Mapping media web portals in Bosnia and Herzegovina, Centre for the Promotion of Civil Society (CPCD). Available at https://bit.ly/3NiYIfa.

maybe geographical location, but no ownership and founder's data); whereas only 27% of them have full data disclosed, including ownership of the portal.

Another study analysing the online media in Bosnia and Herzegovina[29] found that anonymous websites are accountable for more than 50% of the elements identified as "fake news", "clickbait", "disinformation" and "pseudoscience". The report notes the following:

> "As expected, they are also most prone to use clickbait, which is both the most common type of manipulation appearing on these portals (298 out of 1,144 given ratings) and a type of manipulation which these media publish more than any other type of media (68.51% – more than two thirds of all clickbaits are found on anonymous portals). Anonymous portals are also by far the largest source of intentionally fabricated false information, both in the role of the source (58.2% of all published fake news) and the redistributor (54.2% of all fake news redistributed from other sources)".[30]

The lack of transparency is allowed as no legal provisions on transparency of media ownership have been adopted yet. As a result, a big part of online players is obscured, being difficult to identify their ultimate beneficiaries – be they local or foreign – and their interests. It makes it equally difficult to reach them with regulatory or self-regulatory actions meant to keep the information public space clean and accountable.

As shown in the quoted study above, non-anonymous sources are also involved in disinformation, even if at a lower rate. Following this and based on the interviews conducted for the purpose of this study, the most frequent motives for engaging in such actions are related to precarious financing and the fierce competition for the limited resources on the market.

Some media outlets have been set up by political parties – openly or through intermediaries – which makes the risk of propaganda a very real issue. Studies describe several mechanisms that allow for strong parallelism between media and political forces from Bosnia and Herzegovina and abroad. The most direct form of political affiliation is demonstrated via ownership. In such cases, publications lean towards supporting certain viewpoints, usually tilting to the political affiliation of their owners.

Another strong instrument of politicisation is funding. Some public media receive public money funds as key personnel is affiliated with a political party. Other funding that may come with strings attached is the one coming from local public authorities. Foreign funding (e.g., Croatia, Turkey) – be it governmental, or private – is also feeding the media in Bosnia and Herzegovina. As studies show, the financing often comes from anonymous sources, resulting in "selective reporting, for the promotion of ethno-national or religious narratives or political agendas, targeting other ethno-national, political or minority groups. These models act as echo chambers, where audiences encounter views of their ethno-national, religious or political group and disregard other facts and can further prevent reconciliation processes, state building and development of national cohesion".[31]

[29] Cvjetićanin, T., Zulejhić, E., Brkan, D., Livančić-Milić, B. (2019). *Disinformation in the online sphere: The case of Bosnia and Herzegovina.* Citizens' Association "Why Not".

[30] Ibid.

[31] Sokol, A. (2020). Propaganda, disinformation and hate models of media and communication in Bosnia and Herzegovina. SEENPM, Tirana, Peace Institute, Ljubljana and Foundation MediaCentar Sarajevo.

As available research shows, most of the media which publish political disinformation fall into the category of anonymous websites.[32] They also perform high in activities identified by the study as "spin" and "biased reporting" and authors suggest that "some of these 'media' may be working within specific partisan or ideological political narratives typically connected with these ratings".[33] Once again, the anonymity of the ownership structures makes accountability very difficult and further complicates and adds to the severity of disinformation in Bosnia and Herzegovina.

The same parallelism between politics and media may contribute to the slow progress in passing the legislation on transparency of media ownership. Bosnia and Herzegovina committed to pass such legislation as part of its bid to join European Union, but progress reports register, year after year, "no progress" made.[34]

When it comes to the most common topics for disinformation stories, the dominating ones are politics and the incitement of hatred, especially on ethnic or religious grounds. Gender identity or sexual orientation remain major sources of hate speech.[35] In recent years, women and journalists became preferred targets for slurs, hate or incitement to violence. Studies reveal that the sections dedicated to comments in online media and social media platforms are "flooded with large volumes of hate speech, derogatory language and insults, usually related to ethno-nationalism".[36]

Covid-19 pandemic offered new fertile ground for disinformation and conspiracy theorists to create content directly impacting people's behaviour and well-being, and with Bosnia and Herzegovina registering a very low vaccination rate.[37] In addition, immigration is another topic vulnerable to disinformation in Bosnia and Herzegovina

Generally speaking, the media in Bosnia and Herzegovina are not actively involved in fighting disinformation. It is non-profit entities carrying out the majority of fact-checking and debunking activities in the country. During the qualitative interviews undertaken for this study, it was noted that when fact-checking and debunking is limited to the statements of the politicians, the media cooperates and disseminates the results. However, when the debunking stories are published by the media themselves, the reception could be more "hostile" with negative implications for the fact-checkers and debunkers.

[32] Cvjetićanin, T., Zulejhić, E., Brkan, D., Livančić-Milić, B. (2019). *Disinformation in the online sphere: The case of Bosnia and Herzegovina.* Citizens' Association "Why Not".

[33] Sokol, A. (2020). Propaganda, disinformation and hate models of media and communication in Bosnia and Herzegovina. SEENPM, Tirana, Peace Institute, Ljubljana and Foundation MediaCentar Sarajevo.

[34] See: European Commission Country Reports – Bosnia and Herzegovina. Available at https://bit.ly/3NqWXwm.

[35] Reporting Diversity Network. Monthly Monitoring Highlights. Available at https://bit.ly/3u5U0dP.

[36] Sokol, A. (2020). Propaganda, disinformation and hate models of media and communication in Bosnia and Herzegovina. SEENPM, Tirana, Peace Institute, Ljubljana and Foundation MediaCentar Sarajevo.

[37] Covid-19 Vaccine Tracker. In December 2021, 22.1% of population in Bosnia and Herzegovina was fully vaccinated, and 25,5% had received at least one dose. Available at https://bit.ly/3P1U86v.

V. The role of digital media literacy

5.1 Exploring digital media literacy

Digital media literacy (DML) is a dynamic concept that rapidly evolves as a result of developments in technology, society, culture, economics and politics. DML includes the development of skills and competencies as well as the confidence to effectively function in a world where digital media is deeply integrated into almost all aspects of our daily life.

At the most basic level, DML is the ability to access digital media content. However, it could be argued that, given the range of issues linked to digital media as previously outlined in this report, in order to be truly digital media literate, people must be able to reflect and think critically and make informed decisions about their media choices based on critical analysis and reflection. This involves understanding how the media works, who owns the media, the economics behind it, how it is regulated and how media is created.

Digital media literacy also facilitates engagement in the public sphere and the use of creative and participatory technologies and services. In addition, DML skills address issues of online safety and security, and more recently issues relating to how data is used and how algorithms work.

How DML is defined is often based on factors such as existing policy frameworks, political priorities and the needs of specific groups. There are significant areas of overlap between DML and other 'literacies' such as media literacy, media and information literacy, digital literacy and data literacy – which adds to the difficulty of securing a universally agreed definition of DML. In particular, the terms digital media literacy, media literacy and media and information literacy are often used interchangeably.

In 2018, the revised Audiovisual Media Services Directive (AVMSD) of the European Union refers to media literacy as the:

> "skills, knowledge and understanding that allow citizens to use media effectively and safely. In order to enable citizens to access information and to use, critically assess and create media content responsibly and safely, citizens need to possess advanced media literacy skills. Media literacy should not be limited to learning about tools and technologies, but should aim to equip citizens with the critical thinking skills required to exercise judgment, analyse complex realities and recognise the difference between opinion and fact".[38]

UNESCO promotes the composite concept of media and information literacy (MIL) and describes it as:

> "an interrelated set of competencies that help people to maximise advantages and minimise harm in the new information, digital and communication landscapes. Media and information literacy covers competencies that enable people to critically and effectively engage with information, other forms of

[38] European Union. (2018). Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 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 changing market realities, para. 59.

content, the institutions that facilitate information and diverse types of content, and the discerning use of digital technologies".[39]

The Council of Europe views DML as a transversal issue that is addressed by different bodies and departments of the Council of Europe and cuts across many different, yet interrelated policy areas such as freedom of expression; media freedom; media plurality; media ownership, hate speech; online radicalisation; quality journalism; digital exclusion; online safety and security.

So, while definitions of DML will vary between different countries, regions and even organisations, there is general agreement on what it means in real terms: the ability to responsibly and safely use digital media services, maximising opportunities and minimising risks.

5.2 The policy context

As a constantly evolving concept, encompassing many elements and a variety of different policy topics, DML is difficult to categorise into a single policy area. This can result in a situation where multiple state departments or agencies are working to promote aspects of DML, but in an environment where an over-arching strategy with a single body responsible for leadership, coordination, funding or evaluation is absent. This can lead to problems in terms of securing long-term funding and cross-sector support for DML projects.

Despite the muddy policy landscape that DML finds itself in, it is rising on policy agendas across the world, considerably prompted by the information disorder and the perceived threat that mis-, dis- and mal-information can pose to health, well-being and the democratic functioning of society.

For example, under Article 33 of the revised AVMS Directive, there is now a legal obligation for EU Member States to "promote and take measures for the development of media literacy skills".[40]

The Council of Europe has noted the importance of the development of media literacy skills in a significant number of Recommendations. Of particular note are the following:

- *Recommendation (CM/Rec(2020)1) of the Committee of Ministers to member States on the human rights impacts of algorithmic systems* calls on governments of member States, in co-operation with all relevant stakeholders, including from the private sector, the media, civil society, educational establishments, and academic and technical institutions, to encourage and promote the implementation of effective and tailored media, information and digital literacy programmes to enable all individuals and groups to: understand the functions and ramifications of systems employing automated decision making; make informed decisions in the use of such systems**;** enjoy the benefits arising from the use of algorithmic systems; and minimise the exposure to threats and risks stemming from the use of such systems.

[39] UNESCO. (2022). About Media and Information Literacy. Available at: https://bit.ly/3c9BlYL.
[40] Revised AVMSD, Article 33.

- *Recommendation (CM/Rec(2022)4) of the Committee of Ministers to member States on promoting a favourable environment for quality journalism in the digital age* recognises media and information literacy as a critical factor in enabling all age groups to deal with the media in a self-determined way to: effectively access media content and critically analyse information, thus empowering them to understand how media content is produced, funded and regulated, as well as have the confidence and competence to make informed decisions about which media they use, and how they use them; understand the ethical implications of media and technology, and communicate effectively, including by interpreting, creating and publishing content. The CM/Rec(2022)4 calls on member States to provide maximum support to MIL initiatives, which promote the skills and knowledge required to recognise and value quality journalism or illustrate the benefits of quality journalism to various audiences.

