

NAVIGATING THE INFORMATION DISORDER:

EUROPEAN YOUTH IN THE AGE OF DIGITAL DISINFORMATION

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FOREWORD

For young Europeans, the online world is not an accessory to civic life—it is its principal stage. Yet, this very stage is also where disinformation thrives, trust is undermined, and critical engagement is eroded. In this shifting landscape, Europinion was born: an independent media platform and social enterprise committed to strengthening civic resilience and enhancing public dialogue in an increasingly recognise information environment. At our core, Europinion is committed to cultivating media literacy through peer-informed, participatory methods.

This report, *Navigating the Information Disorder: European Youth in the Age of Digital Disinformation*, is the result of over a year's worth of research, guided by three pillars: **generational experience, field-based engagement, and a commitment to democratic empowerment**. It is not an abstract study. Rather, it is grounded in the lived realities of young people—those who have grown up inside the very digital crisis we now seek to address.

The report is directly inspired by our workshops at the 2024 European Youth Events in Berlin and Forlì, where we listened to young participants speak candidly about how they interpret, trust, and share information online. These workshops revealed not only profound insights, but also a stark need: while young people are often assumed to be digitally fluent, many overestimate their ability to detect manipulation, and lack structured tools to critically navigate online content. One of the most striking findings was that nearly half of all participants trusted social media influencers more than professional journalists. Our EU-wide research confirms this gap—and **makes clear that digital fluency does not automatically equate to media literacy**. Crucially, this is not about delivering truth parochially from above. It is about equipping young people with the critical skills and civic confidence requisite to navigate information complexity on their own terms, and to be empowered to take ownership of the information space they inhabit.

It is in response to these findings that we have developed a modular, youth-informed framework for strengthening youth media literacy. The recommendations contained in this report—ranging from inoculation-based workshops to civic simulation games—are not merely theoretical. They are rooted in pedagogical research and the principles of co-design. Most importantly, they reflect our belief that resilience to disinformation and increasing media literacy must be built *with* young people, not merely *for* them.

This report also serves as the evidentiary backbone for our policy recommendations, which were presented at the European Parliament's Culture and Education (CULT) Committee hearing on "enhancing media literacy in the digital age" on 8 April 2025. At the hearing, we called for scalable, participatory formats that equip young citizens not only to identify disinformation, but to understand the psychological and systemic forces that allow it to spread. Our call is not for content control. We call for youth civic empowerment to facilitate the independent navigation of the information space with confidence.

We hope this report contributes meaningfully to the European Union's ongoing efforts to protect democratic discourse and support media literacy in the age of information disorder. As the digital landscape continues to evolve, so, too, must our tools for equipping the next generating to navigate it with discernment, empathy, and agency.

I would personally like to express my deep gratitude to Éléonore Daxhelet for her meticulous construction of this research, guided in both theory and empirics; Adélie Aubin, Samuel Crooks, and Maxime Zigrand for their conscientious efforts in devising the recommendations; and to Will Allen for his ever-captivating illustrations that bring our work to life.

EXECUTIVE SUMMARY

As the digital space has rapidly evolved over the past two decades, permeating numerous aspects of our daily lives, it has introduced a host of new challenges. In particular, information disorders have emerged as one of the main concerns of citizens, researchers and decision makers alike (Freelon & Wells, 2020; Palau-Sampio, 2023). The European Union (EU) has therefore sought to address the issue by developing a myriad of strategies and documents (e.g. the Audiovisual Media Services Directive; the Digital Education Action Plan 2021-2027; the Code of Conduct on Disinformation; see also: Brites et al., 2021) reporting on the prevalence of information disorders in Europe and their impact on individuals, societies and democratic processes. However, these documents have largely overlooked how information disorders specifically affect different age groups (Brites et al., 2021). Young people's distinctive patterns of media consumption - characterised by higher social media usage, algorithmic content delivery, and incidental news exposure - combined with their stilldeveloping cognitive capacities, create unique challenges to mis/disinformation that differ from those of older generations. This report argues for the importance of adding a generational focus to legislation against mis/disinformation. In particular, it focuses on the youngest generations, who not only spend more time in online environments where information disorders flourish but also develop their critical information assessment skills and identities within these challenging contexts.

Information disorders is an umbrella term that encompasses different but related concepts, notably misinformation and disinformation. Misinformation can be defined as the unintentional dissemination of false and misleading information. In contrast, disinformation is the deliberate creation and dissemination of such content for the purpose of causing harm or achieving a strategic advantage (Aïmeur et al., 2023; Santos, 2023; Selnes, 2024). Due to the difficulty in clearly identifying intent and their similar impact on audiences, both concepts are included in this report.

The following conclusions are drawn from this report:

- Young people (16-24) are the fastest growing demographic on social media worldwide, spending an average of 7+ hours daily online with 2-3 hours on social media platforms. This extensive engagement creates increased exposure opportunities to mis/disinformation.
- Youth increasingly use social media as their primary news source (59% of 15–24-year-olds compared to 24% of 55+ year-olds), with platforms like TikTok, Instagram, and YouTube being particularly popular. However, digital platforms with the highest youth usage (like TikTok) are often perceived as least trustworthy information sources, creating a paradoxical situation.
- Young people's news consumption shows a stronger tendency toward fragmentation, passive/incidental consumption, and preference for "soft news" over political content compared to older demographics, although these trends are increasingly visible across all age groups.
- Adolescents are more vulnerable to mis/disinformation due to still-developing cognitive abilities and tendency to consume news in fragmented ways without critical evaluation.
- Social media algorithms exacerbate the mis/disinformation problem by prioritising engagement over accuracy, with emotionally charged false information spreading faster than accurate content.
- "Echo chambers" on social media platforms reinforce existing views and developing belief systems through algorithmic curation, limiting exposure to diverse viewpoints and potentially hindering the development of balanced perspective-taking in young users.

- Visual misinformation (memes, videos) is particularly effective and dangerous, as visuals are
 processed more rapidly and remembered longer than text.
- Content creators with large followings on platforms popular with youth (e.g. entertainment celebrities, lifestyle vloggers, and politically-oriented commentators) play a significant role in spreading mis/disinformation to youth, with 21% of young EU citizens trusting social media influencers despite potential conflicts of interest.
- Peer networks significantly impact information credibility among youth, with 23% more likely to engage with content shared by friends and family.
- Exposure to misinformation can have serious psychological impacts, including increased anxiety, depression, fear, and damaged self-esteem. Real-world consequences include youth radicalisation and health impacts (e.g., COVID-19 vaccine hesitancy among younger demographics).
- Digital literacy varies significantly across EU countries (30-80% with basic digital skills), highlighting the need for targeted educational interventions.
- 70% of 16-24 year-olds have basic or above digital skills, but this still lags behind their 96% daily internet usage rate.
- Education is key to building resilience, with three critical areas for improvement: engaging youth in literacy programme design, enhancing teacher training, and providing resources for parents/guardians.

In light of these findings, the report recommends a multi-component strategy for building youth resilience to disinformation and increasing media literacy across the European Union. These recommendations are rooted in empirical research, youth consultation, and pedagogical best practices:

- Modular Media Literacy Toolkit: A flexible, open-source toolkit combining the core elements
 of disinformation resilience and media literacy, adaptable for formal and non-formal education
 settings across and within Member States.
- Inoculation-Based Workshops: Interactive, scenario-driven sessions designed to expose young people to manipulation tactics in controlled settings, equipping them with cognitive defences grounded in Inoculation Theory.
- **Peer-Led Reflection Seminars**: Structured, controlled youth-facilitated discussions that build trust literacy, emotional awareness, and shared accountability in assessing online content.
- Narrative Framing Simulations: Critical media analysis activities focused on recognising bias, tone, and rhetorical framing across digital news content.
- Civic Simulation Game: A gamified (either analogue or digital) educational tool simulating disinformation-rich civic environments, allowing participants to assume roles such as journalist, candidate, or voter, with a focus on instilling European democratic and pluralistic values in the face of disinformation threats.
- **Piloting**: Initial implementation through regional or subnational EU representations, with a potential flagship launch at an event such as the European Youth Event, followed by EU-wide scaling.

