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D5.3 Exploratory Focus Groups

[12/05/2025]

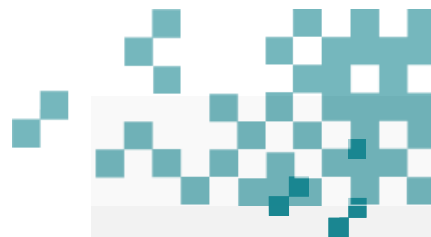


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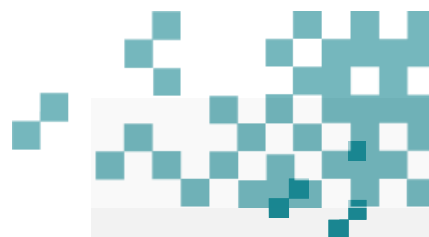
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Abstract	D5.3 explored how middle-aged citizens and professionals across six European countries engage with online and social media. Through 14 focus groups and 5 interviews, participants shared their experiences, content preferences, and views on misinformation. The primary aim of the focus groups and interviews included uncovering participants' media practices and preferences to inform the creation of SMIDGE counter-narrative content. Citizens described using social media primarily for light, entertaining content aligned with personal interests. Many expressed concerns about online privacy and took steps to verify information, although time, emotional fatigue, and lack of topic-specific knowledge were barriers. Trust in content was closely linked to who was presenting it. Participants also noted that what is seen as “conspiratorial” is often shaped by personal beliefs, making such views difficult to challenge. Aggressive online content led some to reduce or withdraw from social media. Professionals also echoed concerns about misinformation and emphasized the impact of algorithms. They focused more on structural solutions like media literacy and platform regulation. They also believed middle-aged individuals are especially vulnerable to online manipulation due to lower digital literacy and passive engagement. Recommendations for SMIDGE counter-narrative videos include using relatable and trustworthy presenters, a light tone, accessible content, and a short format. Dialogue and humour were seen as promising techniques if used carefully.





Key Words	Focus group, interview, social media use, middle aged individuals, solutions
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Revision History

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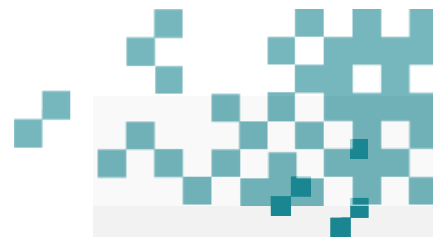
Executive Summary

D5.3 explored the ways in which middle-aged citizens and professionals engage with, experience, and evaluate information from online and social media. With a primary focus groups and interview aim to describe participants' media practices and preferences, this deliverable strives to inform the creation of SMIDGE counter-narrative content. Drawing on 14 focus groups and 5 interviews across six European countries with citizens and professionals, the findings shed light on digital habits, interests, verification strategies, and concerns around misinformation. Participants described using social media primarily for content that aligned with their personal interests, often favouring lighter and more entertaining material. Platform choice was strongly influenced by privacy concerns and the sense of control users felt. Citizens frequently reported adjusting their usage habits based on safety and emotional well-being. One rich theme was the effort individuals put into cross-checking content, such as investigating the credibility of sources or the credentials of the presenter. However, this was often limited by time constraints, too much information available, and a lack of specific knowledge on a topic. Participants acknowledged the complexity of misinformation. Many said that whether a claim is "conspiratorial" often depends on personal beliefs, making misinformation hard to address directly. The emotional impact of online engagement, especially concerning aggressive online content (e.g. online insults, attacks), led some to step-back or reduce their social media use. Views on the role of social media in creating a sense of an online community were mixed, with some valuing its potential to create connections and others feeling more isolated by it.



Professional participants largely agreed with these experiences but brought additional perspectives. Journalists noted that social media affected traditional journalism, describing both opportunities for real-time reporting and concerns over public mistrust and the erosion of ethical standards. They emphasized policy related interventions, such as media literacy education and platform regulation, as key solutions to spreading of online conspiracies, more so than citizens, who emphasized communication strategies such as dialogue. Professionals also perceived middle-aged individuals as more vulnerable to misinformation due to lower digital literacy, stronger pre-existing beliefs, and more passive online engagement. Both groups highlighted the influence of algorithms in reinforcing prior beliefs, with professionals warning of increased polarization and manipulation, particularly among less digitally literate users.

In terms of designing effective counter-narrative videos for the SMIDGE project, participants were unsure when asked directly. However, several themes informed practical recommendations. These include carefully selecting presenters who appear trustworthy, knowledgeable, or relatable; aligning content with the viewer's interests; and ensuring it is easy to understand. A light and engaging tone was preferred, even when addressing serious topics. Aggressive style messages were consistently rejected, while open dialogue and humour were seen as potentially effective—if handled sensitively. Short, concise videos were favoured for maintaining attention and accessibility.