- *Recommendation (CM/Rec(2018)1) of the Committee of Ministers to member States on media pluralism and transparency of media ownership* specifically includes guidelines aimed at developing media literacy and calls on Member States to: adopt/develop appropriate legislative provisions; adopt coordinated state-wide media literacy policy and implement it through multi annual plans involving a wide range of stakeholders; include media literacy in school curricula at all levels and in lifelong learning cycles; encourage media to promote media literacy through their policies, strategies and activities; ensure that local regulatory authorities have the scope and resources for the promotion of media literacy.

- *Recommendation (CM/Rec(2018)2) of the Committee of Ministers to member States on the roles and responsibilities of internet intermediaries* considers the promotion of media and information literacy skills for accessing and managing the digital space as essential. It calls for the protection and empowerment of children regarding their safe and informed access to and exercise of rights in the digital environment, to be ensured via an enhancement of cognitive, technical, social and critical skills among girls and boys, parents and educators on how to deal with an information and communications environment that provides access to degrading content of a sexual or violent nature.

There is also increasing evidence that DML is being viewed as an essential life skill requiring life-long learning. For example, in October 2021, the Irish Government published a 10 year 'Adult Literacy for Life' Strategy[41] which placed Digital Literacy on an equal footing with Numeracy and Literacy, constituting thus an essential skill.

5.3 Digital media literacy roles and responsibilities

The importance of working in collaboration at national, regional and local levels is clearly outlined in the Council of Europe recommendations noted above, and also echoed in a range of other policy positions.

The revised AVMS Directive explicitly underlines the importance of multi-stakeholder cooperation in approaching media literacy and calls on both media service providers and video-

[41] Government of Ireland. (2021). Adult Literacy for Life. Available at: https://bit.ly/3PjAEuF.

sharing platforms providers to work in cooperation with all relevant stakeholders to promote the development of media literacy in all sections of society, for citizens of all ages, and for all media.

The 2016 report 'Mapping of media literacy practices and actions'[42] for the European Commission and the Council of Europe also highlights the importance of cross-sector collaboration in relation to delivering successful media literacy projects with over one third (228 of 547) of the featured projects categorised as 'cross-sector collaboration'.

An exploration of media literacy stakeholders carried out as part of the above-mentioned report identified seven main categories of media literacy stakeholders, namely:

- Civil society, (foundations, not-for-profit organisations arts and cultural bodies, charities, think-tanks, communities of interest and community networks (sports, health, hobbies and religion);
- Public authorities (government Ministries/departments, local authorities and councils, semi-State organisations, policy-makers);
- Academia, (academic institutions, universities and third level education providers);
- Audiovisual content providers (public service, commercial and community broadcasters, on-demand providers and content providers for online games and apps);
- Online platforms (social media websites and search engines);
- Media Regulatory Authorities;
- Journalist Associations.

Working in partnership works best when all partners work to their individual strengths and where possible, in line with their own strategic objectives. Having said that, each of these sectors has a distinct but important role to play in the promotion of DML, especially as part of a long-term programme aimed at changing people's behaviour around their use of digital media.

5.4 The challenges of developing and implementing digital media literacy programmes and initiatives.

Despite the recognition of the importance of DML from a policy perspective, there are significant challenges facing the development and implementation of DML programmes and initiatives.

DML skills empower people to engage with, and get the best from, evolving digital devices and services. However, as technology evolves, the opportunities, risks and skills required to manage them will also need to evolve. As such, DML requires a life-long approach to skills development.

[42] Council of Europe:European Audiovisual Observatory. (2016). Mapping of media literacy practices and actions in EU-28. Strasbourg.

The regular updating of skills is likely to involve regular behavioural changes, which can be a difficult process to implement, as well as monitor and measure.

Changing behaviour should be based on a theory of change model that helps individuals to i) recognise and accept that they need to develop new skills; ii) motivate them to take the first step; and iii) provide them with the support required at every stage of their personalised learning journey. No single organisation, or even sector, can achieve this on their own.

Given the increasing acceptance of the importance of DML, a key question is 'who is responsible for DML?' Due to the complex policy environment that DML finds itself in, it is often the case that there is not one single organisation or body vested with the responsibility of developing DML strategy and policy, providing funding, and implementing and evaluating initiatives.

In the context of Bosnia and Herzegovina this challenge is compounded by the complexity of the network of institutions and their jurisdictions in the country, as well as the fact that the state is still burdened with the political crisis that perpetuates and disables stakeholders to act on long-term issues such as education and digital media literacy.

This can be problematic in terms of overall coordination and effectiveness, especially if DML is recognised as the complex and long-term activity that it is, requiring significant levels of coordination, funding, monitoring and evaluation at an overall level.

In particular, there is growing recognition of the need for better evaluation frameworks for DML. Historically, evaluating the impact of DML interventions has been notoriously difficult and often evaluation simply does not take place. Of the 68 media and information literacy projects analysed by the 2020 Council of Europe's Committee of experts' study '*Supporting Quality Journalism through Media and Information Literacy*'[43], one-third did not undergo any form of evaluation or assessment.

There are many reasons that measurement, assessment, and evaluation of DML projects and initiatives do not take place, including:

- challenges around measuring the acquisition of skills, often in the absence of a robust standard baseline to refer to;
- the lack of established criteria and methods for assessing projects;
- chronic underfunding of DML projects and short-term funding arrangements mean that robust data collection over a period of time (which would provide essential change over time information) is beyond the reach of most projects;
- the fragmented nature of how DML programmes are developed and implemented and the impact this has on the potential for assessing the effectiveness of current interventions.

This final point was noted in the 2021 LSE/Ofcom's final report on '*Rapid evidence assessment on online misinformation and media literacy*': "In particular, efforts to educate audiences and change the ways they engage with information are fragmented across educational contexts,

[43] Chapman, M., & Oermann, M. (2020). Supporting Quality Journalism through Media and Information Literacy. (DGI(2020)1). Prepared by the Committee of experts on quality journalism in the digital age (MSI-JOQ), Strasbourg.

platform-specific initiatives, media-related initiatives and fact-checking services. As a result, their impact on audience knowledge, attitudes and behaviour towards misinformation is unclear."[44]

As strengthened DML becomes ever more fundamental in the complex online environment, it is crucial that media literacy practitioners are able to effectively monitor the results of their initiatives and measure these against their goals. This is done in order to understand the impact that different models and programmes might have, how sustainable and scalable they are and their potential for replication in different countries, cultures or environments.

However, perhaps the biggest challenge for DML is human emotion. While the individual and social benefits of developing DML are clear, it would be a mistake to think of DML as some kind of magic bullet or panacea to the ills of information disorder.

People form opinions and beliefs for complex reasons. By equipping citizens with the cognitive skills to analyse the content and the context does not mean they will do it every-time, or that cognitive reason will win over moral and socio-emotional factors and confirmation bias.

Having said that, DML on its own will not 'fix' the Information Disorder but it can operate as very strong first line of defence to a whole range of issues linked to our use of, and behaviours around, digital media technology and services.

5.5 Digital media literacy in the context of Bosnia and Herzegovina

The promotion of Digital Media Literacy in Bosnia and Herzegovina is still at an early stage of development at all levels: policy formulation, policy implementation, current practices.

In terms of defining DML, there is no agreed definition[45] in Bosnia and Herzegovina. As a concept, DML is not well known and there is little grasp of what the broader 'literacies' are – such as media literacy, media and information literacy and digital literacy. Regional research studies use definitions of media literacy that are usually project based, reflecting thus the projects' goals. There are often differences in how stakeholders understand DML, with some of them defining it too narrowly and not including broader elements such as internet infrastructure and data literacy.

A particular challenge for Bosnia and Herzegovina is the governance structure of the country. Currently there are 14 ministries[46] in charge of developing, implementing and supervising DML (or media and information literacy as it is often described in policy papers). As local analysts point out, "[i]initiatives to develop comprehensive policies will inevitably be confronted with the complex system of responsibilities but also with the lack of political will for cooperation and coordination".[47]

[44] Edwards, L., Stoilova, M., Anstead, N., Fry, A., El-Halaby, G., & Smith, M. (2021). Rapid evidence assessment on online misinformation and media literacy: final report for Ofcom.

[45] There is also no agreed definition of media and information literacy which is the term more commonly used in policy papers in Bosnia and Herzegovina.

[46] The Ministry of Civil Affairs of Bosnia and Herzegovina, entity education ministries, Brčko District Education Department, and the ten cantonal ministries in the Federation of Bosnia and Herzegovina.

[47] Hodžić, S. (2019). Media and Information Literacy in Bosnia and Herzegovina: Numerous Civil Society Initiatives and Lack of Public Policies. p. 87. In Media and Civil Society Development Foundation Mediacentar. *Media and Information Literacy*

During the interviews undertaken for this study, it was noted that civil servants in Bosnia and Herzegovina are open to DML activities, but there is no overarching strategic coordination. However, the topic is not completely missing from the policy radar. Following this, the Policy for the Development of Information Society in Bosnia and Herzegovina (2017-2021) acknowledged "a low level of digital literacy and skills".[48]

Bosnia and Herzegovina formally applied for EU membership on 15 February 2016. In May 2019, the European Commission (EC) adopted its Opinion (Avis) on the country's EU membership application. The Opinion identified the priorities for the country to fulfil in view of opening EU accession negotiations.[49] MIL is discussed in the context of the negotiations chapter on Information Society and the Media, requiring harmonisation of the national legislation with the *acquis communautaire*, including the European Commission media literacy Recommendations of 2009 (2009/625/EC).[50] Still, tangible progress is almost absent. In its 2021 Progress Report for Bosnia and Herzegovina, the European Commission signals that "Bosnia and Herzegovina is at an early stage of preparations in the area of information society and media. No progress was achieved in implementing last year's recommendations, which remain valid. The legislation and strategic framework are not in place and not aligned with the EU acquis".[51] A similar conclusion appeared also in the 2020 report,[52] noting the stagnation of the media sector.

Despite the particularly complex policy environment for DML in Bosnia and Herzegovina and the lack of progress on developing a state-level strategy, DML issues are being addressed.

As a local report reveals, "Communications Regulatory Agency of Bosnia and Herzegovina (CRA) was the first public institution to start using the term media literacy, some ten years ago. Since then, it has commissioned relevant studies, adopted rules, developed guidelines for broadcasting – primarily with a view to protecting minors and consumers – and organised events and campaigns."[53]

The Ministry of Communications and Transport of Republika Srpska (RS) is also an active actor, who, in cooperation with the RS Ministry of Education and Culture, the Pedagogical Institute and the public broadcaster Radio-Television of Republika Srpska, launched an awareness campaign on new technologies and potentially harmful content (violence,

in the Western Balkans: Unrealized Emancipatory Potential. (2019). Sarajevo, Bosnia and Herzegovina. Available at: https://bit.ly/3o3ijWk.