• Evaluation Framework: A rigorous, multidimensional evaluation system structured around four pillars—trust perception, manipulation resistance, narrative recognition, and civic confidence—allowing both quantitative and qualitative assessment.

These recommendations are designed not to prescribe a single solution, but to offer a **scalable**, **subsidiarity-respecting framework** for equipping young people with the tools they need to be empowered to critically navigate the information environments they inhabit daily. At stake is not merely the accuracy of online content, but the civic integrity and democratic engagement of Europe's next generation.

SCALE AND IMPACT OF DISINFORMATION ON YOUTH

QUANTITATIVE DATA AND STATISTICS

Internet use is growing worldwide. In particular, the engagement with social media networks is increasing. This phenomenon is particularly evident among younger demographics. Indeed, adolescents have been identified as the fastest growing demographic on social media platforms (Swamy et al., 2024). By the third quarter of 2024, individuals aged between 16 and 24 have been spending an average of **7 hours and 23 minutes a day online**, including 2 or 3 hours on social media platforms (Petrosyan, 2025). In accordance with DeCook's findings, social media has emerged as "a new socialising institution for children, teenagers, and young adults" (DeCook, 2018: 485).

Adolescents use social media for a variety of purposes, primarily for entertainment. According to a report by the EU Parliament in 2023 (Ipsos European Public Affairs, 2023), young people between the ages of 15 and 24 primarily use **Instagram (76%), YouTube (69%), WhatsApp (60%), and TikTok (55%)**. Notably, TikTok experienced a 7-point increase in its usage compared to 2022. The same report indicates that the primary motivations for using these networks are as follows: viewing photos or videos (57%), maintaining contact with friends and family (53%), monitoring the activities of friends, family, and colleagues (52%), and, intriguingly, **following news and current events (48%)**, which represents an increase of 5 points compared to 2022.

In fact, several studies and reports have indicated that young generations are now predominantly informed via social networks. For instance, the 2024 Reuters Digital News Report (Newman et al., 2024) found that 23% of participants aged between 18 and 24 reported using TikTok as a source of news. The 2023 EU Parliament's report also found that **younger respondents are much more likely to use social media platforms, accounting for 59% of 15-24 year-olds** compared to 24% of 55+ year-olds. This represents an augmentation of 14 percentage points compared to 2022 (Ipsos European Public Affairs, 2023). Additionally, the EU Parliament's report noted that young people are more inclined to use **video platforms**, with **37%** of respondents in the 15-24 age group reporting this usage, as compared to 11% of those aged 55 and above (Ipsos European Public Affairs, 2023). This finding is further substantiated by Reuters (Newman et al., 2024), which also reported an increase in video platform usage among younger demographics. The video platforms most used for news consumption according to age are shown in Figure 1. As demonstrated, social

media platforms such as YouTube, Instagram and TikTok are popular among younger generation (Newman et al., 2024).

As a result, research has found that **young people are 'differently informed'** than previous generations. They prefer, for instance, "'soft' news about cultural events, sports, and celebrities and are the least interested in 'hard' news regarding political or societal matters" (Vissenberg & d'Haenens, 2020: 65). The EU Parliament's report found, for instance, that younger respondents are more likely to engage with content related to hobbies and lifestyle (33%), people (30%) and crime and accidents (36%) (Ipsos European Public Affairs, 2023). Furthermore, research indicates that young people's news consumption is passive and incidental, with information reaching them through social media without them actively seeking news. It has been reported that **41% of 15-24 year-olds are more inclined to read articles or posts as they appear on their online social networks**, compared to 24% of 55+ year-olds (Ipsos European Public Affairs, 2023). Consequently, young people's news consumption is characterised by fragmentation, and they tend to allocate less attention to news content (Vissenberg & d'Haenens, 2020).



Figure 1. Proportion that Say Each is their Main Online News Video Platform by Age Group. Source: Reuters Institute Digital News Report 2024

However, as the use of the internet and social media intensifies and becomes more widespread, similar research has shown that on these same media, information disorders, including misinformation, conspiracy theories, hate speech and 'fake news', have been flourishing (Vissenberg & d'Haenens, 2020). The accessibility of social media has enabled a significant number of individuals to communicate and share information online freely. However, the weakness of content moderation on these new platforms has also enabled the propagation of mis/disinformation and similar false and harmful content (Arora et al., 2025; Bastick, 2021; Hiaeshutter-Rice et al., 2021). A recent study by Statista reveals that **81% of EU citizens consider fake news to be a significant threat to democracy** (Watson, 2024). The sheer volume of information made available online, including both true and false content, has reached a point where it has become challenging to make an accurate estimate of the amount of mis/disinformation. Nevertheless, it can be estimated that **over 70% of EU citizens are regularly confronted with fake news** (Watson, 2024).

In fact, mis/disinformation "spreads farther, faster, deeper and more broadly than truthful information and is often among the most popular social media posts" (Howard et al., 2021: 12). Young people face particular challenges with this phenomenon due to a combination of factors. While their higher screen time increases initial exposure to mis/disinformation and amplifies opportunities for repeated encounters, their vulnerability stems from multiple dimensions: still-developing cognitive abilities, preference for incidental rather than intentional news consumption, and reliance on algorithmic content delivery systems that prioritise engagement over accuracy, to name a few. Social media platforms are often viewed with scepticism regarding information reliability, with varying levels of user confidence in different platforms.

As demonstrated in Figure 2, TikTok presents a particular challenge – users report the greatest difficulty distinguishing between trustworthy and untrustworthy information on this platform, yet it remains one of the most popular among young people. This trust paradox varies across regions, as evidenced in Figure 3, which compares data from the USA and Germany. In Germany, **distrust for TikTok's content reached 41%**, a figure that stands in stark contrast to the 29% recorded in the USA (Newman et al., 2024).



Figure 2. Proportion that Find it Difficult to Identify Trustworthy News on Each Platform. Source: Reuters Institute Digital News Report 2024



Figure 3. Proportion that Find it Difficult to Identify Trustworthy News on TikTok and X - USA, Germany. Source: Reuters Institute Digital News Report 2024

Research has demonstrated that, due to their **underdeveloped cognitive and emotional faculties**, adolescents may be more inclined to accept and act upon false information than adults, and that they are susceptible to the detrimental effects of mis/disinformation (Howard et al., 2021; Vissenberg & d'Haenens, 2020). Indeed, despite their tendency to self-report their ability to discern authentic news from mis/disinformation, research has evidenced significant challenges in this regard among a substantial proportion of adolescents. This underscores their vulnerability to online false information (Herrero-Curiel & La-Rosa, 2022; Herrero-Diz et al., 2020). This phenomenon can be further exacerbated by the manner in which they consume news. Their tendency to consume news in a fragmented and incidental manner on social media results in a comparatively reduced allocation of time to news stories, thereby hindering their capacity to evaluate these sources critically. More generally, while the amount of information on social media has been flourishing, the human capacity for processing information is limited and is unable to attend to all new information (McBride et al., 2021). In summary, **young people are more at risk than adults of being harmed by mis/disinformation**, and the impact can be significant.

PSYCHOLOGICAL IMPACT

Even though the legal age for accessing social media in Europe is 13 years old, and this limit is included in the Terms of Service of many networks, there is compelling evidence that the average age at which young people create their first social media profile is considerably lower. A Norwegian survey conducted in 2022 (Children and the Media – a Survey of 9–18-Year-Olds' Media Habits, 2022) revealed that 96% of children in grades 4 to 7 (ages 9 to 12) possess a mobile phone, with at least 20% acquiring their first mobile phone at the age of 8. The survey also estimated that 56% of 9-year-olds use social media, a figure that rises to 90% from 12-year-olds onwards. This suggests that children and adolescents are increasingly entering the digital landscape at an early age. This phenomenon, however, may potentially exert a deleterious effect on their psychological development and mental well-being.