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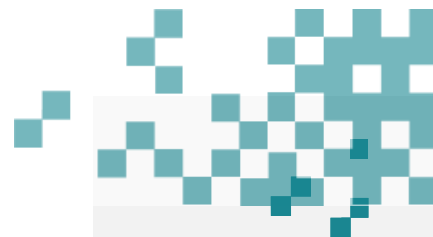


Introduction

Social and online media has become an integral part of citizen's daily lives affecting individuals' understanding of the political, social and environmental context in which they live in (Boulianne & Theocharis, 2023). Importantly, dependence on social media for information and news has significantly increased since the impact of the COVID-19 pandemic (Grinberg et al., 2019; Lazer et al., 2018). Similar to their increased use, social and online media have also become a fertile ground for the spreading of misinformation, conspiracy theories and erroneous content (as analysed extensively in other SMIDGE deliverables; Levy, 2017; Enders et al, 2023). Despite the rise and influence of social media however, little qualitative research has considered how individuals and importantly middle-aged individuals experience their participation in social media, how they perceive evaluate and respond to information received through social media. Nonetheless, gaining a thorough understanding of how specific demographics (namely, middle aged individuals) engage with online and social media and how they process and discern information has the potential of informing the development of counter-narrative content to be developed in SMIDGE, supporting individual in approaching misinformation and conspiratorial content in a more informed and critical manner.

While social media platforms were initially embraced by younger generations, individuals currently in the middle aged demographic (40-65) (commonly referred to as Generation X; born between 1960 and 1980) — who grew up during a less digitally saturated era — have undergone significant shifts in both their personal and professional spheres, requiring them to swiftly adapt to the digital age (Gao, 2024; Giarla, 2019). Often described as "digital immigrants", individuals currently in midlife adapted to technological advancements later in their lifespan (Gurunathan & Lakshmi, 2025). Studies focusing on this demographic in the U.S. have shown that these individuals have fully incorporated the internet into their daily routines, with 94% engaging with social media, rates comparable to their usage of traditional media like television (Gao, 2024; Giarla, 2019).

Prior research highlights a tendency toward platforms such as Facebook, X (formerly Twitter), LinkedIn, and WhatsApp, with comparatively lower engagement with highly visual platforms like Instagram and TikTok (Calvo-Porrall & Pesqueira-Sanchez, 2019; Euajarusphan, 2021; Gao, 2024; Giarla, 2019; Gurunathan & Lakshmi, 2025). However, these patterns may vary across different cultural and contextual settings, as few studies have explored this phenomenon cross-culturally. The choice of platforms among Generation X users also reflects their specific priorities in using social media. Research suggests that this group is more inclined to use social media for professional purposes (Fietkiewicz et al., 2016), maintaining connections with friends and family (Calvo-Porrall & Pesqueira-Sanchez, 2019; Giarla, 2019), and gathering information or fostering personal growth, while placing relatively less emphasis on purely social interactions (Berezan et al., 2018; Calvo-Porrall & Pesqueira-Sanchez, 2019). Although limited, available studies suggest that middle-aged users may approach online content with greater skepticism (Cabeza-Ramírez et al., 2022; Calvo-Porrall & Pesqueira-Sanchez, 2019) and exhibit higher concerns about privacy (Euajarusphan, 2021; Lissitsa & Kol, 2016). Similar findings were echoed in an older qualitative study (Yimaz & Özkoçak, 2010) which focused on Gen X (however at a younger life stage), which also found that this group were more passive content consumers and were aware of risks regarding privacy (although they accepted them).



In terms of our study's specific research questions—which pertain to middle-aged users' perceptions of online conspiracy theories and misinformation, their experiences of these phenomena, and their approaches to managing such content—our understanding remains limited. Beyond this gap in knowledge about individuals currently in the middle-age demographic, we have a more general understanding of online and social media experiences from previous qualitative studies involving broader age groups. For instance, a qualitative study by Hadlington et al. (2022) conducted with 24 individuals aged 18 to 56 identified three core themes of interest. Firstly, individuals used social media to remain social and stay connected with their personal networks. Interestingly, participants described efforts to differentiate and distance themselves from individuals spreading fake news, suggesting a sense of moral distancing. A second theme centered on participants' perception of the online environment as a perfect storm for the spread of fake news, particularly due to the speed of circulation and the predominance of personal—rather than verified—opinions. Regarding fact-checking, individuals reported using strategies such as triangulating their sources, relying on gut feeling, or applying common sense to assess content credibility. Similar issues were echoed in another qualitative study by Urakami et al. (2022), involving a broader demographic (ages 18–54), where participants expressed difficulty in detecting misinformation and reported emotional impacts linked to these encounters. Participants in that study indicated a need for tools to support both the verification of online content and the regulation of their emotional responses to misleading or false information.

Professionals' understanding and consideration of social and online media use among the middle-aged demographic today, as well as their views on what makes content attractive and how misinformation or conspiratorial content is managed by this group of citizens and professionals, remains somewhat vague. Professional journalists and content creators (such as influencers) have experienced profound changes in their online activities due to the rapid rise of social media (Abidin, 2021; Newman et al., 2023). Despite their deep familiarity with the online media sphere, their perspectives on the specific appeal of content and the role of social media in the spread of misinformation and conspiracies have not been consistently explored.

Some broader studies, including these professional groups, offer relevant insights. For instance, in a survey of 400 journalists in the U.S., Saldaña and Tien Vu (2021) found that while journalists generally engaged at low levels in actively debunking misinformation, those who integrated social media more heavily into their professional routines were more likely to address it. Importantly, many journalists believed that social media companies should take primary responsibility for regulating misinformation on their platforms. Similarly, in a qualitative study with 16 journalism professionals across several countries (including Europe), van Antwerpen et al. (2023) reported that journalists saw themselves as operating in direct competition with misinformation, calling for clearer standards and the restoration of public trust. They emphasized the importance of promoting trust in journalistic processes and maintaining transparency.