[48] Politika razvoja informacionog društva bosne i hercegovine za period 2017 – 2021 (Policy for the Development of Information Society in Bosnia and Herzegovina (2017-2021). Available at: https://bit.ly/2MlOY6c.

[49] European Commission. (2019). Communication from the Commission to the European Parliament and the Council – Commission Opinion on Bosnia and Herzegovina's application for membership of the European Union. SWD(2019)222 final. Brussels.

[50] European Commission. (2009). Commission Recommendation 2009/625/EC of 20 August 2009 on media literacy in the digital environment for a more competitive audiovisual and content industry and an inclusive knowledge society. OJ L 227, 29.8.2009, p. 9–12.

[51] European Commission. (2021). Commission staff working document, Bosnia and Herzegovina 2021 Report. Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (SWD(2021) 291/2 final). Brussels.

[52] European Commission. (2020). Commission staff working document, Bosnia and Herzegovina 2020 Report. Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (SWD(2020) 350 final). Brussels.

[53] Hodžić, S. (2019). Media and Information Literacy in Bosnia and Herzegovina: Numerous Civil Society Initiatives and Lack of Public Policies. p. 87. In Media and Civil Society Development Foundation Mediacentar. *Media and Information Literacy in the Western Balkans: Unrealized Emancipatory Potential*. (2019). Sarajevo, Bosnia and Herzegovina. Available at: https://bit.ly/3o3ijWk.

advertisements, stereotypes, pornography) and regulation and self-regulation (strategies and laws, codes of ethics for the media and advertisers).

The local analysts consider that "any significant integration of the MIL concept in the curricula in individual administrative units, can be primarily ascribed to the lack of resources and lack of interest on the part of decision-makers".[54]

As is the case in many other countries, civil organizations are actively trying to fill the gap and are responsible for an array of initiatives that monitor or promote DML. Workshops and training sessions are among the most frequently used forms, monitoring and advocacy are others, as well as initiatives of some private platforms.

In Bosnia and Herzegovina, a number of sectors appear to be 'missing' from the DML landscape. As a rule, the local reports reveal there is no significant participation of the public media in existing DML interventions. Similarly, public libraries, community-based public institutions and cultural institutions, as well as policy-makers and parliamentarians are also missing from the DML conversation in Bosnia and Herzegovina. One exception to this is the work that Mediacentar is doing with the public library in Sarajevo.

Funding for the projects and initiatives led by civil society organisations is almost completely dependent on the international donor sector.

DML interventions are mainly youth and urban focused. This may be related to easy access to networks through which DML interventions can be delivered. Some youth groups are active in the area of DML including the Network of Highschool Students.

[54] Hodžić, S. (2019). Media and Information Literacy in Bosnia and Herzegovina: Numerous Civil Society Initiatives and Lack of Public Policies. p. 87. In Media and Civil Society Development Foundation Mediacentar. *Media and Information Literacy in the Western Balkans: Unrealized Emancipatory Potential*. (2019). Sarajevo, Bosnia and Herzegovina. Available at: https://bit.ly/3o3ijWk.

VI. Building resistance to information disorder

The following guidelines are based on an examination of recent research projects and digital literacy practices in different countries and contexts. They are understood as the best practices currently available to explain the disinformation problem and equip people with the necessary knowledge and skills to make informed choices and avoid being deceived and manipulated by false/misleading information.

Employed in different educational and cultural settings, these best practices can also be adapted to different age groups according to various needs. For this reason, in this section they will be presented as a set of general guidelines to tackle disinformation. Examples and resources about the topics outlined below are available in the next Section: An Educators Guide.

6.1 The information

6.1.1 Attention

The disinformation crisis is, in some sense, an attention crisis. It is important to check our information 'diet', through paying attention to how much information we are exposed to on a daily basis. This can be done by assessing the platforms we use, how much time we spend on them, and the quality of this experience. Critical thinking, which is essential to avoid disinformation and manipulation, depends on deep attention.[55] This means that we need to be aware of the way we consume information online and how we use our attention, especially when consuming information that is critical for important decisions that we make. For instance, if we need to make a decision that will directly affect our health and the well-being of our community, we need to make sure we pay attention and fully understand the information we are consuming, without the distractions posed by social media memes, funny emojis or short, decontextualised messages received in messaging platforms.

6.1.2. Search

Ask yourself – how do I find information online? Search skills involve the ability to find good quality information using the tools available in the digital world. Search engines, such as Google, Bing and Yahoo, are the most common way to find information online.[56] They offer filters and other tools to make your search more dynamic and accurate, so learning how to operate these tools improves your chance to find the information you want and avoid unnecessary distractions. For instance, you can filter your search by date to avoid results from a period that does not correspond to your wishes, or surround your search terms with quotation marks to get the precise keywords in the proposed order.

6.1.3. Sources

The first question one should ask when encountering any piece of information is: where does it come from? It has never been so easy to create and spread content online, which means that

[55] Caulfield, M. (2018) *Recalibrating Our Approach to Misinformation*. Available at: https://bit.ly/2QHTcKP.

[56] Statista. (2022). Worldwide desktop market share of leading search engines from January 2010 to January 2022.

there is a lot of content producers in the digital world creating websites, blogs, podcasts, videos etc. Unfortunately, not all these producers have good intentions or know how to create a reliable content, so the first task is to check the source. Following that, the second question should be: is this source reliable?

There are many ways to assess the reliability of a source, and the most effective ones are the following:

- Check if the name of the author is available, and who they are – if you cannot find any information about the author this should be a point of concern.
- Check if the date on which the content was produced is available – it is important to know whether this information is recent or not.
- Check if the source is sponsored by a person or organisation – this may influence editorial decisions.
- Check if it is possible to assess the reputation of the source. For example, if you are looking for information about health, you need to make sure that the source has the proper reputation to produce content about health (a peer-reviewed academic journal or a health organisation, such as the WHO, are examples of that).
- In the case of websites, check the domain. Domains such as **.com**, **.net** and **.org** can be bought by anyone, whereas domains such as **.edu** and **.gov** are reserved to educational institutions and governments, respectively. You can also check the domain owner information using, for instance, www.whois.com.

6.1.4. Message

Digital media messages may come in various forms, such as a plain text, an image, a video, a graphics interchange format (GIF), an audio file. They may also come in different formats, including a news story, a movie, a documentary, a report, a meme, a social media post, or a digital sticker. Bad actors, that is people or bots (automated user accounts) that actively spread disinformation and sow discord, may use different methods to manipulate the information in these messages in various ways.

In this regard, DML does offer some techniques to assess their reliability, as following:

- Pay attention to the language used. Messages with fake or misleading content usually use sensationalist, exaggerated and emotional words or claims (commonly known as clickbait) to draw your attention, make you feel angry/happy/afraid/hopeful and then share the information without thinking too much about it.
- Read beyond the headlines – it is very important to have access to the full text rather than only relying on the headline. The latter can be misleading and lacking the full context of the story.
- Check if the content is being sponsored. Some advertisements might be created to look like news stories or scientific reports, but they are actually trying to promote a product or sell something to you. This does not mean that the information they provide is necessarily false, but it means that they are biased towards the perspectives of the sponsor.

- Check who else is talking about the topic. If you receive a piece of information and you cannot find it anywhere else on the web, it is very likely that this information is not accurate.
- Check other sources. Even if the information you received is factual, there might be other perspectives that you should consider. Never rely on only one source of information.
- In case you cannot find reliable information in other sources, check if fact-checkers have analysed the information and have reached a conclusion about its authenticity.
- Be aware of how images can be easily modified to deceive you. Try to learn some simple editing skills to see how an image can be doctored. This will help you assess how realistic an image is. You can also verify the authenticity of images using, for instance, Google reverse image search.
- Videos can also be easily manipulated. Again, learning some basic editing skills can help you understand how people can manipulate videos. It is also advisable to check how *deepfakes* are created as they are increasingly becoming popular in the web.
- Always check your biases in relation to the information you received (please see more on this topic below).

6.2 The tech industry

6.2.1. Business model

The business model of tech companies such as Google and Facebook favours quantity over quality. Online monetization drives ad revenue, and not per se healthier public discussions. This means that the more clicks, likes, views a content has, the more money they can make – regardless of the quality of the content. Even though tech companies employ content moderators and have recently introduced some measures to curb the spread of false information, studies have shown[57] that the amount of disinformation on these platforms is still dangerously high. For this reason, the fact that a piece of content has millions of clicks, likes or views does not necessarily mean that it is of good quality, accurate or reliable. Do not fall for the numbers. Instead, always perform a qualitative analysis of the content you are consuming.

6.2.2. Algorithms

Digital platforms use users' data to provide them with content that is tailored to their needs and preferences. This means that the content we see has been organised by algorithms to make us feel comfortable and engaged in the digital space. In this sense, it is important to understand that the information we access in these spaces does not necessarily reflect the opinions and expectations of the majority of people; it is simply a personalised experience of the digital world. If you come across a piece of information many times over a short period of time, make sure you are aware that this can be simply because the content is personalised for you, and does

[57] Culloty, E., Park, K., Feenane, T., Papaevangelou, C., Conroy, A., & Suiter, J. (2021). Covidcheck: assessing the implementation of EU code of practice on disinformation in relation to Covid-19. Broadcasting Authority of Ireland (BAI). Available at https://bit.ly/3c9Po05.

not necessarily have to do with the authenticity or reliability of the information. Algorithms constantly promote sensationalist, conspiratorial and misleading content over factual information, so being aware of this feature enhances your chances to make informed decisions and avoid manipulation.[58]

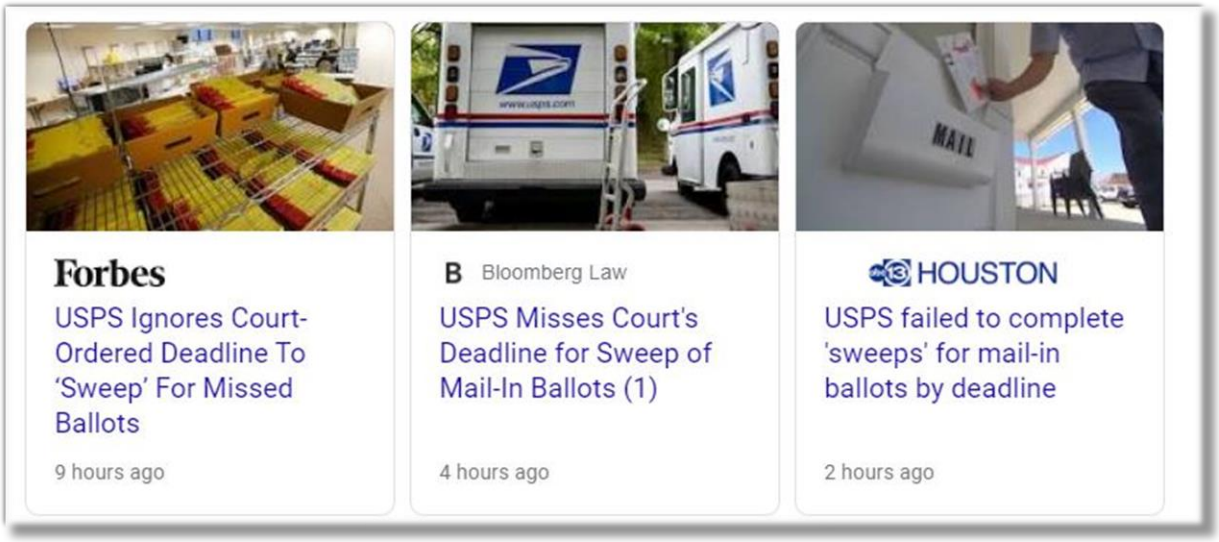
6.3 The news

News outlets are normally considered reliable sources of information. This is because the work of a journalist involves adhering to high standards of ethics, authenticity, and credibility. Furthermore, news outlets are accountable for the news they provide, unlike anonymous sources.