The World Health Organisation (WHO) defines 'mental health' as "a state of wellbeing in which an individual can flourish, through realisation of one's potential, positive social interaction and contribution to society" (Popat & Tarrant, 2023: 324). A recent study by the WHO has estimated that "one in seven (14%) 10-19-year-olds experiences a mental disorder," with depression, anxiety and behavioural disorders being the most common (Mental Health of Adolescents, 2024). This phenomenon underscores the growing prevalence of mental health challenges among the younger

populations, with mounting evidence suggesting a potential link to social media use. In particular, research has indicated that social media may exacerbate depressive symptoms and decrease selfesteem (Arora et al., 2025; Popat & Tarrant, 2023). The Health Behaviour in School-aged Children international report from 2021/2022 found that **11% of adolescents reported problematic social media use**, defined as a difficulty controlling social media compulsions, a feeling of distress when the use is restricted and a preoccupation with thoughts of social media when not online (Boniel-Nissim et al., 2024).

The dissemination of mis/disinformation, in particular, has been identified as a contributing factor to this phenomenon (Arora et al., 2025) and may increase psychological distress in young people, especially those already at risk. Indeed, hoaxes are not harmless; conspiracy theories for instance have been found to be largely detrimental to people's well-being and mental health, associated with anxiety, self-uncertainty, anomie and feelings of powerlessness, and can further damage people's health, as evidenced by vaccine hesitancy (Van Prooijen et al., 2022). More generally, exposure to mis/disinformation can cause "fear, panic, depression, stress, and anxiety in people" (Rocha et al., 2023: 1013). Regarding teenagers, mis/disinformation has been found to negatively affect children's self-esteem and create cynicism toward news sources (Selnes, 2024). Growing mistrust towards news and traditional media outlets is problematic and can lead to news avoidance; young generations often score high in this area (Ipsos European Public Affairs, 2023; Vissenberg & d'Haenens, 2020). Indeed, constantly trying to verify the accuracy of information can be tiring and increase negative feelings, including anger and stress (Arora et al., 2025), which explains why some may prefer to avoid news altogether. On social media, however, information reaches young people on its own, and it is this very lack of experience with news that can make it difficult for young people to distinguish between false and true content (Vissenberg & d'Haenens, 2020), thus increasing their vulnerability to mis/disinformation.

More problematic even is the fact that falling for false content is not necessary to produce negative outcomes. A recent study by Bastick (2021: 1) shown that "even short (under 5-min) exposure to fake news was able to significantly modify the unconscious behaviour of individuals." These altered unconscious attitudes can then affect cognitive, emotional, and moral processes. As a result, exposure on its own represents a significant challenge. In addition, Bastick conducted his experiment on undergraduate students, highlighting the danger that mis/disinformation poses to young adults and teenagers, as they are the demographic that spends the most time on platforms that facilitate the spread of such content. In fact, young people's extensive screen time multiplies their opportunities for exposure to misleading content, making them statistically more likely to encounter the types of persuasive mis/disinformation formats that Bastick's research identified as problematic.

EXAMPLES OF REAL-WORLD CONSEQUENCES

In this section, two examples of real-world consequences of mis/disinformation on young people are presented. The first example concerns the **risk of radicalisation** of adolescents through the diffusion of mis/disinformation on social media. Akram and Nasar (2023) showed how fake news and disinformation can influence and manipulate the public, especially youth, to increase support for certain extreme ideologies. The authors have highlighted how social media can be weaponised for radicalisation purposes, using the promise of connection and acceptance often promoted by these networks to lure users into radical conversions without them realising it. In particular, the authors point to Al-Qaida's online strategy to "manipulate the grievances of (Muslim) youth and radicalise them for violent extremism under the cover of giving a purpose to their life" (Akram & Nasar, 2023: 280). Similarly, during the 2010s, ISIS attracted many teenagers and convinced them to join the group. In fact, adolescence is often the time when young people feel the need to affirm their identity

and align themselves with particular ideologies or communities (Herrero-Diz et al., 2020), making them more susceptible to radical disinformation than adults. DeCook has shown how the Proud Boys, a masculinist and hateful group active mainly in the US, use Instagram and internet memes as a means of propaganda to socialise young men into the group's ideology. As a result, social media can be seen as "one of the most effective radicalisation tools of 21st century" (Tufekci, 2018).

The second example relates to the **increase of mistrust** caused by the flood of mis /disinformation, which can have very damaging consequences, particularly when it comes to health. This phenomenon was especially evident during the Covid-19 pandemic. The propagation of mis/disinformation and conspiracy theories online regarding the virus's origin and the vaccines' efficacy has had grave consequences for public health, impeding efforts to address the crisis. The spread of false information, particularly on social media, has contributed to vaccine hesitancy (Basch et al., 2021), especially among younger people. As more individuals, particularly younger demographics, turn to social media for health information, they often rely on these platforms as their primary source of news. Research has shown that while many young adults aged 18 to 30 have strong digital skills, they often lack the ability to critically evaluate health information (Basch et al., 2021). This makes them more susceptible to believing conspiracy theories related to COVID-19. As a result, younger generations have been more likely to endorse conspiracy theories about the pandemic compared to other age groups (Basch et al., 2021). The surge of mis/disinformation during that period was such that the WHO has termed it an 'infodemic' (Pérez-Escoda et al., 2021). This interference in people's behaviours had direct consequences for health, as well as generating serious social unrest and violence, in the form of harassment or attacks against health professionals and people of Asian origin (Rocha et al., 2023).

MECHANISMS OF DISINFORMATION

YOUTH PARTICULAR VULNERABILITIES

The dissemination of false or misleading information has emerged as a significant challenge within the digital landscape. This phenomenon is particularly salient among young generations, for at least three main reasons. First, recent surveys have shown that teenagers and young adults spend a substantial amount of time online, especially on social media. For instance, it is estimated that **97% of people aged 16-29 years used the internet daily** in 2023, compared with an average of 86% for the global population in Europe. They used it for the most part to surf on social networks (more than 80%) (Young People - Digital World, 2024). However, research has shown that social media platforms harbour a large amount of mis/disinformation. As a result, young demographics are more at risk to encounter false or misleading content than other age demographics.

In addition to their special relationship with digital platforms, youths are more vulnerable because of their **relatively limited cognitive and emotional capacities**. As this development is yet underway, children and adolescents are less likely to successfully distinguish genuine information from hoaxes; they are thus more susceptible not only to endorse and be harmed by such false content but also to propagate it to their friends and online social circle (Howard et al., 2021; Vissenberg & d'Haenens, 2020). Nevertheless, it should be noted that while young people are arguably the most affected by mis/disinformation, "older adults are more likely to share false information" (Osmundsen et al., 2021: 1012).

The third reason why young people are more at risk than adults when it comes to mis/disinformation relates to the way they consume news. Young demographics tend to be passive news consumers, reading news as they appear on their social media feeds. As a result, **their news consumption is rather incidental and fragmented**, with teens frequently 'snacking' on news while multitasking or engaging in other activities (Vissenberg & d'Haenens, 2020). Consequently, they spend relatively little time on each post, pausing only occasionally for specific content that catches their interest. Yet, passive interaction with online and news content reduces the use of cognitive reasoning to evaluate such information, increasing susceptibility to mis/disinformation (Millet et al., 2024). Moreover, not only do they tend to allocate less time assessing the credibility of each piece of information, they also tend to select news that aligns with their existing attitudes and beliefs and avoid hard topics, which may impede them from developing critical assessment skills (Vissenberg & d'Haenens, 2020). However, there are other dynamics at play that could exacerbate these vulnerabilities. The following of this section is therefore dedicated to analysing the dissemination and deceptive mechanisms of mis/disinformation.

ALGORITHMS AND VIRALITY

The Internet has revolutionised the way information is produced and consumed. In particular, it has led to a democratisation of information, blurring the line between news consumers and producers. Although this has allowed many new voices to enter the public debate, this shift has also led to the proliferation of dubious content, as traditional gatekeepers of information have been removed (Das et al., 2022). Consequently, **the rise of the digital space, especially social media, has been increasingly linked with the spread of mis/disinformation**, threatening healthy public discussions (Grandinetti & Bruinsma, 2023). Researchers have particularly discussed how the very structure of social media networks and the market on which they are based have been significant contributing factors (see for instance: Cinus et al., 2022; Diaz Ruiz, 2023; Metzler & Garcia, 2024; Millet et al., 2024; see also: Tufekci, 2018).