Regarding content creators, recent studies have further clarified how influencers affect information credibility and audience engagement. In an experimental study on COVID-19 misinformation, Wasike (2022) found that posts endorsed online by influencers significantly increased both engagement and post's perceived credibility compared to the same content posted without an influencer being involved. However, this effect was mediated by credibility signals such as the perceived trustworthiness of the source and the level of detail provided, highlighting the relevance of understanding how citizens verify information. In a follow-up study, Wasike (2025) found that individuals who followed influencers tended to trust both influencers





and traditional news sources, concluding that news consumption via social media did not necessarily diminish trust in mainstream journalism.

To summarize, although previous studies have explored in varying degrees how citizens and professionals engage with online and social media content, no studies have specifically examined the experiences of those currently in middle age within the European cross-cultural context and using qualitative methods. This demographic, which often includes individuals in influential social roles (e.g., parents, team leaders, or those in senior positions), encountered social media later in life and integrated it into their routines at a more advanced life stage. Their historical relationship with digital technologies may shape how they use, verify, and interpret online information. Gaining a deeper understanding of their social and online media experiences will be essential for developing effective counter-narrative messages tailored to this group.

To address these aims, SMIDGE hosted six online focus groups with citizens, three with professionals, plus 4 interviews with professionals –content creators (e.g. journalists and influencers in social media) across European countries. The aim was to conduct focus groups with citizens and professionals to examine how social media affected individuals' beliefs, focusing on mainstream and extremist media and extremist beliefs. The analysis examined participants' media practices, the type of content they engaged with and shared, social media attractiveness features, which platforms and apps they used, and how social media might have offered a sense of community and influenced middle-aged individuals in shaping their beliefs. Participants were asked to discuss the characteristics of the message that make it attractive and convincing. Citizens were asked to discuss which features on social media influence them to shape an opinion or reconsider an existing one on important socio-scientific issues - vaccination, immigration and climate change. Content creators were asked which features they believe influence users of social media, the receivers of the message, regarding these same issues. The project also examined whether there were cultural and gender differences in the way social media affected citizens' beliefs.

Method

Procedure

Citizen and professional focus groups/interviews received bioethical approval centrally from the Cyprus Bioethics Committee and each organising partner's local ethics committees, as required. Participants' rights of confidentiality and of withdrawal were explained before each focus group and at the beginning of each discussion, while participants were also advised to take turns during the focus group and to exercise respect of each other's opinions. Participants were fully debriefed at the end of each focus group session. An extensive focus group/interview protocol (Annex 1) and interview schedule for each type of focus group was developed in cross-discussions with the consortium team (Appendix 1 & 2). Questions focused on the use of social and online media in the middle-aged group, including how it influences beliefs, behaviour, reactions to online content and how individuals deal with inaccurate content on online platforms.

Participants in the citizen focus groups were eligible if they belonged to the middle-aged demographic, defined for this study as individuals aged 40 to 65. For the professionals' focus groups, recruitment primarily targeted middle-aged participants, but with some flexibility to include slightly younger individuals. This was based on the consortium partners' recognition that content creators often belong to a slightly younger demographic. As a result, six content creators



and journalists aged 30–40 were included. The recruitment flyers for the citizen and professional focus groups are provided in Appendices 2 and 3. Before joining, participants filled in a linked MS form to give consent and register. Confirmed participants completed an online demographics form and then provided an email address to receive the meeting invitation on a pre-agreed date.

Online focus groups and interviews were all held via Microsoft Teams (GDPR compliant). Each 90-minute focus group was guided by two facilitators from the organising partner, who received training by two experienced researchers in conducting focus groups over a 2-hour online workshop. One facilitator from the organising partner guided each 60-minute interview. Sessions were recorded and transcribed (where possible) using the in-built Teams function, with participants reminded of this at the outset. All organising partners translated and proofread interviews into the English language and shared them with UCLan Cyprus for further analysis.

During the focus groups, facilitators welcomed participants, encouraged camera use, introduced themselves and the project, and invited brief participant introductions to support open discussion. Upon completion of the focus group, citizen participants were thanked for their participation and rewarded with 20 euros worth of vouchers as compensation for their time.

Citizen focus groups

SMIDGE hosted six online focus groups (and 1 interview) with citizens across several European countries (Denmark, UK, Greece, Kosovo, Italy, Belgium). Participants for the citizen focus groups were recruited using two methods: First, individuals who had completed the SMIDGE online survey and expressed interest in joining a focus group were contacted to confirm their willingness to participate. Second, the opportunity to take part was advertised on the social media channels of each respective organisation while snowballing recruitment was also possible. All potential participants were offered a €20 voucher in appreciation of their time.

Professionals focus groups

SMIDGE hosted 3 online focus groups and 4 interviews with professionals across 3 European countries (Italy, UK, Cyprus). Professionals were contacted through letters sent to news organisations, direct contact via their social media channels, and through professional networks. Professional participants were not offered additional compensation for participation.

Participants

In total, 46 participants took part in the **citizens' focus groups** and one interview. The participants were from six different countries: Cyprus (7), Denmark (4 participants in the focus group and 1 in an interview), Italy (6), Kosovo (7), Belgium (10), and the United Kingdom (11). The majority of the participants were male (65.22%). Participants ranged in age from 41 to 65 years old. The majority of participants held a university or college degree, with 15 participants having master's degrees and 1 having attained a PhD or other postgraduate qualification. Their occupations were diverse, including lawyers, teachers, lecturers, engineers, business professionals, and public sector employees. Some participants were self-employed, while others worked in specialised fields such as business development, consulting, and municipal services.