However, this does not mean that one should simply read (or watch, or listen to) the news passively, taking everything at face value. On the contrary, one should always read the news with a 'critical eye'. This means paying attention to how the story is constructed, analysed and framed.

The same story can be told in many different ways, taking different perspectives and approaches, and the way a journalist decides to tell this story reveals a lot about how impartial, independent, ethical and objective their reporting is. As consumers of news, we need to learn how to assess the quality of journalistic standards when we come across news stories, checking the sources, analysing the evidence, examining the language and evaluating potential biases.

For instance, a simple change in the word we use to tell a story may affect the perception of the audience in relation to the facts being described. Below, there are 3 headlines about the same story – The U.S Postal Service (USPS) was ordered by a court to sweep mail-processing facilities in search for missing ballots during the last U.S election.



The first media outlet uses the verb 'ignore', which suggests that the USPS intentionally refused to acknowledge the order, as if it was not something important. On the second headline,

[58] Howard, P. N., Neudert, L., Prakash, N., & Vosloo, S. (2021). Digital misinformation/disinformation and children. UNICEF. Available at: https://uni.cf/3AHaZr.

the verb used was ‘miss’, which provides a much milder connotation and does not suggest anything about the intentions of the company. Finally, the third news outlet uses the verb ‘fail’. In this case, depending on the interpretation, it can either suggest that the company was simply not successful in meeting the deadline (because of incompetence, for instance), or that it neglected the order, which would be more similar to the connotation of the first example.

It is also important to know who owns or sponsors the news outlet, and what the exact interests of the owner or sponsor are. If, for instance, you know that a news outlet is linked to a political party, an ethic movement, or a religious association, you must take this into consideration when evaluating its content. The fact that a news outlet is linked to certain groups of interest does not automatically mean that its news will be false or misleading, but it certainly suggests that it may be biased towards the interests of the groups, which can decisively affect its impartiality and independence. For instance, as mentioned in a previous section, some media outlets in Bosnia and Herzegovina have been set up by political parties, which opens the possibility that these channels will be used to favour a specific political view to the detriment of others. In this case, it is important that the reader knows who owns the media outlet so that they can be aware of the potential biases associated with its political leanings.

6.4 The disinformation machine

Bad actors use many techniques to draw our attention and make us believe in the message they are spreading. Being aware of these techniques can help us distinguish between a legitimate and false story.

6.4.1. Fake appearance

People and organisations may pretend to be something/someone they are not. For instance, individuals who claim to be experts in topics which they have only a superficial knowledge about; or institutions that pretend to be news outlets but in fact are just propagators of false stories. In some cases, individuals can even impersonate a real person by using their photos and personal details, and organisations can also mimic the name and the appearance of reputable institutions to deceive people. For this reason, it is important to be always alert and check the details of the person/organisation you are following. It is also possible to report impersonation directly to a digital media platform, even if you are not registered or do not have a personal account.

6.4.2. Emotion

Bad actors know that a very effective way to engage people is to play to their emotions. When we are very happy or very angry; or when something triggers hope or fear in exceptional ways, we tend to deal with information with more enthusiasm and passion[59] – this results in engagement, comments, and shares. Some emotions get in the way of a more rational thinking, which is a perfect trap for people to share false information without thinking or reasoning correctly. The simple awareness of this feature can make us stop and think before engaging with a piece of information and sharing it around.

[59] Martel, C., Pennycook, G., & Rand, D. G. (2020). Reliance on emotion promotes belief in fake news. *Cognitive research: principles and implications*, *5*(47).

6.4.3. Discredit

One of the most common tactics employed by bad actors is to discredit anyone who opposes their views.[60] Disinformation is based on lies or at least on misleading arguments, and for this reason it can always be debunked, even if it takes some time. So, if bad actors manage to discredit the people who are trying to expose their lies, they can turn the attention away from them, at least for a while. There have recently been many fierce attacks to journalists, scientists, fact-checkers and other professionals simply because they are trying to bring the facts and empirical evidence to the surface. In this case, it is important to understand what makes a reputable and decent individual or institution. Reputation is not something built overnight; it actually involves long-term dedication/commitment, public recognition, titles/awards, accredited expertise, and the production of sound and reliable knowledge. When faced with a message trying to discredit a person or an institution, always question the underlying reasons for this, and do a quick investigation to check if the arguments stand or if they are just trying to turn your attention away from the real problem.

6.4.4. Conspiracy theories

Conspiracy theories are multiple and diverse, but in general they aim to explain an event or phenomena through simplistic and superficial stories based on few facts and plenty of imagination. They can be very appealing as they offer an eccentric and fantastic explanation that usually involves people of power (the government, the media, the health authorities, the actors from Hollywood etc.) trying to secretly manipulate individual's minds and behaviours, and those who 'discover' this 'secret' are supposedly rewarded with a very privileged knowledge. This can be particularly attractive in times of severe stress and uncertainty whereby everyone is looking for answers and the future looks unclear. During the COVID-19 pandemic, for instance, there have been many conspiracy theories spread on digital media platforms, with stories claiming that the virus was a hoax; it was created by the Chinese government to destabilise the West; that vaccines had chips to manipulate people's minds and cause them to become infertile; or that social distance measures were actually an attempt by a hidden world government to restrict peoples' freedom.[61]

Believing in these stories can give a sense that we are in control of the situation, and also a feeling of exclusiveness and belonging to a very special group. The best way to debunk conspiracy theories is, first, to check if you are believing in something only because it makes you feel better, or because there are strong evidence supporting the arguments. Then, it is important to learn as much as possible about the topic being discussed and look for gaps in the arguments. The conspiratorial narrative is always fragile in terms of empirical and scientific evidence, and lacking rational logic.[62]

[60] The Bad News Game. (2017) Available at: GetBadNews game (Info Sheet for Educators) - SALTO (participationpool.eu).

[61] Adetunji, J. (2021). 'Conspiracy theories about the pandemic are spreading offline as well as through social media.' *The Conversation*. Available at: https://bit.ly/3RtGRWb.; Pertwee, E., Simas, C. & Larson, H.J. (2022) 'An epidemic of uncertainty: rumours, conspiracy theories and vaccine hesitancy'. *Nature Medicine* (28)**,** pp. 456–459.

[62] Brotherton, R. (2015). *Suspicious minds: Why we believe conspiracy theories*. Bloomsbury Publishing.

6.5 Psychological traits

6.5.1. Confirmation Bias

There is extensive evidence[63] showing how psychological traits get in the way of logical reasoning. The most popular one that is always associated with the problem of disinformation is the confirmation bias. Confirmation bias is defined as the tendency we all have to believe, favour or support that type of information that is in line with and confirms our previous beliefs and convictions. Even though we cannot 'turn off' our bias, the simple fact that we are aware of it can have many positive results in our daily consumption of information and news. In essence, if you come across a piece of information that makes you feel happy and satisfied, the first thing you must enquire about is how this feeling can harm your ability to assess the reliability of the information. Good quality information is not information that makes us happy; it is information that is based on facts and grounded on empirical evidence.

6.5.2. Illusory Truth Effect

This effect is related to the tendency we have to believe a piece of information is true after repeated exposure to it.[64] Bad actors know that repeated statements are easier to process, and, in the long run, they sound truer than new ones. The idea that 'a lie repeated a million times becomes the truth' has been largely used throughout history, especially in propaganda campaigns. This is no different with the current disinformation crisis. It is very common to hear arguments such as "everyone around me is talking about the same thing, so it must be true". It is important to understand that this is not necessarily the case. First, if you are exposed to certain comments on social media, for instance, this might be because of algorithms pushing information that conforms your preferences, as explained above. Second, it might be the case that because a false story is repeated so many times, people who are distracted, will assume it is true because of the amount of time they have come across this information, and not because of the quality of the information per se. Being and remaining aware of this repetition technique, which is used to create the illusory truth effect, is of great importance to prevent jumping to hasty conclusions and avoiding being misled by quantity over quality.

[63] Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of general psychology, 2*(2), 175-220.; Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation. *American educational research journal*, *54*(1), 3-34.

[64] Pennycook, G., Cannon, T. D., & Rand, D. G. (2018) Prior exposure increases perceived accuracy of fake news'. *Journal of experimental psychology: General*, *147*(12), pp. 1865–1880.

VII. An educators' guide

These teaching guidelines are based on critical media literacy practices[65] aimed at empowering people to become critical and responsible users of digital media. The pedagogical framework is grounded in critical pedagogy[66] and transformative media education[67] that promotes a dialogic, engaging and collaborative learning experience whereby participants reflect on their lived experiences with the assistance of the educator.

In the context of disinformation, this means understanding the structural dynamics of digital media through active participation in production, debates, reflection and transformative action.

The following teaching guidelines will present suggestions of how learning activities can be designed to address the most pressing issues of disinformation in the context of Bosnia and Herzegovina.

To date, most DML teaching guidelines have been designed to address the needs of young people, and to some extent the needs of adults in general.[68] Resources and training for old people are still in short supply and there is a general understanding that for this age group, a lot remains to be done.[69]

The teaching guidelines will be divided by topics and will include some recommendations for their application to the following age groups:

- CH: children (9-13 years old);
- TY: teens and young adults (14-26 years old); and
- OP: old people (over 60 years old).

These learning activities can be applied in schools (for children and teenagers), universities (young adults), libraries and cultural centres (adults and old people). Each of these educational settings have their own structure and resources, and for this reason the following activities need to be adapted accordingly.