Social media platforms, and more broadly the internet, operate within an "**attention economy**," where maximising user engagement and time spent online is the primary goal (Marwick & Lewis, 2017). Platforms rely on this model to collect user data, which is then monetised, notably through targeted advertising. **Central to this strategy are algorithms** that curate news feeds, search results, and recommendations based on engagement metrics and user data history, to keep users engaged for as long as possible (Howard et al., 2021).

However, the focus on engagement has inadvertently prioritised sensational and emotionally charged content, including mis/disinformation and conspiracy theories (Alsinet et al., 2021). Such content often evokes strong emotional responses, whether positive or negative, and tend to spread faster than regular content, increasing the likelihood of going viral (Bastick, 2021; Howard et al., 2021). This dynamic is driven by the fact that "viral content, from funny videos to sensational headlines, garners the clicks, retweets, and likes, and thus advertising revenue" (Marwick & Lewis, 2017: 42).

Taking advantage of this model, mis/disinformation is often intentionally crafted to be emotionally impactful and provocative, precisely to maximise their spread (Bakir & McStay, 2018). Experimental research has shown that **social media market practices tend to reward the spread of mis/disinformation** and similar misleading or outrageous content (Diaz Ruiz, 2023). By attracting both positive and negative engagement, this kind of content gains traction and reaches a large audience, particularly young people who spend significant time online. For instance, Vissenberg and d'Haenens (2020: 65) have found that "around 126,000 fake news stories had been tweeted more than 4.5 million times by around 3 million Twitter users." This demonstrate how **mis/disinformation**

on social media spreads faster and farther than genuine information, often becoming some of the most widely shared posts (Howard et al., 2021).

Furthermore, creators and disseminators of disinformation often use bots to further take advantage of the system and increase the reach of their content. Briefly defined, "bots are automated social media accounts that resemble genuine users" (Howard et al., 2021: 11). Created in bulk, **bots artificially increase the virality of misleading and harmful content** by engaging with it, tricking social media algorithms into amplifying its reach. This automation aims to make disinformation snowball into misinformation, reaching actual users who may then unintentionally spread it (Woolley, 2022).

The primary concern with mis/disinformation going viral is the **heightened risk of exposure**. Even brief encounters with such content can subtly alter unconscious attitudes, potentially influencing behaviour without the individual's awareness (Bastick, 2021). This problem is exacerbated by the market incentives of digital companies, which can make social media addictive. Algorithms designed to maximise user engagement inadvertently increase the likelihood of exposure to mis/disinformation. Moreover, this process can amplify exposure, leading users to encounter similar pieces of misleading or false content multiple times. Yet, **research has demonstrated that repeated exposure enhances familiarity and thus the perception of accuracy** (Dunaway, 2021; Papapicco et al., 2022). Repetition is key to disinformation rather than manipulative talents (Diaz Ruiz & Nilsson, 2023). This dynamic creates a self-reinforcing cycle where misinformation becomes more entrenched in users' perceptions, further complicating efforts to mitigate its spread and impact.

Thus, the prioritisation of engagement over accuracy highlights how the profit incentives of technology companies can come at the cost of the integrity of information and public safety, particularly young people. Given their tendency to spend more time online than their elders, their lack of experience and ongoing brain development, **youths are particularly vulnerable to the negative effects of social media**. These platforms can particularly expose young people to a disproportionate amount of mis/disinformation and harmful content, potentially shaping their perceptions and behaviours in ways they may not fully understand or control.

ECHO CHAMBERS AND POLARISATION

Another algorithmic effect of social media is the formation of information bubbles or echo chambers. Echo chambers are environments where individuals primarily encounter beliefs and opinions that align with their own, creating a self-reinforcing mechanism that amplifies accepted information, ideas, and beliefs while underrepresenting differing or competing worldviews (Bakir & McStay, 2018; Diaz Ruiz & Nilsson, 2023). It is noteworthy that this mechanism is rooted in our cognitive system and natural limitations and biases, including confirmation and dissonance biases, which naturally lead us to seek out information that confirms our preexisting beliefs and avoid what might contradict them.

Nevertheless, **algorithms have been found to exacerbate these effects** by curating content based on users' data and engagement history, resulting in 'filter bubbles' (Bakir & McStay, 2018). These bubbles limit exposure to diverse viewpoints, reducing opportunities for debate and criticism, and reinforcing preexisting beliefs and perceptions. While algorithms do not solely create echo chambers, they amplify users' information behaviours (Figà Talamanca & Arfini, 2022; Metzler & Garcia, 2024; Zimmer et al., 2019). Algorithms create a feedback loop where a user's past behaviours shape their future social media feed, limiting growth and change and reinforcing biases. Additionally, Al-powered recommendation algorithms are not mere communication tools;

they act as decision-makers, determining what users see. However, their decision-making processes remain largely unknown, even to users, platforms, and the algorithms' engineers themselves. **Young people, in particular, may gravitate towards online spaces that reinforce their attitudes**, which can contribute to their vulnerability to the spread of mis/disinformation (Herrero-Diz et al., 2020). Indeed, when misleading content aligns with the accepted worldview within these chambers, the chances of it being accepted as a fact rise, as a way to support the existing position (Dunaway, 2021).

Moreover, echo chambers foster the repetition of information, increasing the **perception of accuracy through repeated exposure**. In extreme cases, this can lead to polarisation, where antagonistic groups with differing worldviews emerge. Polarisation, exacerbated by social media, poses a real threat to democracy as individuals identify more strongly with specific groups, dividing the world into liked in-groups and disliked out-groups (Renström et al., 2023). This polarisation facilitates selective exposure, where contradictory information is perceived as an attack on one's identity. Consequently, members of such groups become more susceptible to mis/disinformation from like-minded sources, reinforcing their worldviews (Dunaway, 2021). This can have real-world consequences in terms of radicalisation, as the combination of mis/disinformation and self-reinforcing mechanisms tend to move entire groups toward more extreme positions (Diaz Ruiz & Nilsson, 2023).

Mis/disinformation is both a cause and a consequence of polarisation, creating a selfreinforcing dynamic. Disinformation campaigns have indeed been found to have for prime objective the erosion of society by exacerbating intergroup tensions and polluting the information environment (Starbird et al., 2019). In turn, polarisation encourages the sharing of fake news as a means to express anger and construct group identity (Osmundsen et al., 2021). This phenomenon is particularly critical for young people, who are more vulnerable to fake news and are at a crucial stage of cognitive and identity development.

MEMES AND VISUAL DISINFORMATION

Mis/disinformation can take more than one form. Increasingly, experts have examined and worried about the impact of visual mis/disinformation, such as fabricated photos or videos, also known as deepfake, and memes. In fact, **visuals are expected to be more pervasive and critical** than text-based mis/disinformation (Howard et al., 2021). Visuals are processed more rapidly than textual information and create richer sensory responses, thereby affecting memory more profoundly and longer (Weikmann & Lecheler, 2023). Users are more likely to misconstrue fabricated visuals as credible than textual mis/disinformation, as critical skills tend to be less developed against this kind of information (Howard et al., 2021). As commonly known, a picture is worth a thousand words (Lokmanoglu et al., 2023). The prevalence of visual mis/disinformation has led to the development of a substantial body of literature, and this report does not aim to address all its findings. Therefore, it will attempt to present the dangers and pervasiveness of visual mis/disinformation for youth through a single case study, namely internet memes.

To put it briefly, memes are "humorous images, videos, text, etc. that are copied and spread through out the virtual sphere" (DeCook, 2018: 485), often becoming units of internet culture or subcultures (Lynch, 2022). Research has shown how **memes can be weaponised for political and ideological purposes, as a tool of propaganda**, often disseminating harmful and false information. Memes allow to convey a lot of information in a single image or short video, making them easier to process. As a result, they have been used to define and bring digital communities together; often including private inside jokes, they limit communities and can serve as identity building blocks (Al-Rawi, 2021; DeCook, 2018).