In total, 19 participants took part in the **professionals' focus groups** and interviews. The participants were from three different countries: Cyprus (n = 7), Italy (n = 6) and the United Kingdom (n = 6). The majority of the participants were female (57.9%). Participants' age range was from 30 to 65 years old. All participants identified either as a professional journalist or as a content



creator/ influencer. Influencers' professional backgrounds varied, including filmmakers, influencers/content creators, artists, university professors and lawyers.

Data analysis

All transcripts were uploaded into NVIVO (v15; 2024) and analysed using thematic analysis (Braun & Clarke, 2006, 2022), chosen for its flexibility with mixed qualitative data and suitability for interpreting participants' thoughts in context. Citizen focus groups were analysed separately to professional focus groups. A comparison of themes across citizens' and professionals ensued only after thematic finalization of each separate analysis.

Following Braun and Clarke's six-phase approach, the three researchers familiarised themselves with the data and jointly coded one transcript to generate initial codes. The remaining transcripts were divided among the team, and initial themes were developed through collaborative meetings. One researcher (VC) then reviewed and organised the codes into a draft thematic map for citizen and professional focus groups/interviews. Inter-rater agreement was assessed by having two independent researchers in the case of the citizen focus groups (PK, AP) and one (AP) in the case of professional focus groups/interviews recode 20% of the data, achieving >90% agreement. Themes were refined, defined, and finalised in consultation with the team, ensuring alignment with the research questions. In the final phase, visual outputs were extracted from NVIVO, and the project write-up was completed.

Results

Citizen focus groups

The citizen focus groups resulted in several themes reflecting middle-aged individuals' social media preferences, behaviours, perceptions regarding misinformation and conspiracies online, and their emotional experiences of their online lives. Themes are described in order of frequency in the data. That is, some topics and ideas were widely discussed, whilst others were discussed less. Although certain themes share overlapping concepts, we present them separately, as each thematic cluster represents a distinct meaning within the data.

Using social media

This was by far the most talked about theme, present in all the focus groups/interviews. Participants indicated their type of activity on social media, how frequently they used it, and which social media platforms they preferred.

Participants mentioned a wide range of platforms and frequent use of social media. Many expressed that different media served different purposes for them, for example, emphasizing **purposes such as fun, retrieving political news or information, or for serious purposes such as work tasks**. It was expressed by some participants that they **preferred certain platforms based on the platforms' more secure privacy settings**, and that they **used specific websites** to retrieve news or information rather than obtaining it from secondary sources like social media platforms. For example, one participant said that they preferred using Reddit because they believed it was more private, and another said they used Facebook because it had data protection functions.

Participants also mentioned their **reasons for sharing** content on social and online media, and what **type of video** content they preferred. Participants focused on being attracted to content related to their **personal interests and experiences**. Indicatively, referring to psychological and personal motives one participant mentioned,

“Yeah, there is one news I saw about a child disability, like what people—what people face, like what children are facing, children with disability. I saw that on news, and people were like throwing in their own idea, their experiences. So, I also try to share my own experience because one of my child has autism. So that is, Ehm, yeah, the kind of news I—I go through. It gives me comfort to see some others are going through similar things, yeah.”

While another participant even mentioned that they use social media because they are a pessimist and like to see things that make them feel bad about the world and better about self.

On the same theme, reasoning, participants indicated liking **political videos, news reporting videos**, while others preferred **humorous or funny videos**.

In terms of content sharing on social media, participants in five focus groups talked about **sharing light and funny content**, while participants in three focus groups also said that they tended to participate online to **comment against misinformation**, or in four focus groups to correct something, or in five focus groups to educate others. Another frequent type of online participation, mentioned in four focus groups, was only **sharing fact-checked content**. Many (five focus groups) also mentioned that they did not share any content at all on social media.

Methods of cross-checking information

This was the second most discussed theme, mentioned in all the focus groups/interviews. Participants were concerned with cross-checking information online and talked about the methods that they employed. Participants from all the countries suggested methods of cross-checking information on social media.

Some methods of cross-checking that were suggested by the participants were: being more critical of the content of the information (mentioned in four focus groups), checking how credible the source is (mentioned in six focus groups), and using official sites (mentioned in seven focus groups):

“I’m trying not to engage in international politics or things like that, because there’s a lot of fake news. And so, if I see something on Facebook that is interesting about international politics, I will control other sources—yeah, Ehm, my newspaper, my magazine, the radio, the television—because I don’t trust the information on Facebook. Facebook is, for me, a different thing.”

Also, participants in four focus groups mentioned checking the post’s characteristics (location, views, images) to ascertain the post’s validity. One participant in the Italian citizen focus group indicated that finding first-hand information from real sources and cross-checking information from different online sources are other ways of cross-checking. Another participant from Italy said,

“I look for it with a critical eye. I’ll use Facebook as an example, since it’s the platform I use the most. On groups or pages, I check how many members there are, and then I might ask to join the group or follow the page. At that point, I look at others’ opinions, try to figure out if they’re not interesting to me or seem blatantly false, evaluate the content that I don’t agree with, or where, perhaps, there’s a



headline but then they talk about other things. I usually use this method. Another method is trying to compare what I find on the internet with what I find on social media, because often from people's opinions comes a truth that's sometimes missing from the article that's predetermined on an editorial page. People often write impulsively, so interesting data often emerges from the way someone writes."