The activities are suggestions of how DML knowledge and skills can be explored in an educational setting. They do not need to be followed as they are presented in this study. Educators can adapt them according to their needs and use the elements they think are more effective to address the topic they are teaching.

In schools, teachers of different subjects can integrate DML practices into the classroom in many different ways. For instance, language teachers can use DML to explain how language is important in the construction of media messages and for the evaluation of news articles.

[65] Kellner, D. & Share, J. (2019) The Critical Media Literacy Guide – Engaging Media and Transforming Education. Leiden: Brill/Sense.

[66] Freire, P. (1998). Pedagogy of Freedom. Maryland: Rowman and Littlefield.

[67] Mihailidis, P., Shresthova, S., & Fromm, M. (2021) *Transformative Media Pedagogies.* New York: Routledge.

[68] Rasi, P., Vuojärvi, H., & Ruokamo, H. (2019). Media Literacy Education for All Ages. Journal of Media Literacy Education, 11(2), p. 1-19.

[69] Rasi, P., Vuojärvi, H. and Rivinen, S. (2021). Promoting Media Literacy Among Older People: A Systematic Review. *Adult Education Quarterly*. 71(1), p. 37–54.

History teachers can get students to produce a documentary about a historical event, explain the difference between an opinion and a historical fact, and show them the importance of collecting sound and reliable information to explain events that took place in the past.

Maths's teachers can show students how easy it is to lie and mislead with statistics. They can also demonstrate how bad actors can manipulate numbers to their favour.

In biology/science lessons, teachers can explore the importance of empirical evidence for scientific claims and show how dangerous it can be when one trusts pseudoscience to make important decisions.

Information and communications technology (ICT) classes can go beyond the more technical aspect of technology and get students to critically think about the ways they use and create digital media content, and the many challenges posed by digital platforms.

In arts, teachers can explore how images convey meaning, and how easy it is to manipulate pictures to deceive people. It is also possible to create cross-curricular projects whereby three or four different disciplines work together.

The resources available in each learning activity are normally designed for specific ages, but some of them can be adapted to different age groups. Therefore, potential adaptation of each resource should be considered based on the target group.

The following teaching approaches will form the core strategies of all recommendations, regardless of age group:

Production: Practical, hands-on activities involving the production of digital media are an essential aspect of media literacy education.[70] They provide participants with the opportunity to understand how digital content is created, how editing plays a key role in meaning-making practices, and how the different modes of communication (text, image, sound etc.) can be combined in specific ways to convey specific meanings. Understanding the language of digital media equips participants with digital and critical skills, Both skills help in assessing how media messages are constructed, eventually contribute to development of an analytical thinking towards how false messages are created and spread.

Digital production requires the access to digital technology, such as internet connection, computers, tablets, and smart phones. In the context of Bosnia and Herzegovina, it is understood that not all schools in the country are equipped with these technologies, so participants' smartphones can be used in this case (if they are available). Also, in some cases the learning practices can be adapted to a non-digital experience. For instance, if participants cannot create a digital video, they can at least design a script and storyboard for a movie. If they cannot create a website, they can use white boards to draw the structure of the website and plan the content.

Lived culture: Digital media experiences are all about people's lived culture, and it is important to bring this connection to the learning experience.[71] Participants' popular culture references can be used to create a more dynamic experience using real life situations as a

[70] Buckingham, D. (2003). Media education: Literacy, Learning, and Contemporary Culture. Cambridge: Polity Press.; See also: Burn, A. & Durran, J. (2007). Media Literacy in Schools – Practice, Production and Progression. London: Sage.

[71] Potter, J. & McDougall, J. (2017) Digital Media, Culture and Education: Theorising Third Space Literacies. London: Palgrave Macmillan.

background for the topic discussed. That is why it is very important that the educator applies a dialogic strategy whereby participants will have the chance to bring their own media and cultural experiences to the learning space, expressing their ideas, engaging in debates with their peers and reflecting on how what they learned can be applied to their lives in practical ways.

Teamwork: Working in teams allow participants to share ideas, engage in productive discussions, and work together to achieve common goals. It promotes collaboration, which can be very useful for project-based activities, for instance, and also for practices that involve the production of something, such as a digital artefact.[72] People working collaboratively can use their individual perspective, knowledge, and skills to solve problems, sharing responsibilities and assigning specific roles to different members. This interactive approach provides learning opportunities whereby participants are exposed to individual perceptions of others, confront their ideas in a controlled setting, work out their arguments, and understand the benefits of co-operative effort.

7.1 My digital world

Teaching about the digital world involves getting participants to familiarise themselves with the many features of digital platforms and how they work.

CH – They have grown up in the digital age and most of them are quite used to digital devices and platforms. Even though most social platforms have a minimum age requirement, this rule is not always followed. As a result, many children end up using applications and platforms even before they are legally allowed to do so. Platforms such as Snapchat, TikTok and YouTube are among the most popular.[73]

TY – Most of them have also lived through the digital revolution and have a good level of familiarity with digital devices and platforms.

OP – Four in five adults in Bosnia and Herzegovina have social media accounts, especially on Facebook, even though only slightly over half of them claim to create and post media content.[74] Traditionally, compared to younger people, older people are less likely to engage with digital platforms and to a lesser extent. As a result, more time may be required to show the many features of digital platforms and explain how they work in practice.

7.1.1 Teaching practice

Educators ask participants to describe their digital media habits, the places they visit, their favourite platforms and how they use them. This is to help the educators learn more about the participants and warm-up for the discussions that follow questions such as the following could be used:

[72] Lawlor, J., Conneely, C., Oldham, E., Marshall, K., & Tangney, B. (2018). Bridge21: teamwork, technology and learning. A pragmatic model for effective twenty-first-century team-based learning. *Technology, Pedagogy and Education*, *27*(2), 211-232.

[73] Anderson, M., Jiang, J. (2018). Teens, social media & technology 2018. Pew Research Centre, 31, 1673-1689. Available at: https://bit.ly/2GhvkrH.

[74] Council of Europe. (2021). Media Habits and Attitudes: Study on Media Habits of Adults in Bosnia and Herzegovina. Council of Europe: Strasbourg.

- What are your favourite platforms (websites, blogs, video platforms, games, social media etc.)? Why do you like these platforms?
- What kind of content do you usually consume?
- How long/how much time do you spend on these platforms?

Group discussion – educators facilitate discussion in groups exploring how the participants think their digital media habits affect their daily lives. A special focus should be given to *attention*, that is, it is important to prompt participants to think about how their attention is affected by the amount of information they consume on a daily basis.

Explanation – educators then move on to explain that it is very important to pay attention to the information we consume, otherwise we might misinterpret it and not grasp its full meaning. They can show some examples.

Group discussion – participants discuss what can happen if they do not understand the information they consume. This is the point where the educator should lead the discussion to make them realise that this can negatively affect their 'information diet'. Not paying attention to the content they access online can lead to the consumption of false or misleading information.

Group discussion - Educator asks the question: who decides for the content that you see online? Participants discuss in their groups.

Explanation – Educator introduces the concept of algorithms and explains how they are used to select and organise the content online. Educator explains that the digital platforms collect data and use it to create personalised digital profile of users. These profiles are like depositories of users preferences and are accessed by algorithms to provide users with a very personalised experience.

Group discussion – Participants discuss the benefits and problems of this personalised content.

Explanation – Educator explains that this feature has some benefits, such as greater user satisfaction with the content provided. However, the learning point is to highlight to participants that this feature might also create an illusion that the content users see is a genuine representation of the real world, which is not true. Furthermore, algorithms can also suggest content that may contain false or misleading information, even if this has nothing to do with the users history on the platform.

For TY and OP, educator can also introduce the business model of the digital platforms and explain how their mechanism facilitates the spread of inadequate and misleading content, as described in 6.2 above.

Production – For this activity, participants can create a website (using Google sites, for instance) where they can discuss their digital media habits and think about ways to improve them, posting real examples of problematic content available on digital platforms and reflecting on how a distracted person could be misled by it.

Presentation and reflection – Each group will present their websites, and participants will reflect on the whole experience.

7.1.2 Resources

CH
Interland (by Google), a game that explores the digital lives of children
Available at: https://beinternetawesome.withgoogle.com/en_us

CH, TY
Video about how people leave their 'digital footprint' on the digital space
Available at: https://www.commonsense.org/education/videos/whats-in-your-digital-footprint

CH, TY, and can be adapted to OP
Lessons on digital citizenship
Available at: https://www.commonsense.org/education/digital-citizenship

CH, TY, OP
Analysis of daily digital consumption habits
Available at: https://app.box.com/s/od3ojaxgsl7otihx4a8u582pu6rp9u1w

Digital storytelling resource bank
Available at: https://sites.google.com/prod/view/digtechstories/home

7.2 Disinformation strategies

One of the main techniques used to explore the strategies used by bad actors to create and spread disinformation is the Inoculation Theory.[75] In essence, this means building resistance against false information by exposing participants to a 'lighter' version of fabricated and misleading stories and the techniques used to create and spread them.

CH – For younger children, educators can use examples of disinformation that are part of their everyday lives, such as the consequences of lying to their families or friends.

TY, OP – Teenagers (as well as young adults and old people) already have the intellectual means to understand more complex issues related to disinformation, so educators can show more serious and dramatic examples involving violence (where age-appropriate), political manipulation and hate speech, for instance.

7.2.1 Teaching practice

Group discussion – To enable educators to learn more about what participants know about disinformation and its implications, educators can ask participants to discuss the concept of disinformation using questions such as the following as prompts:

- What is disinformation?
- Do you know the difference between disinformation and misinformation?
- Have you heard the expression fake news?
- Why do you think people create and spread disinformation?
- Do you think you have already shared false information? Why?
- What are the consequences of disinformation for you and the people around you?

Explanation – Educator gives definitions of disinformation and misinformation, explains the many reasons why stories might be fabricated (to make money, to attack an opponent, to destabilize governments etc.) and some of the consequences using real examples (please check resources).

Group discussion – educator asks participant to discuss some strategies they know people can use to create and spread disinformation (the word disinformation can be replaced by lies when explaining to CH).

[75] Basol, M., Roozenbeek, J., & Van der Linden, S. (2020). Good news about bad news: Gamified inoculation boosts confidence and cognitive immunity against fake news. *Journal of cognition*, *3*(1),2.

Practical activity (playing an online game, available in Bosnian language) – Educator asks students to play the online game Bad News (please check resources). In this game participants learn how to create and spread false information as if they were the bad actors themselves. The idea is that by acting as bad actors they learn the main (six) techniques commonly used in these situations (impersonation, emotion, polarization, conspiracy, discredit, and trolling). Participants take around 20 minutes to complete the game.

OP – The game was developed mainly for young people; however, it can be played by older people as well. The educator can also decide not to use the game and just discuss the 6 techniques with older participants, showing real examples of how false stories are created and spread.