Consequently, they have been increasingly used by extremist communities that primarily operate online, for at least two main reasons. First, because of their humorous nature and design, memes offer an easy and ready-made barrier against criticism, allowing their authors and distributors to absolve themselves of any responsibility (Lynch, 2022). Secondly, they serve as visual representations of different online communities, allowing members to mark their sense of belonging and in-group identity in a simple and concise way, often unintelligible to outsiders (DeCook, 2018). Their very nature makes memes a perfect vehicle for political and ideological communication, as well as for the dissemination of disinformation; **they operate in a tailored environment that privileges strong emotional response, conciseness and outrage** (Lynch, 2022). This particularity allows memes to easily go viral, reaching a vast audience repeatedly and potentially impacting users' attitudes and behaviours without them necessarily noticing.

For instance, as a photo-based platform, **Instagram has become a fertile land for the development and dissemination of political memes and visual mis/disinformation**. However, due to their readily digestible and accessible nature, they can be significant in how youths process mis/disinformation. Picture and video-based services like Instagram are in fact very popular with children and teenagers; they represent more than 30% of all users, being the most represented age demographics on the platform (Dixon, 2024). Because they are funny, **memes attract many young people** looking for entertainment on social media. However, memes and the platform have increasingly been weaponised for propaganda purposes (AI-Rawi, 2021), representing a real risk for young people. As an example, DeCook (2018) has demonstrated how extremist groups, such as the Proud Boys, have mobilised on Instagram using memes to attract young people. In fact, behind the humoristic appearance of memes lie a powerful propaganda and indoctrination tool targeting primarily the younger demographics in search of belonging and identity. This is particularly problematic as Instagram has been found to have a strong influence on youth culture and perceptions of the world, representing a significant radicalisation route (DeCook, 2018).

INFLUENCERS AND PEER NETWORKS

In addition to the network's structure and the format of the message, the source constitutes also a significant factor in the process of mis/disinformation propagation. As shown in Figure 4 (Newman et al., 2024), users tend to pay more attention to certain types of source according to the networks they are using. However, it is also possible to see that personalities and celebrities play a predominant role on most platforms, particularly the ones most popular amongst young people, namely YouTube, Instagram, and TikTok. In fact, it is estimated that 30% of young Europeans access content related to famous people and **79% of the 15-24 year-olds allegedly follow influencers or content creators on social media**, compared to just 37% of the global EU population, all age included (Ipsos European Public Affairs, 2023). Given the significance of such sources amongst the younger generations, it is important to analyse the role influencers might play in creating and disseminating fabricated content and the impact of such behaviours on youths.

This is all the more important that the particular environment of **social media promotes credibility based on identity and status** (John, 2021). These dynamics therefore shifts a large part of information authority and legitimacy to social media influencers, who resemble their followers, thus allowing a better identification. As a result, content creators are able to build credibility even on topics that situate outside their domain of expertise, thanks to their status (John, 2021). Furthermore, their popularity and the accessibility of social media make it easy for them to distribute information and reach a large audience.

In particular, Lan and Tung (2024) have found that three main factors influence students' trust on social media: **the perceived credibility of the content creator, familiarity with them and user engagement**. Influencers seek to create an image of proximity and transparency with their online communities, fostering trust. Furthermore, Howard et al. (2021) have specified the role of engagement metrics in increasing the perceptions of credibility. In fact, **the higher the metric, the more likely content is susceptible to be shared, and the less likely users are to verify the information it conveys**. Engagement cues indicate popularity and social approval or disapproval of the content; comments, in particular, can mitigate credibility perceptions. Supportive comments encourage engagement with the material, while critical comments tend to discourage it (Lischka, 2025).

In addition to source credibility and engagement metrics, the credibility of the message itself is another significant factor. Research has demonstrated how **the language and tone used can impact the receivability of the message** by the audience, with positive and neutral language seeming more persuasive than negative or aggressive language (Keshavarz, 2021). Individuals' perceptions of social media as a reliable source of information also positively affect information credibility (Millet et al., 2024), as do pre-existing knowledge and beliefs. In fact, information is often deemed more credible when it comes from a source sharing similar viewpoints (Lischka, 2025), as **perceived likeness increases trust** (Keshavarz, 2021). In this sense, social media influencers play an important role by portraying themselves as close to their followers.

Young people, in particular, tend to uncritically accept information when it comes from influencers and opinion leaders they admire (Mahmood et al., 2023). Recent surveys show that **21% of young Europeans tend to trust social media influencers**, a figure that is rising (Ipsos European Public Affairs, 2023). They are also less likely to critically assess such content as they tend to prioritise aesthetics over veracity, rendering them more vulnerable to such mechanisms (Herrero-Curiel & La-Rosa, 2022). This dynamic is particularly worrying given the possibility of fooling engagement metrics and the virality of a piece of content through the mobilisation of inorganic and automated bots, as discussed above.

Indeed, despite the image they attempt to curate online, influencers are not similar to their followers. Not only their online celebrity status and influence capability set them apart, but **many are paid to put forward certain products and ideas**. Political influencers, especially, can be sponsored, however it is not uncommon for them to avoid clearly stating it. Moreover, according to Woolley (2022: 122), "depending on who is paying, an influencer might also spread sensational or misleading political content." Given their power of persuasion, this perspective is quite alarming. Such influencers can in fact act as '**propaganda laundering machines**,' as organic disinformation is harder to detect and much more compelling (Woolley, 2022).

Another significant source of mis/disinformation comes from ordinary people. Although the role of inner circle might not be immediately apparent on the previous figure, **peer networks, friends and family members play a crucial role in information exchange and credibility assessment**. A majority of 15-24 years-olds follow their friends, family or colleagues on social media and **23% of them are more likely to read content when it has been shared by their peers**. Group membership is indeed an important factor of information acceptance and distribution, including mis/disinformation (McBride et al., 2021). In particular, research has shown that social media users' are influenced in their choices by "either intensity of their perceived friendship or friends' perceived coolness" (Amatulli et al., 2014: 3), demonstrating the impact of intimacy and perceived attractiveness on perception of social media content.



Figure 4. Proportion that Pay Attention to each of News on each Networks. Source: Reuters Institute Digital News Report 2024

Additionally, children and teenagers are very likely to share information on topics that interest or surprise among their peers, with the intent to inform others or to affirm one's identity, affinities or interests. Moreover, the more young people perceive their friends' behaviour to be frequent, the more likely they are to reproduce such behaviour (Angelini et al., 2024), indicating that peer influence significantly shapes their online activities, including their propensity to share content. However, **as they tend to showcase more impulsive reactions and behaviours online, they rarely verify**

content beforehand, thereby effectively and unwittingly creating, sharing and amplifying mis/disinformation (Herrero-Diz et al., 2020; Howard et al., 2021). Moreover, the search for popularity might also push young people to share or create content to go viral. Studies have shown that youths are quite aware of the dynamics of social media and recommendation algorithms and might thus take interest into content they believe will maximise attention (Howard et al., 2021), including misleading or outrageous messages. Additionally, the sense of anonymity and impunity that often rules social media can embolden some to spread problematic content (Lan & Tung, 2024).

THE CURRENT STATE OF MEDIA LITERACY AMONG YOUTH

As explained throughout this report, mis/disinformation in a complex phenomenon. As the Internet and social media have grown, the digital space has increasingly become a significant component of younger generations' lives and identities. **New generations have often been referred to as 'digital natives,'** having grown up surrounded by digital applications and tools. However, it is important to note that parents and educators were mostly born before the Internet became as widespread as it is today and can remember a time without digital applications. Consequently, they have been termed 'digital nomads' or 'migrants' by researchers. In contrast to their children or students, these older generations do not share the same identity formation experiences in the digital space. **Young people are thus navigating online spaces and constructing their virtual identities with limited guidance**, which places them at risk of encountering harmful content, including mis/disinformation (Smith & Parker, 2021).