Solutions to misinformation, fake news and conspiracy

Participants in all focus groups/interviews expressed a **wide range of solutions to misinformation**, including education (the most popular solution), dialogue, and control of platforms by governments and communities. Participants in three focus groups suggested creating and finding credible websites to fact-check; three focus groups suggested having easily accessible scientific information; and one focus group discussed the importance of presenting balanced views from official media sources:

"To deal with misinformation, people should check reliable sources. However, I do know that some people just do not trust any sort of mainstream media, and I just think misinformation will get worse until social media sites are controlled and regulated better."

Humour was suggested by a participant in Denmark as a tool to counter misinformation and conspiracy, along with online warnings (discussed in three focus groups) and tips to help users select accurate information. AI was also suggested by a few participants in two focus groups to filter the accuracy of news on social media. Another suggestion, from one participant in the UK focus group, was to include helplines to support people experiencing mental health issues.

Dialogue-based interventions were discussed in four focus groups, while the importance of delivering information from credible presenters was highlighted in three focus groups. When discussing dialogue-based interventions for debunking conspiracies, one Danish participant said:

"That's one of the things that, in the nature of science, the starting point is that it shouldn't be a religion that is preached. Things should be able to be discussed and examined, and it should be welcome to ask questions. I mean, it's about a different mindset than just presenting the truth and hitting others over the head with it."

Table 1 illustrates that education and dialogue-based interventions were most preferred among the citizen participants.

Table 1. List of solutions and ideas for managing misinformation and conspiracies, as derived from the focus groups/interviews.

Suggested Strategy	Mentioned in # Focus Groups (n =6; n=1 interview) / # of coded mentions (n=76)
Education	6/17
Dialogue	4/10
Easily accessible, scientific, true information	3/9

Create, find credible website, community to fact check	3/8
Credible presenters	3/7
Online warnings	3/4
Block, control platforms	1/6
Explicit, balanced views from official media sources	1/4
Tips to select information, handle online technology	2/5
Use AI to filter the accuracy of news on social media	2/3
Humour could be a tool to counter misinformation/conspiracy	1/1
Include helplines to refer people with mental health issues	1/1
Counter narratives must match the target audience	1/1

Cross-checking information from online sources is difficult

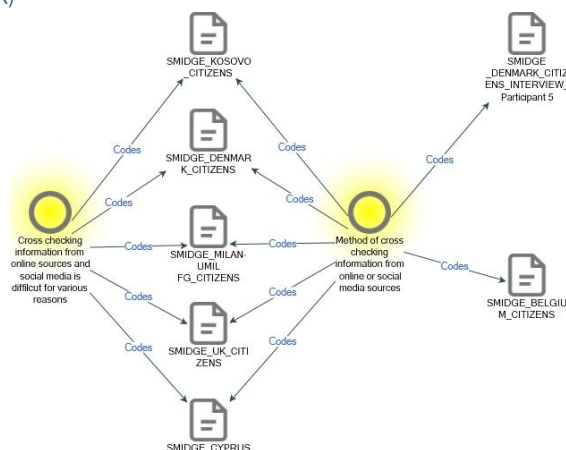
On an connected theme, participants in five focus groups considered that **cross-checking and validating online information is difficult**. In two focus groups, participants expressed that cross-checking is difficult due to a **lack of knowledge** on the individual topics. Participants from two focus groups also indicated that the **lack of time** and **the effort required** to verify information—and in three focus groups, the absence of trusted sources—make cross-checking even more challenging:

“Even if someone is educated, well-prepared, and has critical thinking, the plausibility of the information—rather than information that’s blatantly false—would require personal effort to investigate, and therefore, it’s often accepted to avoid that effort, right? It’s easier to just see something that seems somewhat plausible, and this drags people and groups along.”

Participants in the Greek focus group commented that distinguishing between opinions and facts is difficult in the cross-checking process. Lastly, participants in two focus groups mentioned that having too much information to filter overwhelms participants, making it harder to cross-check the information.

Although all the focus groups indicated methods of cross-checking information from online and social media sources (see previous theme), only participants from Denmark, Kosovo, Italy, Greece-Cyprus, and the UK indicated that cross-checking information from online sources and social media is difficult (Graph 1).

Graph 1. Difficulties with cross-checking are discussed in 5 focus groups (Denmark, Kosovo, Milan, Greece-Cyprus, UK)



Mistrust of social media and online content

Mistrust of content from social media and other online sources was expressed in all of the focus groups. Participants in 6 focus groups talked about the **widespread and commonality of online conspiracy theories, lies and fake news on social media**. Only one participant mentioned that they did not come across such content, while participants in 5 focus groups agreed that such content is widespread and in 2 focus groups, that social media is selective in what information to emphasise and promote. In considering the wide reach of misinformation content, one participant from Denmark said,