Reflection - After the game, educator opens the discussion with participants and goes through the six techniques in more detail. They reflect on their experience and think about strategies to avoid being manipulated by bad actors.

7.2.2 Resources

CH
Bad News Game
Available at: https://www.getbadnews.com/droggame_book/junior/#intro

TY, OP
Bad News Game
Available at: https://www.getbadnews.com/

CH, TY
Alternative game – Harmony Square
Available at: https://harmonysquare.game/en/play

For Educators
Consequences of disinformation in Myanmar
Available at: https://bit.ly/3aE6JOE

Consequences of disinformation in Mexico
Available at: https://www.bbc.com/news/world-latin-america-46145986

CH, TY, OP
Video with definitions of disinformation, misinformation and malinformation
Available at: https://www.youtube.com/watch?v=HD5MmuLDeFE

Seven different types of disinformation (p.9)
Available at: https://uni.cf/3yXZWIN

A complete guide to Conspiracy Theories – with examples
Available at: https://bit.ly/3O1EwyD

7.3 My values

The disinformation crisis is not only about digital media and technology. It also involves the discussion of values and principles that are inherent to our lived experience as humans and how we understand our responsibility as individuals and our collective experience as society. Ultimately, it comes to the question: what kind of world do we want to live in? This is a question that goes beyond digital media and technology and touches on important concepts that are part of the fundamental pillars upon which modern societies have been built, such as freedom, knowledge, trust, truth, democracy and individual responsibility.

CH – For younger children, these values can be discussed according to their personal experience. For example, to explain democracy, an example can be taken of a decision that the class must make about an important issue that affects everyone. The educator can explain how important it is that everyone's opinion is heard and debated so that the final result, whatever it is, will be a decision made collectively with everyone's participation. To explain truth, to students can be shown the many ways in which a lie can cause harm to people around them. Regarding knowledge, to students can be described the advantages of learning something they did not know before and how this can positively impact their lives.

TY, OP – Teenagers (as well as young adults and old people) already have the intellectual means to understand more complex issues related to disinformation, so educators can show more arguments and examples to discuss these concepts.

7.3.1 Teaching practice

Group discussion – To enable the educators to learn more about how participants understand these concepts and where the main gaps in knowledge are, the educator can ask the participants to discuss concepts such as freedom, knowledge, truth, democracy and individual responsibility using the following questions as prompts:

- Do you know what these concepts mean?
- Do you think they are important for you and the society where you live? Why?
- How do you think these concepts affect your life? (Give examples).

Explanation – Educator explains each concept and why they are important for both individuals and societies alike. Real examples may be used as illustrations. These are very complex concepts that can trigger heated debates, so it is important that the educator choose their examples wisely according to the level of development and maturity of the participants.

Scenarios and group discussion – The educator can create or select some scenarios (they can be real or not) where the concepts below need to be applied in the context of digital media.

- **Freedom and Individual responsibility**: Participants can discuss the balance between freedom of expression and individual responsibility, potentially using the following questions as prompt:
  - Can I say whatever I want or should there be a limit? If there should be a limit, who should be responsible for establishing it and making sure everyone follows the rule?
  - Should hate speech be allowed in the digital space? What about spreading stories that have no factual basis (even though the sender genuinely believes it is true) and can negatively affect the society?

  The educator should explain that some limits are more obvious than others (child sexual abuse and exploitation is illegal, for instance, but other content that is deemed harmful may not be illegal), and that it is not obvious and easy to decide who should oversee this kind of regulation (Government? Tech companies? Independent agencies? A mix of the three?). The key point here is to get participants to reflect on the fact that freedom is essential for the good functioning of any society, but, at the same time, freedom without individual responsibility can have negative effects for both people and communities.

- **Knowledge and Trust:** Participants can discuss the importance of knowledge production for society using prompt questions such as:
  - What are most important developments that we have achieved through the acquisition of knowledge?
  - How have they changed our lives for the better? Examples: science (medicines, vaccines), law (legal systems, justice); technology (communications, well-being); social and political sciences (government policies, human rights).

  The key learning point here is to get participants to reflect on how the production and accumulation of knowledge has brought significant advancement to the world and improved our lives in many ways. Also, it is important to understand and appreciate the role of experts, meaning people dedicated to the advancement of knowledge based on robust methodological standards and empirical evidence. This is directly connected to the idea of trust. The reason why we should trust experts over lay people is because the former has the specialist knowledge that the latter does not. This does not mean that experts do not make mistakes or that we should blindly trust experts without questioning their methods and approaches. In fact, it simply means that, when it comes to understanding the world around us in an objective and rational way, we should value empirical knowledge over baseless and unsupported claims.

  In the digital world, anyone can create content claiming anything they want without showing how their claims are supported by empirical evidence, so it is important to check the level of expertise of the author before trusting the information we receive.

- **Democracy:** Participants can explore the difference between democracy and other forms of government. The educator can show some examples of democratic principles, such as the right to vote, freedom of assembly and expression, free press, rule of law, equity justice, human rights etc. These principles are abstract values related to real societal problems and in most cases they are applied only to a certain extent, which can be a good topic for discussion.

  The key learning point here is to explain that, even though all 'real democracies' have their problems, the democratic principles are still valid regardless of the way they are (or are not) applied. In relation to disinformation, students can discuss how false information can jeopardise these principles, and what can be done to avoid that.

- **Truth**: Participants can discuss how we know that something is true. One of the main problems in the disinformation crises is the high level of relativism that some people apply to the objective reality. This is a good opportunity to discuss the difference between facts and opinion, for instance. The educator can show some real examples of facts and opinions on digital media platforms and get students to discuss them.

  The key learning point here is an explanation of the relationship between truth and facts, that is, information that has been studied, documented, and grounded in empirical evidence. If people do not share the same objective reality supported by facts, it becomes impossible to engage in a healthy and productive dialogue. Furthermore, if people disregard the importance of factual information, this creates a perfect scenario for the creation and spread of fabricated stories.

Practical activity – The educator asks participants to produce a podcast (using a free audio software, such as Audacity). In this podcast participants should discuss the topics covered in the session, reflect on how they relate to the disinformation crisis, and suggest best practices for digital media platforms to ensure that they are protected and followed by the users.

Presentation and reflection – Each group present their podcast, and participants reflect on the whole experience.

7.3.2 Resources

CH, TY, OP
Audacity
Available at: https://www.audacityteam.org/

CH, and can be adapted to TY, OP
Teaching young people about democratic values
Available at: https://coi.org.ua/images/documents/423/teaching_democracy_en.pdf

7.4 The news

Journalism, the work of journalists and role of the news media industry has always been a central tenet of Critical Media Literacy. In recent years, with the rise of disinformation, it has become even more relevant.

However, addressing the role of Journalism in an educational context is a balancing act between acknowledging the importance of the press as the watchdog for democracy and human rights and, at the same time, understanding that all news outlets have their own agenda, and that concepts such as neutrality, fairness and objective reporting are very complex when it comes to news consumption.

In the context of Bosnia and Herzegovina this is even more complicated as the news media landscape is composed of a great number of different outlets - some with strong connections to political parties and ethno-national movements. Research studies also show that some traditional media outlets have been part of the disinformation problem, contributing to the spread of false and misleading information.

CH – For younger children, some simple examples of news that are related to their everyday experiences can be used. This can be something related to their school or family environments. It is particularly important to emphasise how language is an important aspect of the news production, showing how different words have different impact on the reader. It is also important to provide contexts that facilitate criticality, even if it is at a very basic level.

TY – News consumption is more present in the lives of teenagers and young adults compared to young children, so the educator can use current examples in Bosnia and Herzegovina, such as political and ethnic issues that appear in the news. This age group also consume more news from social media platforms compared to older people, so it is important to address how social media platforms influence the news diet that people consume.

OP – This age group may be more accustomed to the news media landscape in Bosnia and Herzegovina and may be more likely to have well defined news media habits. This aspect can be explored during the session asking participants to explain why they follow certain media outlets rather than others and showing how a diverse news media diet is important to have a broader understanding of current affairs.

7.4.1 Teaching practice

Group discussion – To help the educator learn more about the participants' views and prepare them for the following activities, the educator may ask participants to discuss the work of journalists and the role of the news media in the society using the following questions as prompts:

- Do you know what is involved in the work of a journalist?
- How important do you think the news media is for our society?
- Do you trust the news media? Why?
- What other sources of information we have? Are they more or less trustworthy compared to the news media?
- Do you think that journalists are neutral?

Talk to an expert – The educator can invite a journalist to talk about their work and how the news industry operates. It is important to show that there are methods and principles involved in the work of journalists, and the following of these methods and principles is what ensures that the news they produce can be regarded as accurate and trustworthy. The educator can discuss with students the best practices in good reporting – related to all the values outlined in the previous section – and how this is important for the good functioning of any society. The educator can show examples of media outlets in Bosnia and Herzegovina that do not follow these methods and principles and how this affects the quality of news they produce.

Analysis of news – The educator can show examples of news from different media outlets and ask students to analyse them. This analysis should be based on some categories, such as:

- *The source* (Where was the article published? Who owns the news outlet? Who is the author? Is the article sponsored by an external party?)
- *The language* (Clear or ambiguous; sensationalist or straightforward)
- *The format* (Is it a news article, in-depth article, or opinion article? What are the main differences among them?)
- *The audience* (Who is the intended audience and why?)
- *Supporting evidence* (Does the article present evidence to support the story being told?)
- *Bias* (Is the article biased in some way? What are the main elements that suggest that?

Explanation – The educator explains that the news industry has a very important role in democracies as they are responsible for monitoring the government and informing the public about the most important issues happening in the world. In the digital space, with so much information coming from a diverse range of sources, it is increasingly difficult to distinguish between an accurate and reliable and an inaccurate and unreliable news source. For this reason, journalists can also work as *curators* of information, selecting, organising and delivering the news to us. However, as the previous exercise demonstrated, not all news outlets work in the same way, and news articles have always to be accessed with a critical eye. This means that even within the news media industry there is a scale in terms of neutrality, transparency and fair reporting. Thus, critical thinking skills must be applied to analyse the news very carefully, learning how to check all the elements that compose a news story.

In Bosnia and Herzegovina 58% of adults claim to rely on only one or two sources of information for current affairs, so the educator must emphasize the importance of media plurality and broadening the scope of sources to have a more diverse experience with news and, as a consequence, be open to more perspectives and points-of-view – while remember the role of confirmation bias.

Practical activity – Participants could be asked to work as journalist and create a news report (this activity may be undertaken using a range of resource such as Word, PowerPoint, Google Sites or WordPress). The participants will have to carry out some research, evaluate the information they find, and decide how they are going to publish their news report following high standards in terms of accuracy, integrity, and fairness.