Accordingly, research has demonstrated the **necessity to cultivate robust digital competencies** in order to safeguard young individuals from potential harms and negative online experiences (Vissenberg et al., 2023). Research in this domain has indicated that fostering strong digital skills are necessary to help young people navigate the Internet and social media in a more secure manner and build resilience from a young age and throughout their lives is paramount. In fact, it is important to initiate education in this area at an early age, to equip children with the necessary skills to navigate online spaces and assess information. Experimental studies have demonstrated that children often begin to accept alternative facts and hold conspiratorial beliefs at the age of 14 (Jolley et al., 2021). Considering the young age at which some children enter the digital space, it is imperative to implement educational measures in advance to safeguard children. One possible approach involves introducing lightweight conspiracy theories and subsequently debunking them with children, to initiate the development of critical thinking skills (Basu, 2020).

In view of these findings, the EU has established an objective to ensure that by 2030, at least 80% of the EU population will possess fundamental digital competencies. However, recent surveys have revealed significant variations among EU countries in terms of their citizens' digital literacy skills, with estimates ranging from 30% to 80%, as illustrated in Figure 5 (Mancino, 2023). **The EU's average is 54% of individuals having at least basic digital skills**, while 86% of the population is estimated to use the internet regularly. This indicates a significant disparity between countries and between citizens' internet usage and the digital competencies required to navigate effectively and safely the digital space.



Figure 5. Share of Individuals (%) with Basic or above Basic Digital Skills by Country, in 2021. Source: Eurostat

When analysing the share of individuals possessing basic or above basic digital skills according to socioeconomic status, Figure 6 reveals that **younger generations, specifically those between the ages of 16 and 24, demonstrate a high share of proficiency, reaching approximately 70%** (Mancino, 2023). The predominant factor contributing to this statistic is the fact that the majority of these individuals are digital natives, having been raised in the digital age and utilising the Internet frequently and consistently. However, it is important to note that surveys estimate that 96% of this age group uses the Internet daily, indicating a discrepancy between competencies and utilisation.



Figure 6. Share of Individuals (%) with Basic or above Basic Digital Skills by Socioeconomic Status, in 2021. Source: Eurostat

Digital skills are important to build resilience against mis/disinformation. Although studies have found that these skills are linked to riskier experiences, particularly due to high internet usage, they help to build a shield against information disorders, protecting against associated harm (Vissenberg & d'Haenens, 2020). However, it is noteworthy to acknowledge the heterogeneity of digital skills, encompassing a broad spectrum that extends beyond purely technical aptitudes to include more social competencies. The concept of digital literacy emerges as a unifying framework encompassing: "(1) technical competence; (2) literacy in using digital technologies in a meaningful way – to work, study, and perform daily tasks; (3) the ability to evaluate information critically in the context of digital technologies; and (4) the motivation to participate and engage in digital culture" (Potyrała & Tomczyk, 2021: 256). Therefore, in the context of mis/disinformation, in addition to analysing digital skills in Europe, it is important to look specifically at media literacy, defined as the ability to retrieve and evaluate information (Park et al., 2021).

Rank (1-41)	Country	Score (100-0)	Clusters (1-5)
1	Finland	74	1
2	Denmark	73	1
3	Norway	72	1
4	Estonia	71	1
5	Sweden	71	1
6	Ireland	70	1
7	Switzerland	67	1
8	Netherlands	64	2
9	Iceland	62	2
10	Belgium	61	2
11	Germany	61	2
12	Portugal	60	2
13	United Kingdom	60	2
14	Austria	59	2
15	Czech Republic	58	2
16	Spain	58	2
17	France	57	2
18	Latvia	55	2
19	Slovenia	55	2
20	Lithuania	54	2
21	Luxembourg	53	2
22	Poland	53	2
23	Slovakia	48	3
24	Italy	47	3
25	Croatia	45	3
26	Malta	45	3
27	Hungary	41	3
28	Cyprus	39	3
29	Greece	38	3
30	Ukraine	38	3
31	Serbia	33	4
32	Moldova	32	4
33	Montenegro	32	4
34	Romania	32	4
35	Bulgaria	31	4
36	Turkey	29	4
37	Bosnia and Herzegovina	24	
38	Albania	23	
39	North Macedonia	22	
40	Kosovo	21	5
41	Georgia	20	5

Figure 7. Media Literacy Index 2023. Source: Open Society Institute Sofia

As demonstrated in Figure 7 (Lessenski, 2023), **considerable disparities in media literacy are evident among EU countries**, ranging from 31 (Bulgaria) to 74 (Finland), with an EU global average of 54, reiterating the previous results. The map presented in Figure 8 further illustrates the existence of **a North-South and West-East divide**. This finding underscores the need for targeted investment in media literacy programmes at the EU level, particularly within educational institutions, to address the evident disparities among EU countries. **Education in this domain is considered paramount to cultivate resilience in the face of mis/disinformation**. Studies have found that educated people tend to "feel more in control of their lives, do not believe so much in easy solutions and have more analytical skills" (Lessenski, 2023: 5). This finding is corroborated by Figure 6, which demonstrates a strong correlation between higher education and advanced digital skills, including media literacy. Additionally, it is noteworthy that Finland, the country with the highest ranking, has been recognised for its commitment to education as a means of countering information campaigns and enhancing societal resilience (Lessenski, 2023).



Figure 8. Media Literacy Index 2023: Map of the Clusters. Source: Open Society Institute Sofia

A review of the extant literature and previous studies reveals a clear consensus that education plays a pivotal role in counteracting the dissemination and ramifications of mis/disinformation. Digital literacy programmes that emphasise media literacy are of paramount importance. Nevertheless, there are still some gaps in this field. For instance, young people are often treated as a homogenous group in surveys and research, overlooking crucial differences in socioeconomic background, education, cultural contexts, and digital access that significantly influence individual vulnerabilities to mis/disinformation. Additionally, there is a notable scarcity of comparative studies examining how these factors interact with regional or national contexts across different European countries. While this report necessarily discusses youth as a general demographic category following the convention of existing research, it acknowledges the limitations of this approach and advocates for more nuanced studies that recognise the heterogeneity of young people's experiences with mis/disinformation. The following points represent potential further areas for improvement in media and digital literacy efforts in the EU.

• Work with adolescents to understand their perceptions of harm and mis/disinformation and their needs.

Adolescents and young adults are often well aware of the downsides of digital spaces and social media platforms. It is important to take into account their perceptions of online harms and mis/disinformation, to better understand how they navigate online spaces and to design educational programmes that support their specific digital needs and actively engage them, to foster their participation (Swamy et al., 2024). In fact, media literacy programmes need to keep up with young people's digital usage and some might not be directed enough to their daily experiences. For example, Lan and Tung (2024) have found that many participants in their study did not receive any education specific to TikTok or similar popular platforms amongst children and teenagers. Furthermore, students interviewed by Smith and Parker (2021: 2) have expressed the desire to engage in critical thinking of digital content and "to build practical, holistic, and transferable literacy skills that they can apply in their lives beyond school." Many reported that they felt current digital and media literacy education programmes were missing crucial elements of real-life experiences with digital platforms. The authors also found that these students were more likely to think critically about their online behaviours and revise them when they were directly involved in the discussion. Engagement further increased when the discussion centred on real-world examples and issues they had encountered. In fact, adolescents are a crucial part of designing efficient and relevant digital and media literacy programmes and their perspectives can provide very valuable insights into how to better protect them and what skills they specifically need to develop to navigate online spaces safely.

Enhance the formations and curricula for teachers and educators.

The second crucial element of digital and media literacy programmes are teachers and educators. As stated by Potyrała and Tomczyk (2021: 267), "individuals who share the responsibility for creating digital safety in the school and the family environment should be particularly literate in this area." However, if pupils and students are considered to be digital natives, teacher and educators are mostly recognised as digital migrants. While the digital space constitutes a significant part of the students' lives and identities, most teachers and educators do not share this same experience, creating a gap between the two groups. A study focusing on teachers' digital skills found that over 10% required special support, while only a third scored highly in digital literacy (Potyrała & Tomczyk, 2021). A significant proportion of participants disclosed that they received inadequate ICT training during their formation. Particularly problematic for educators is the ability to correctly assess the reliability of online content, which leaves them vulnerable to mis/disinformation. This, in turn, has a significant impact on their ability to offer qualitative pedagogy in this domain. Notably, those most in need to further educational support were the youngest participants, while the more experienced teachers were found to enhance their literacy in the job, by trying to address their students' questions and needs. These findings underscore the necessity to improve curricula to incorporate media literacy skills and their pedagogical approaches. It also demonstrates that technical digital skills do not guarantee media literacy. Moreover, media literacy can be conceptualised as a lifelong educational pursuit, necessitating ongoing learning and professional development. In addition, it is imperative to emphasise the necessity for teachers and educators to collaborate in this endeavour. The development of relevant media literacy programmes must be inclusive, as teachers are often the first to encounter students' issues while navigating online spaces.