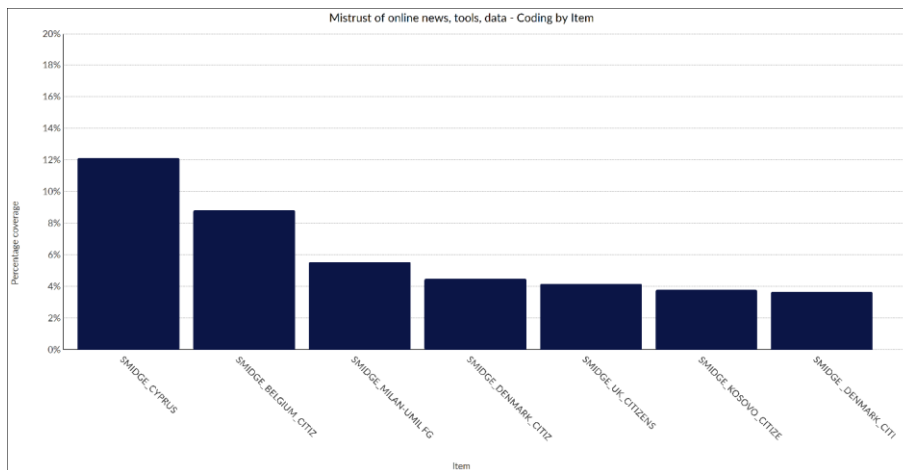
“Yes, well, there has certainly been stuff about coronavirus vaccinations and all those strange theories that suddenly circulate about this and that. And of course, I’ve read some of that, but I think my approach has been more... because it has simply been news stories. It’s not because I’ve set out to investigate what was in the vaccines, it’s more because it’s something that has dominated the news media, and that is how I’ve come to read about it.”

Additional subthemes included concerns about Artificial Intelligence manipulating content (3 focus groups), scare-mongering through online stories (2 focus groups) and attempts at controlling the public through promoting selected stories (2 focus groups). On this latter point, one participant from the Greek - Cypriot focus group said:

“What I generally observe in the Balkans is that there is a strong tendency—both in the Albanian and the Greek context—to exaggerate certain specific topics, whatever happens to be trending at the time. That is, if the news features topics A, G, D (and I won’t give specific examples because it applies to everything—whether we’re talking about gossip, news of little importance, political events, national differences, or anything else), there is an amplification, and an emphasis on difference and conflict. I believe—this is my own opinion, my personal view—that this happens because there are groups and individuals who promote this sense of difference, and the algorithmic expression of these events means that content which is reactive or negative is prioritized over content that is positive.”

Graph 2 indicates the frequency of codes regarding concerns about mistrust of online content per participating country, indicating greater concerns in Greece-Cyprus and Belgium.

Graph 2. Frequency of codes on Mistrust of social media and online content across focus groups.



Demographics and social media use

Participants said that several demographic characteristics affect how participants will use social media, for example, gender (one focus group) and age. Based on participants' perspectives from only one focus group, participants with a higher educational level and socioeconomic status are less prone to misinformation:

"I think the challenges lessen with age as one is hopefully more experienced. It could be said the higher your level of education and socio-economic status, the less likely you are to be taken in by false information—although I have no evidence for that, but it seems reasonable."

Also, participants from six focus groups agreed that **middle-aged people are not the most vulnerable group on social media**, but that younger generations are more vulnerable (five focus groups):

"I see that the younger generations are tending to see, to rely more on online sources for academic reflections. And while I tend to rely more, I'm more old-schooled on books and literature, like what the certain sociologists said, but like, reading the book rather than just inserts or interpretations. So yes, we might be a bit backward, according to them. But I think, yeah, we scrutinize more in terms of all the content that we receive. So yeah, I guess we're less vulnerable—at least that's my perception."

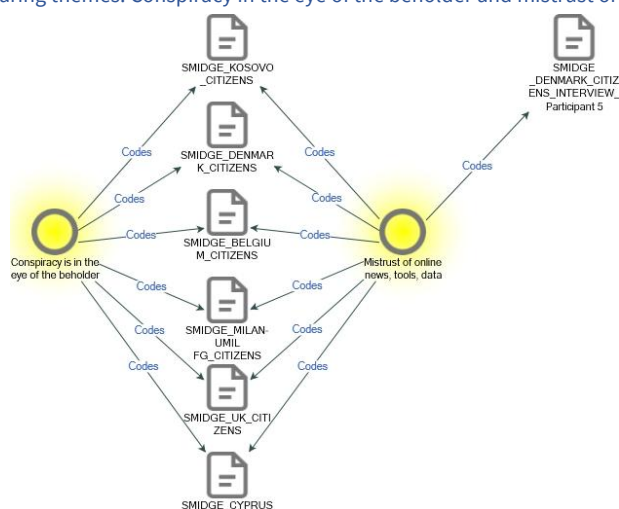
Conspiracy is in the eye of the beholder

Participants in six focus groups described that whether something is seen as a **conspiracy is subjective and depends on an individual's personal perspective**. More specifically, participants in two focus groups commented that conspiracy theories have some truth in them. Also, many participants find that cross-checking conspiratorial content is difficult, as it is **affected by someone's personal beliefs**. Two participants from Italy suggested that there are individuals who are **swept along by what political leaders and authorities** say:

"I often notice that people are swept along by what political leaders say, and they no longer think for themselves. That is, often an opinion might be shared when it's brought up by a political figure. Then they start saying: 'Oh, this is right-wing or left-wing,' without the ability to discern anymore."

One participant from Cyprus-Greece also mentioned that **fear** leads people to believe in conspiracy theories, as they provide a sense of control in chaos. Graph 3 indicates the focus group countries that expressed concerns regarding discerning conspiracies, whilst also considering the problem of mistrusting online content. Only participants in Denmark did not comment on the problem with discerning conspiracies reflected in this theme.