Presentation and reflection – Each group will present their websites, and participants will reflect on the whole experience.

7.4.2 Resources

CH, TY, OP
Some lesson plans on news media and digital citizenship
Available at: https://bit.ly/3z0L4ta

Checkology (News Literacy Project) – free resources to navigate the information landscape
Available at: https://get.checkology.org/

The 5 core values of journalism
Available at: https://www.youtube.com/watch?v=uNidQHk5SZs

How journalists minimise bias
Available at: https://www.facinghistory.org/resource-library/video/how-journalists-minimize-bias

CH, and can be adapted for TY and OP
List of news website for kids
Available at: https://bit.ly/2pT9L6o

CH, TY
Game about journalists practice - iReporter – BBC News
The game, Available at: https://bbc.in/2LDkvyj
The teachers' guide, Available at: https://bbc.in/3PpYggw

TY, OP
Examples of media bias with comments
Available at: https://www.allsides.com/media-bias/how-to-spot-types-of-media-bias
Lesson plan on media bias with examples
Available at: https://eavi.eu/lesson-plan-detecting-and-decoding-bias-in-the-media/

7.5 Research and critical skills

The digital landscape brings many challenges for users to access, find, evaluate and use the information they consume. In order to navigate this digital world and avoid the problems posed by disinformation disorder, people need to acquire both technical and critical thinking skills.

CH – Most children, even young children, are engaging with digital devices from a young age and may have built up a relatively high level of competence in relation to 'using' digital technology from a technical point of view. However, this technical 'proficiency' may not be reflected in the critical thinking skills required to navigate the digital world in a safe and productive manner.

This section encompasses many technical skills, which may be easily learned by children – but it also encompasses critical thinking skills which can be more challenging for this age group. The educator should bring some real-life examples connected to the everyday experiences of children in order to facilitate the explanation of this more analytical elements of digital media literacy.

TY – Teenagers and young adults use information they find on the internet for entertainment, study, work and so on. Their interests may be more diverse than the other age groups, and this needs to be taken into consideration. This session suits this age group entirely, both in terms of technical and critical skills.

OP – As the age group which may have learned about technology later in their lives, there may be a significant knowledge gap related to some of the technical skills covered in this section, compared to other age groups. This means that the educator might have to start this session by explaining some fundamentals of the internet, such as how search engines and social media platforms work. However, it is important to note that the digital knowledge gap between people in this age group can be significant. For example, a sixty-five year old woman who has worked in an office environment for many years may be very technically proficient while a sixty year old man who has worked in manual labour all his life may not have the same level of technical skills.

7.5.1 Teaching practice

Group discussion – The educator asks participants to discuss how easy it is to create content and spread it on the internet. A good way of doing this is by comparing how access to information is much easier now compared to 30 years ago. The key learning point is for participants to understand the ease at which anyone with a smartphone and a decent internet connection can become a content creator and disseminate content now.

Explanation – The educator explains that this situation brings a lot of benefits, such as giving a voice and platform to people previously excluded from the public sphere, offering opportunities for people to publicise their work, produce creative content, express their ideas and make money with honest and authentic digital content.

On the other hand, it also brings many challenges – such as the exponential increase in the creation and circulation of disinformation. The key learning point of this session is to empower participants with some practical techniques to avoid being deceived by false, inaccurate, and unreliable content.

Practical activity – The educator tells participants that they will create a digital video documentary about a topic of their choice. They must research online for information about this topic, providing the source, the evidence, and the arguments to justify the content that they will create – based on the techniques outlined in Section 6.1 (The information), especially under the categories *search*, *sources* and *message*.

Presentation and reflection – Participants will present their work to their peers and reflect on the activity as a whole. During this reflection it is important that the educator ensures that students carried out all the steps required for a good online-research, checking the sources and evaluating the quality of information in different ways.

Most importantly, educator must make sure that participants understand that these techniques are indispensable for a quality experience in the digital world. In Bosnia and Herzegovina, 56 % of adults do not perform any fact-checking of the online information, so the educator can emphasise this point during the activity.

7.5.2 Resources

CH
Video on ‘what is false information?’
Available at: https://www.webwise.ie/teachers/what-is-fake-news/

TY
Media literacy test
Available at: https://media-and-learning.eu/type/featured-articles/edumediatest-pilot-test-highlights-pupils-lack-of-critical-thinking-skills/

CH, TY, OP
Check who owns an online domain
Available at: https://www.whois.com/

Fact-checking platform – Bosnia and Herzegovina
Available at: https://raskrinkavanje.ba/

Fact-checking platform – US
Available at: https://www.snopes.com/

Fact-check training
Available at: https://app.box.com/s/1srbtpj5u8o90dhvf8vzgypsnp5p548r

How to use reverse image search
Available at: https://www.pbslearningmedia.org/resource/nmlit17-ela-howtoreverse/is-it-real-using-reverse-image-search-common-sense-education/

List of places to find debunked stories
Available at: https://app.box.com/s/2ul41z8780p5usx3d66nu97ugsvg1oim

For Educators
Tips to spot bad science reporting
Available at: https://www.pbslearningmedia.org/resource/c7ab68b7-0f23-4888-952d-127ec9b71c17/top-4-tips-to-spot-bad-science-reporting-above-the-noise/

How to spot disinformation
Available at: https://europa.eu/learning-corner/sites/default/files/files/disinformation-booklet_en.pdf

7.6 My bias

One of the most important aspects that has emerged in recent years in relation to the way people deal with information in the digital space is how psychological traits influence decision making. Among these traits, conformation bias has been the most studied and discussed, because it shows how personal preferences impact the way information is favoured to confirm previous beliefs and convictions. Being aware of these traits can help people assess their feelings and emotions when they encounter information, leading to more careful reflection and analysis.

CH – For young children, the educator can have some exercises explaining how everyone has their own preferences, and that this is completely normal. Using examples that are familiar to children, the educator can show how sometimes we favour things and people not because they are the best choices, but simply because we like them, and this is how our bias works in simple terms.

TY and OP – These age groups can understand more complex issues related to confirmation bias, so the educator can use the example of how algorithms take advantage of our confirmation bias to create radical polarization online or discuss the how this bias affects the work of journalists in more detail.

7.6.1 Teaching practice

Group discussion – The educator asks participants to discuss how their personal preferences may influence the way they consume information online. The educator can ask for some real examples of when they encountered information they liked and information they did not like, and what their reactions in those experiences were like. The educator can also ask participants if they would believe something is true even if they knew that there was no evidence available, and the likelihood was very small (the expectation here is that most will reply 'no').

Practical activity - The educator chooses some topics that he/she knows will generate mixed opinions among participants (it could be related to human rights, freedom of expression, or obligatory vaccination, for instance). The educator asks participants to say whether they agree or not with the topics proposed. Then, educator will choose the topic that causes the biggest polarisation among participants (the one closer to 50/50% so that the number of participants in each group will be similar).

Next, the participants will split into groups of three or four and divided into two larger teams – the ones who agree and the ones who disagree with the topic proposed. The educator will then tell participants that they will create a short video defending the opinion of the opposite group, not their own by going online to find information that supports the argument. This means that they will have to find information that goes against what they believe to be correct and use this information to defend ideas which they disagree with. This practice allows participants to confront their own arguments and opinions and challenge their confirmation bias.

Explanation – The educator will then describe what confirmation bias is and explain that this is common to all of us and show some studies demonstrating that people tend to believe in a story even if there is no empirical evidence available, just because the story conforms to their previous beliefs. It is important to show how powerful confirmation bias is and how it can do real harm to decision making processes.

Presentation and reflection – Participants will present their videos and reflect on the experience as a whole. The educator will provoke participants into thinking how they felt about looking for information that challenges their own beliefs, and what they learned about this experience. It is also important to note that many participants will change some of their views simply because they were exposed to different ideas. This is a good opportunity for the educator to explain how important it is to confront our bias all the time and have access to a diverse information diet so that we are exposed to different perspectives and point-of-views.

7.6.2 Resources

TY, OP
Video about confirmation bias
Available at: https://www.facinghistory.org/resource-library/video/defining-confirmation-bias

CH, TY, OP
Lesson plan about confirmation bias
Available at: https://www.commonsense.org/education/digital-citizenship/lesson/challenging-confirmation-bias

For Educators
About confirmation bias
Available at: https://fs.blog/confirmation-bias/

About confirmation bias
Available at: https://www.psychologytoday.com/ie/blog/seeing-what-others-dont/201905/the-curious-case-confirmation-bias

VIII. Conclusions

Countering disinformation is a complex multi-faceted problem and the solutions to it must also be multi-faceted, involving a wide range of actors, over long periods of time and encompassing a range of different approaches.

One such approach is promotion of Digital Media Literacy skills and knowledge across society. DML is rising on policy agendas, globally prompted, at least in part, by the threats posed by the Information Disorder. However, it is important to note that DML is not the complete solution to the problem of disinformation.

Despite the current focus on DML, the development of effective DML interventions can be limited by the absence of factors such as a shared understanding of what DML means; overall strategic coordination; secure funding; and evaluation of media literacy interventions.

Developing Policy with DML in mind

DML touches on many policy areas and attention should be given to ensure that policy-makers and those called to shape up the future digital evolution and of the country – via legal norms and policy formulation - are up-to-date with the most recent approaches and initiatives at international level and are willing and able to create in Bosnia and Herzegovina an environment that respects the full spectrum of human rights, including the freedom of expression.

One size does not fit all

All citizens need DML skills and knowledge in order to function in today's digitally dependant environment and those skills need to be regularly updated. Adopting a life-long learning approach to DML interventions will help to ensure that everyone has access to the support they need, when they need it. This is especially important for those with low levels of DML skills and knowledge, and those who are most vulnerable to disinformation – keeping in mind that these two groups may include people from very different walks of life. DML interventions should be designed to meet people where they are on their particular learning journey, and no two learning journeys will be the same.

Working in partnership

Political and policy realities mean that it is not always possible to have a single body responsible for the coordination and roll-out of DML interventions at a state level. However, operational realities also mean that no single organisation can support everyone at every step of their DML learning journey.

Successful DML interventions are supported by partners who can work to their particular strengths to help protect, and empower, whole societies from the issues emerging from our complex, interconnected, digital media ecosystem.

In particular, the media sector, the public library sector and online platforms and service providers have important roles to play. The media can help to raise awareness of and normalise positive DML behaviours. Public Libraries can provide a comprehensive and trusted outreach network. The immense insight and reach that online platforms and service providers have can also be harnessed to promote positive DML behaviours.

Design interventions based on evidence

Investment should be made into gathering comprehensive insights about the particular DML needs and potential motivations of different cohorts to improve their DML skills and knowledge, as well as the places that they are likely to seek help from, and when. The development of a Theory of Change framework could also be considered.