Provide resources for parents and guardians.

The final element of media literacy effort relates to parents and guardians. This group of actors is frequently overlooked in media literacy discourse and research, despite its recognised significance. It is a well-documented fact that young people frequently access online spaces while at home, and parents thus play a key role in guiding and educating their children. The family environment is recognised as the third pillar of effective media literacy (Potyrała & Tomczyk, 2021); however,

guidance tailored to this specific group is currently lacking. Addressing this gap is imperative to ensure the efficacy of media literacy initiatives.

POLICY AND STRATEGY RECOMMENDATIONS

To address the evolving challenges posed by digital disinformation and unequal media literacy, we recommend a multi-component strategy grounded in pedagogical theory, empirical research, and participatory youth engagement. The recommendations presented build on our insights from our workshops at the 2024 European Youth Events in Berlin and Forlì, our 2025 Europe-wide research report, and the guiding frameworks of the Digital Education Action Plan, EU Youth Strategy, European Democracy Action Plan, and Article 10 of the Treaty on European Union. Each strategy is conceived as both scalable and adaptable, designed to respond to varying national, educational, and cultural contexts within the European Union.

At the heart of our strategies is a clear principle: media literacy must be co-designed with young people, not imposed upon them. Resilience against disinformation and enhanced media literacy is not achieved through top-down truth delivery and messaging, but through fostering curiosity, civic self-awareness, empowerment, ownership, and critical discernment.

MODULAR MEDIA LITERACY TOOLKIT

The foundation of our policy and strategy recommendations is a modular media literacy toolkit, capable of implementation across a wide variety of educational and community-based contexts. This toolkit synthesises the four pedagogical strategies outlined below – inoculation-based workshops, peer-led reflection seminars, narrative framing simulations, and a digital civic simulation game – into a coherent, customisable structure that educators, youth facilitators, and civic organisations can deploy flexibly.

This approach is grounded in kinaesthetic pedagogy, emphasising learning through active engagement rather than passive instruction. The toolkit is designed to be:

- Peer-led and co-designed with youth contributors;
- Multilingual;
- **Open-source**, enabling adaption by schools, youth centres, civil society associations;
- Deployable across both formal (e.g. schools) and non-formal (e.g. youth associations, civic spaces) education settings for maximum outreach;
- Respectful of the principle of subsidiarity, empowering Member States, regions, and local education providers to tailor implementation according to national and cultural contexts.

This modular media literacy toolkit design offers a structured yet flexible mechanism to equip young people with the cognitive tools to recognise manipulation, develop reflective habits, and practice civic resilience.

INOCULATION-BASED DISINFORMATION WORKSHOPS

These workshops draw on Inoculation Theory, which posits that exposing individuals to weakened versions of manipulative techniques, alongside critical reflection, fosters long-term resistance to misinformation. Inspired by the work of McGuire (1964) and more recent studies (Roozenbeek et al., 2023; Saleh et al., 2024), our workshops place young participants in environments where they simulate the deconstruction of disinformation. Participants are exposed to real-world disinformation formats – memes, deepfakes, emotionally framed headlines – and supported to understand how they manipulate attention and bypass rational judgement. Rooted in inoculation Theory, this method builds long-term cognitive resistance through structured exposure and kinaesthetic learning. Inoculation is especially promising for this young demographic, whose critical evaluation skills are still developing. By simulating manipulation tactics before they are encountered organically, **participants develop pre-emptive mental 'antibodies' against misinformation**.

The workshop structure includes:

- 1. A short introduction to the concept of disinformation and manipulation tactics;
- 2. Fact-checking and counter-narrative construction;
- 3. Peer evaluation and credibility assessments;
- 4. A reflective debriefing session focused on key skills.

This approach provides experiential insight into how and why manipulation works, rather than simply identifying "bad content." It empowers students to develop "mental antibodies" – critical, pre-emptive cognitive tools – and builds evaluative resilience across various media types.

PEER-LED REFLECTION SEMINARS

Reflection seminars are designed to be intimate and peer-driven. They centre on young people's lived experiences with online content – what they believe, trust, share, and later question. This method draws on social learning theory, and recent studies (Smith & Parker, 2021) have shown that such formats significantly enhance retention and behavioural adaptation.

These sessions:

- Encourage open dialogue on media experiences in small groups;
- Address how content makes participants feel, and how those emotions impact credibility assessment;
- Build "trust literacy" the ability to gauge reliability within one's own digital community;
- Reduce the stigma of "being duped" by disinformation by normalising cognitive vulnerability as a shared human trait.

Reflection seminars help **anchor media literacy in empathy**, recognising that disinformation thrives not only through manipulation but through isolation. They are particularly effective when co-facilitated by peer educators, ensuring relatability and psychological safety.

NARRATIVE FRAMING SIMULATIONS

In narrative framing simulations, participants understand the effects of framing and editorial processes. Participants reframe the same news story in different tones and formats – learning how narrative framing shapes meaning. They explore how headlines influence perception, how editorial choices reflect bias, and how persuasive narratives can be factually accurate but still manipulative.

Our research and field engagement reveal that young people are particularly vulnerable to persuasive misinformation framed to trigger emotions. This simulation helps them identify rhetorical manipulation and cultivates cognitive flexibility, crucial for empowering a generation of informed, proactive citizens.

The exercises teach participants to:

- Deconstruct tone and bias;
- Recognise how seemingly factual stories can still frame reality manipulatively;
- Reflect on their own cognitive biases in interpretation.

The purpose of these simulations is to **strengthen cognitive flexibility** – the ability to hold multiple perspectives and examine claims critically. Young people, who are especially susceptible to emotionally persuasive narratives, gain tools to resist ideological polarisation and develop a more nuanced, critical civic mindset.

ANALOGUE / DIGITIAL CIVIC SIMULATION GAME

To extend engagement beyond workshops and seminars, we recommend the development of an **interactive civic simulation game**. This game simulates an election period in which the player assumes the role of a candidate, journalist, or voter navigating a media environment saturated with disinformation. The game can be either analogue or digital, recommended to be trialled in analogue format first and refined into a digital mode.

This approach builds on the tested success of formats such as *Harmony Square* and *Cat Park*, both of which have demonstrated measurable impact on misinformation resilience through gamified pedagogy. By developing a European-specific model that is grounded in these precedents but contextualised within the European civic and electoral landscape, we aim to create a game that also foregrounds European values – democracy, pluralism, subsidiarity, and solidarity – which are often taken for granted or insufficiently appreciated by younger generations. This simulation could be rolled out across the EU as part of a wider civic engagement campaign.

Game mechanics include:

- Crisis management scenarios and viral disinformation response;
- Fact-checking challenges to build credibility scores;
- Collaborative gameplay: working with or against other roles (e.g. as a campaign team or newsroom).

This game is based on **democratic imagination** – the notion that young people learn best by being immersed in complex, dynamic systems. It gamifies media literacy in a way that is **deeply engaging**, **contextually-rich**, **and pedagogically rigorous**, blending civic education with media strategy.

PILOTING

The toolkit and its components are designed to be **piloted flexibly** within **regional** or **subnational representations** to the European Union, allowing localised adaptation that aligns with the **evaluation metrics** outlined below. This decentralised approach reflects both the pedagogical principle of relevance and the institutional principle of **subsidiarity**, enabling Member States, education providers, and youth networks to tailor delivery to their respective contexts. Conversely, the pilot could be EU-focused.