Graph 3. Comparing themes: Conspiracy in the eye of the beholder and mistrust of online content.



It can or cannot be a sense of community

It was expressed by participants in all focus groups that social media can offer a **real feeling of community**. One participant said:

"Have some a little bit community feeling because you share a community of people who want to make, ehm (short pause), want to do some sportive, ehm, actions or say, ehm, I'm—I'm somebody who always likes to sport or likes to move, likes to walk, likes to run, I like to bicycle."

Some participants indicated that social media offers a sense of community because it allows users to share the **same interests and keep up with real-life friends and family**. Some participants, especially from the UK, indicated that it offered a stronger sense of community during the COVID-19 lockdowns.

However, fewer participants (in four focus groups) also indicated that **social media alienates** users and is not a real community:

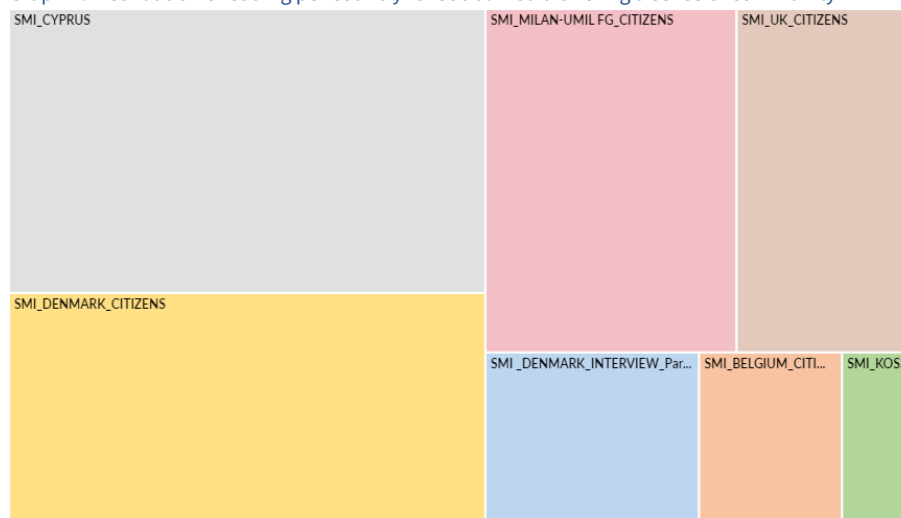
"I'm a member of some associations, I'm a volunteer with the Red Cross, and I've been part of a cultural association for twenty years. Before, there were groups on Facebook, but now they've moved to WhatsApp or Telegram, and so that sense of community we used to find with friends on social media, in my opinion, is no longer there. On the contrary, there's a sense of estrangement and



alienation, of disintegration, at least as far as I'm concerned. I find community elsewhere, maybe in these groups where you maintain contact with people you meet more or less regularly in real life. On social media, I see more alienation than community."

In fact, it was expressed by a few that they do not feel part of an online community and that they miss the face-to-face sense of community and social contact. Graph 4 shows the frequency distribution of codes under this theme per focus group country.

Graph 4. Distribution of coding per country for social media offering a sense of community



Distance, overwhelm from social media

Participants from all focus groups indicated a feeling of being **fed up and tired from social media use**. Some also said that they decided to close accounts or distance themselves from the media (two focus groups). The negative feelings expressed were mostly related to subthemes of emotional overload (six focus groups, one interview), connected to repetitive, depressive, and negative content.

One participant said, *"I used Facebook and Instagram a lot during the pandemic but stopped afterward—probably due to overexposure—so I closed those accounts."*

In four focus groups, participants also said that social media was too imposing on their lives and that they had to take a step back. One participant from the Greece-Cyprus focus group said:

"Somewhere in the middle of the whole journey, when I first started engaging with these platforms, I can say there were nights when I stayed up reading, clicking again, going somewhere else. It's really a black hole. You enter, and it's this vast thing that pulls you in. (.) Now, I can say that I avoid it. I'm no longer at that stage."

Participants from three focus groups also said that the excessive presence of false information on social media was related to their decision to step away.

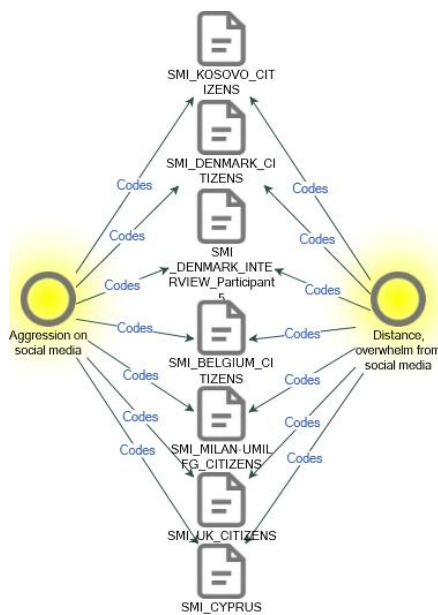
Aggression on social media

Related to the previous theme was a frequent impression that social media was a **very negative and aggressive environment**. This was mentioned in all the focus groups and interviews. For some (4 focus groups) aggression meant a more **careful participation online or avoidance** in active participation. For others it meant that they had to **take a stand** for aggressive comments to protect self and others (2 focus groups). A participant from Denmark said:

“...if people are hated that much, I want to be on their side. And I feel the same way about Jane Fonda... every single time there's a picture of Jane Fonda, there's always a crowd clinging to the fact that she was in Hanoi once. And it's just like, “Hey, come on.” That was so many years ago, and it's a completely different reality—move on already. When people think it's funny to bring up pictures of her as Barbarella... that's a fictional character, right? For me, it's just a fascination with a beautiful woman in a sci-fi outfit, and it has nothing to do with Vietnam or anything else. But every time a picture is posted, you see hordes of Americans getting completely outraged, right? And that just makes me want to like it even more... I know it doesn't help anything, but I feel compelled when people are so toxic... when they go after someone so harshly.”