Test, Iterate, refine

It is recommended that an evaluation framework is developed for DML interventions including assessment and baseline setting, monitoring, measurement and evaluation to help foster a culture of test, iterate and refine.

Build in sustainability

The nature of DML skills and knowledge means that it is likely that people may need to 'upskill' on a regular basis.

Thought should be given at the planning stage of any DML intervention as to what the 'next step' should be for participants. Consideration should also be given to whether the intervention could be sustainable and if so, what the plan for future sustainability might look like.

Consideration should also be given to how proposed interventions fit into the wider DML landscape and/or any related policy frameworks or programs.

Integration into schools

Stakeholders across Bosnia and Herzegovina agree that there are many challenges in the implementation of DML in schools. The complexity of political administration in the country, combined with a fragmented educational system with 14 different curricula poses some challenging barriers to the introduction of DML modules to the school curriculum. However, this is by no means only a problem in Bosnia and Herzegovina. All over the world, educators, scholars and policymakers are struggling to integrate DML practices into the school curriculum.

The international experience reveals that there is no single recipe for or solution to this problem, and that it is important to start with small but consistent Digital Media Literacy activities in schools across the country. These activities must be supported by three main actions.

- The first action is to raise awareness about the importance of DML in schools. This can be done through state-wide campaigns and local interventions with key stakeholders in the education field.
- The second action is the production of free teaching resources easily accessible by educators. These resources must be diverse enough to cater for different age groups and socio-economic backgrounds; they need to be available in different formats, so that they can be used as a one-off workshop in a after school session, for instance, or integrated into the curriculum of specific subjects.
- Finally, the third action is training of teachers. Resources alone are not enough to equip with the knowledge and skills they need to address DML in the classroom. Training is very important to teach the basic concepts of DML and instruct teachers on how they can make the most of the resources in the classroom. In order to secure the sustainability of teacher training, efforts should be made to address pre-service teachers and include elements of DML and critical media pedagogy in their academic formation years.

IX. References

Adetunji, J. (2021). 'Conspiracy theories about the pandemic are spreading offline as well as through social media.' *The Conversation*. Available at: https://bit.ly/3RtGRWb.

Anderson, M., Jiang, J. (2018). Teens, social media & technology 2018. Pew Research Center, 31, 1673-1689.

Basol, M., Roozenbeek, J., & Van der Linden, S. (2020). Good news about bad news: Gamified inoculation boosts confidence and cognitive immunity against fake news. *Journal of cognition*, *3*(1),2.

Brotherton, R. (2015). *Suspicious minds: Why we believe conspiracy theories*. Bloomsbury Publishing.

Buckingham, D. (2003). Media education: Literacy, Learning, and Contemporary Culture. Cambridge: Polity Press.

Burn, A. & Durran, J. (2007) Media Literacy in Schools – Practice, Production and Progression. London: Sage.

Caulfield, M. (2018). Recalibrating Our Approach to Misinformation.

Chapman, M., & Oermann, M. (2020). Supporting Quality Journalism through Media and Information Literacy. (DGI(2020)1). Prepared by the Committee of experts on quality journalism in the digital age (MSI-JOQ), Strasbourg.

Council of Europe:European Audiovisual Observatory. (2016). Mapping of media literacy practices and actions in EU-28. Strasbourg.

Council of Europe. (2018). Recommendation CM/Rec(2018)1 of the Committee of Ministers to member States on media pluralism and transparency of media ownership.

Council of Europe. (2018). *Recommendation CM/Rec(2018)2 of the Committee of Ministers to member States on the roles and responsibilities of internet intermediaries*.

Council of Europe. (2020). Recommendation (CM/Rec(2020)1) of the Committee of Ministers to member States on the human rights impacts of algorithmic systems.

Council of Europe. (2021). Media Habits and Attitudes: Study on Media Habits of Adults in Bosnia and Herzegovina. Council of Europe: Strasbourg.

Council of Europe. (2022). Recommendation (CM/Rec(2022)4) of the Committee of Ministers to member States on promoting a favourable environment for quality journalism in the digital age.

Culloty, E., Park, K., Feenane, T., Papaevangelou, C., Conroy, A., & Suiter, J. (2021). Covidcheck: assessing the implementation of EU code of practice on disinformation in relation to Covid-19. Broadcasting Authority of Ireland (BAI). Available at https://bit.ly/3c9Po05.

Cvjetićanin, T., Zulejhić, E., Brkan, D., Livančić-Milić, B.(2019). *Disinformation in the online sphere: The case of Bosnia and Herzegovina.* Citizens' Association "Why Not".

Deuze, M., Blank, P., & Speers, L. (2012). A life lived in media. *Digital humanities quarterly*, *6*(1).

Edwards, L., Stoilova, M., Anstead, N., Fry, A., El-Halaby, G., & Smith, M. (2021). Rapid evidence assessment on online misinformation and media literacy: final report for Ofcom.

European Commission. (2020). Commission staff working document, Bosnia and Herzegovina 2020 Report. Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (SWD(2020) 350 final). Brussels.

European Commission. (2021). Commission staff working document, Bosnia and Herzegovina 2021 Report. Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (SWD(2021) 291/2 final). Brussels.

European Union. (2018). Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 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 changing market realities. (Revised AVMSD)

Freire, P. (1998). Pedagogy of Freedom. Maryland: Rowman and Littlefield.

Government of Ireland. (2021). Adult Literacy for Life.

Hodžić, S. (2019). Media and Information Literacy in Bosnia and Herzegovina: Numerous Civil Society Initiatives and Lack of Public Policies. p. 87. In Media and Civil Society Development Foundation Mediacentar. *Media and Information Literacy in the Western Balkans: Unrealized Emancipatory Potential*. (2019). Sarajevo, Bosnia and Herzegovina.

Howard, P. N., Neudert, L., Prakash, N., & Vosloo, S. (2021). Digital misinformation/disinformation and children. UNICEF.

IREX. (2019) Media Sustainability Index.

Kahne, J., & Bowyer, B. (2017). Educating for democracy in a partisan age: Confronting the challenges of motivated reasoning and misinformation. *American educational research journal*, *54*(1), 3-34.

Kellner, D. & Share, J. (2019) The Critical Media Literacy Guide – Engaging Media and Transforming Education. Leiden: Brill/Sense.

Lawlor, J., Conneely, C., Oldham, E., Marshall, K., & Tangney, B. (2018). Bridge21: teamwork, technology and learning. A pragmatic model for effective twenty-first-century team-based learning. *Technology, Pedagogy and Education*, *27*(2), 211-232.

Martel, C., Pennycook, G., & Rand, D. G. (2020). Reliance on emotion promotes belief in fake news. *Cognitive research: principles and implications*, *5*(47).

Mihailidis, P., Shresthova, S., & Fromm, M. (2021). Transformative Media Pedagogies. New York: Routledge.

Moor, J. H. (2005). Why we need better ethics for emerging technologies. *Ethics and information technology*, *7*(3), 111-119.

Moor, J.H. (1998) *Reason, relativity, and responsibility in computer ethics*, ACM Sigcas Computers and Society. 28. 14-21. 10.1145/277351.277355.

Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of general psychology*, *2*(2), 175-220.

Nielsen, R. K., & Graves, L. (2017). " News you don't believe": Audience perspectives on fake news. Reuters Institute for the Study of Journalism (RISJ).

Osmančević, E., et al. (2021). Mapping media web portals in Bosnia and Herzegovina, Centre for the Promotion of Civil Society (CPCD). Available at https://bit.ly/3NiYIfa.

Pennycook, G., Cannon, T. D., & Rand, D. G. (2018) Prior exposure increases perceived accuracy of fake news'. *Journal of experimental psychology: General*, *147*(12), pp. 1865–1880.

Pertwee, E., Simas, C. & Larson, H.J. (2022) 'An epidemic of uncertainty: rumours, conspiracy theories and vaccine hesitancy'. *Nature Medicine* (28), pp. 456–459.

Pettitt, T. (2012). Bracketing the Gutenberg parenthesis. *Explorations in media ecology*, *11*(2), 95-114.

Politika razvoja informacionog društva bosne i hercegovine za period 2017 – 2021 (Policy for the Development of Information Society in Bosnia and Herzegovina 2017 – 2021).

Potter, J. & McDougall, J. (2017). Digital Media, Culture and Education: Theorising Third Space Literacies. London: Palgrave Macmillan.

Rasi, P., Vuojärvi, H. and Rivinen, S. (2021). Promoting Media Literacy Among Older People: A Systematic Review. *Adult Education Quarterly*. 71(1), p. 37–54.

Rasi, P., Vuojärvi, H., & Ruokamo, H. (2019). Media Literacy Education for All Ages. *Journal of Media Literacy Education, 11*(2), 1-19.

Sokol, A. (2020). Propaganda, disinformation and hate models of media and communication in Bosnia and Herzegovina. SEENPM, Tirana, Peace Institute, Ljubljana and Foundation MediaCentar Sarajevo.

Statista. (2022). Worldwide desktop market share of leading search engines from January 2010 to January 2022.

The Bad News Game. (2017) Available at: GetBadNews game (Info Sheet for Educators) - SALTO (participationpool.eu).

UNESCO. (2022). About Media and Information Literacy.

UNICEF. (2020). Children's Media Habits in Bosnia and Herzegovina. UNICEF and Communications Regulatory Agency in Bosnia and Herzegovina, Sarajevo.

Wardle, C., & Derakhshan, H. (2017). Information Disorder Toward an interdisciplinary framework for research and policymaking. Council of Europe Report DGI. Strasbourg, France.

This study on 'Digital media literacy basics: Information disorder and disinformation' forms the basis for the further development of informative and educational content. It aims at improving access to information by citizens in Bosnia and Herzegovina and enhance their understanding of the main issues related to digital literacy, in particular how information disorder and disinformation in today's digital world impacts on people's lives and the media environment.

The study explores – with a focus on Bosnia and Herzegovina – the wicked problem of information disorder by analysing the existing media landscape, elaborating on the meaning of information disorder, and the infrastructure underpinning it. In addition, the study delves into the meaning of digital media literacy and its role in countering disinformation.

Finally, the study provides in-depth practical advice and guidance for educators to illustrate how learning activities can be designed to address the most pressing issues of disinformation in the context of Bosnia and Herzegovina.

www.coe.int

The **Council of Europe** is the continent's leading human rights organisation. It comprises 46 member states, including all members of the European Union. All Council of Europe member states have signed up to the European Convention on Human Rights, a treaty designed to protect human rights, democracy and the rule of law. The European Court of Human Rights oversees the implementation of the Convention in the member states.

COUNCIL OF EUROPE

CONSEIL DE L'EUROPE