In parallel, the initiative could also be launched at a **flagship event** such as the **European Youth Event (EYE)** or a similarly styled EU-endorsed youth forum, generating early visibility and momentum. Such a launch should be accompanied by **press coverage** and **institutional engagement**, allowing for public dissemination, stakeholder dialogue, and broader coalitionbuilding centred around the shared objective of increasing youth media literacy across Europe.

The pilot should:

- Include live inoculation workshops, reflection seminars, and framing simulations;
- Collect participant feedback to refine content and delivery;
- Serve as proof-of-concept for regional and EU-wide scaling;
- Demonstrate adherence to the principle of subsidiarity by allowing national and regional actors to adapt modules to their educational systems and contextual needs to ensure relevance.

Following a successful pilot launch, the toolkit should be disseminated to schools (secondary; option to focus research and pedagogical approach to primary schools if deemed necessary), youth networks, and civic associations. A multilingual resource model (initially English and German) ensures accessibility and prepares the campaign for expansion.

With a successful pilot, this initiative could be scaled into a Europe-wide campaign – coordinated across Member States, endorsed at the EU level, and delivered in participation with regional actors– to ensure long-term, sustainable impact of media literacy and democratic resilience. The proposed digital civic simulation game would be designed and produced at this stage, guided directly by insights from the pilot phase and the evaluation metrics outlined below.

EVALUATION METRICS

A robust and multidimensional evaluation framework is essential for both measuring the impact and guiding future implementation. In keeping with the **Digital Education Action Plan**, the **European Democracy Action Plan**, the **EU Youth Strategy**, as well as the principle of **subsidiarity**, evaluation should be adaptable to national and regional contexts, whilst maintaining comparability across Member States.

Our recommended evaluation model rests on four pillars: **Perception**, **Resistance**, **Recognition**, and **Confidence**. These will be tracked using a combination of **quantitative indicators**, **qualitative reflections**, and **pre/post intervention analysis**.

Trust Perception Metrics

Assess changes in participants' perceptions of credibility, source reliability, and trust dynamics before and after intervention.

Indicators:

- Change in trust placed in different types of media sources (e.g. journalists, influencers, factcheckers, institutional channels);
- Self-reported awareness of algorithmic bias and emotional influence;
- Recognition of fact-checking mechanisms (e.g. EU-supported initiatives).

Tools:

- Structured pre/post surveys;
- Comparative Likert-scale rankings of trust across media types;
- Scenario-based source evaluation tasks.

Manipulation Resistance Scores

Measure the degree to which participants develop cognitive resilience to common manipulation techniques.

Indicators:

- Ability to identify emotional framing, false causality, conspiratorial cues, and inauthentic amplification (e.g. bots, virality loops);
- Reduction in likelihood to share misleading content;
- Improved detection of disinformation patterns in new content.

Tools:

- Disinformation scenario exercises (with recognition scoring);
- Digital behaviour self-reporting (e.g. "Have you shared content later found to be false?");
- Simulation performance (e.g. identifying manipulation during simulation/gameplay).

Narrative Framing Recognition

Evaluate participants' ability to analyse how narratives are shaped, framed, and editorialised.

Indicators:

- Capacity to distinguish tone, rhetorical bias, and emotional manipulation;
- Ability to reframe a news story in multiple ideological and emotional registers;
- Awareness of the distinction between factual accuracy and rhetorical persuasion.

Tools:

- Framing simulation exercises (assessed via facilitator rubrics);
- Written or verbal deconstruction tasks (e.g. explain how a headline might lead a reader);
- Peer review tasks in group-based sessions.

Civic Confidence and Engagement

Track changes in civic self-efficacy, media self-awareness, and willingness to engage in democratic dialogue (with pre/post intervention analysis)

Indicators:

- Capacity to distinguish tone, rhetorical bias, and emotional manipulation;
- Stated likelihood to engage in civic action (e.g. fact-checking, discussion, voting etc);
- Confidence in resisting disinformation and navigating media in social and political contexts.

Tools:

- Reflective evaluation (capturing cognitive and discernment shifts);
- Longitudinal follow-up surveys (1-3 months post-intervention).

Methodology and Delivery

Each workshop, seminar, and module will include a pre- and post-session survey intervention tailored to its objectives. Where feasible, digital dashboards will be used to collect anonymous engagement data and track overall progress, especially in game-based and online formats. Follow-up surveys should be implemented 4-8 weeks after participation. These should include scaling scores (e.g. Likert) for **quantitative data** acquisition.

Qualitative inputs (e.g. interviews, facilitator notes, focus group transcripts) will supplement the quantitative metrics, capturing and emergent themes.

All data collection must be:

- Anonymised and GDPR-compliant;
- Adaptable to national languages, contexts, and delivery formats;
- Designed to support subsidiarity by allowing education authorities and facilitators to interpret results contextually whilst contributing to an EU-wide evaluation.

Iteration and Feedback Loops

Findings from each piloted intervention should be aggregated into a comprehensive feedback report, informing:

- Improvements to module content;
- Tailoring of toolkit for national, regional, EU-wide, or age-specific contexts;
- Design priorities for future digital tools, especially the civic simulation game;
- Policy recommendations regarding European institutional integration.

Youth participants should be invited into the feedback process directly – vis structured reflection prompts and optional peer-review forms – to ensure ownership, relevance, and lived validation.

CONCLUSION

At the heart of this report lies a simple but urgent conviction: that in order to safeguard Europe's democratic pluralism in the twenty-first century, we must equip young people with the skills requisite to identify, resist, and combat disinformation in their everyday lives. This is a necessity. The accelerating volume, intensity, and algorithmic manipulation of online content are not passing phenomena. They now define the civic experience of a generation coming of age in a world where information is omnipresent, but trust is not.

Throughout this report, we have sought not only to map the contours of this challenge, but to offer a framework for tangible, effective response. Drawing from original fieldwork at the 2024 European Youth Events in Berlin and Forlì, as well as from Europe-wide research and pedagogical theory, we

have built a vision rooted in empirical evidence and practical feasibility. What emerges is a clear message: media literacy must no longer be seen as a niche concern or a soft skill – it is a foundational capacity for democratic resilience.

Indeed, while young people are often assumed to be 'digitally native', our research reveals that digital fluency does not equate to critical reflexivity. The capacity to scroll, share, and search is not the same as the ability to scrutinise, interpret, and resist. Nearly half of the young participants in our workshops reported placing more trust in social media influencers than in professional journalists. This finding does not suggest carelessness or ignorance; it reflects the absence of structured tools and spaces to interrogate how information is framed, validated, and consumed.

This report responds with a set of policy and pedagogical strategies designed to increase the media literacy of young Europeans. Each recommendation – whether inoculation-based workshops, peer-led reflection seminars, narrative framing simulations, or the development of a digital civic simulation game – centres on one principle: media literacy must be built with young people, not delivered to them. These formats are participatory by design, flexible in implementation, and capable of being embedded into both formal and non-formal educational settings.

Crucially, this strategy is not abstract or overly centralised. It embraces the principle of subsidiarity: implementation should begin where young people live, learn, and participate – within regional, subnational, and community-level institutions. The modular structure of the toolkit is designed to provide a starting point for adaptability across Member States, linguistic contexts, and civic cultures. A pilot phase, supported by a robust evaluation framework, will ensure that the programme evolves in dialogue with those it serves, and can be scaled into a Europe-wide campaign with credibility and precision.

What we are calling for, ultimately, is a system of civic youth empowerment. One that gives young people the practical skills and emotional confidence to navigate disinformation not just in abstract terms, but in the real environments they inhabit – on their phones, in their conversations, across their social networks. A system that treats them not as passive targets of manipulation, but as active stewards of the information spaces they inhabit.

To increase media literacy is not simply to teach critical thinking; it is to build the infrastructure of a more reflective, pluralistic, and resilient public sphere. It is to invest in the very capacities – discernment, empathy, trust-building – that democratic societies require to endure. And it is to reaffirm that the future of European democracy depends on the integrity of the information ecosystems in which its young citizens learn to think, trust, and act.

To identify, to resist, and to combat disinformation is not only to defend the present. It is to shape the conditions for a more just, informed, critically engaged, and democratic future.

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