Graph 5 indicates the relationship between the previous theme of being overwhelmed with social media and experiencing aggression on social media, showing a commonality in their focus group presence.

Graph 5. Comparison of themes: Aggression on social media and Distance and overwhelm from social media



Impact of social media on beliefs and behaviours

Participants from five focus groups discussed that social media had changed their daily human habits (four focus groups) (e.g., sleep, phone usage), **changed their perceptions on various**



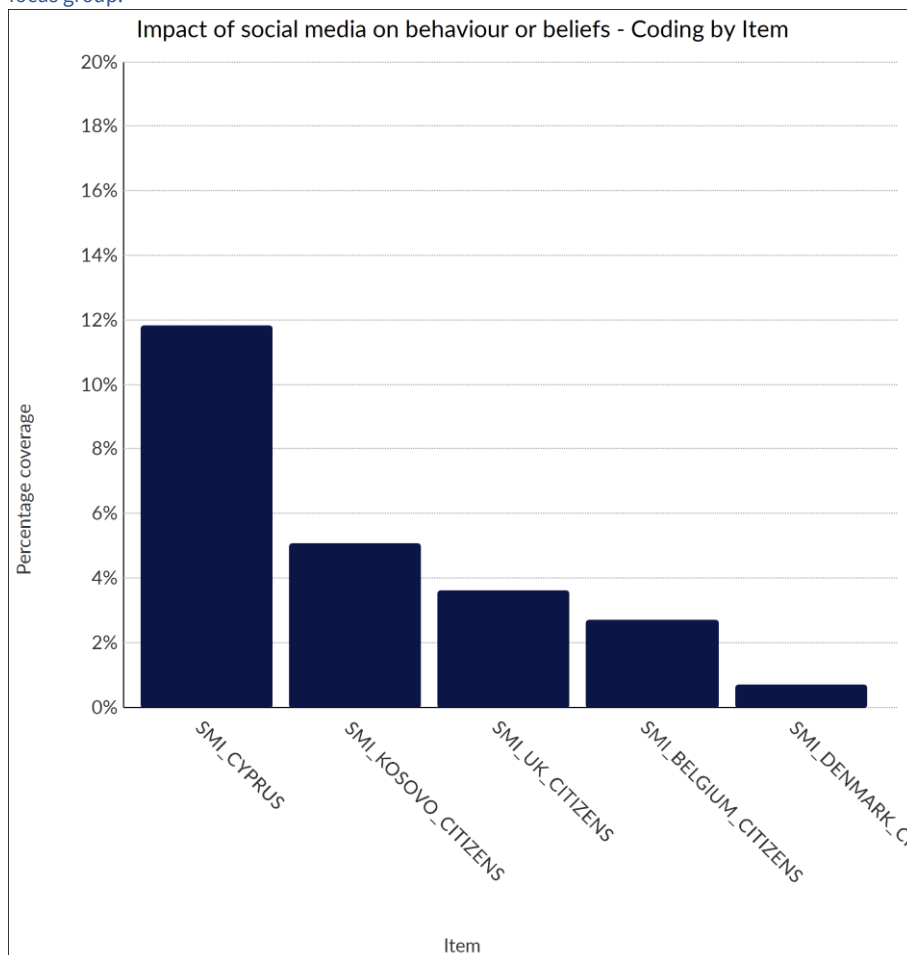
topics in general (four focus groups) (e.g., religious life, voting, COVID-19, Brexit), and influenced views particularly related to **health and wellness practices**, such as reducing smoking, eating healthy meals, or starting to go to the gym (two focus groups).

A participant mentioned how political perceptions could change:

“For example, they read something on social media and think, ‘OK, this sounds true,’ and then have their political opinions and sides based on content produced by [certain] political parties. It doesn’t matter if it is true or not. They don’t—how should I say—verify the information. In English, there’s this saying: ‘The proof is in the pudding.’”

Graph 6 shows the frequency of this theme across focus group countries indicating higher concern among the Greek – Cypriot and Kosovar focus groups.

Graph 6. Frequency of coding on theme: impact of social media on beliefs and behaviours per focus group.





Professional focus groups

The professional focus groups resulted in several themes reflecting professionals' impressions of middle-aged individuals' social media preferences, behaviours, and how they tend to approach misinformation and conspiratorial content online. Professionals included a wide group consisting of influencers who did not have a journalistic background and professional journalists. Participants' ages ranged from 30 to 70 years of age. Additionally, professionals reflected on their own professional choices, how social media has changed their profession, and the ways in which they feel social media has transformed the information landscape. Themes are presented in order of frequency in the data—that is, some topics and ideas were widely discussed, while others were mentioned less frequently.

The attractiveness of content on social and online media

Participants considered the topics, visuals, and online media to be more attractive to the middle-aged demographic in question. Their responses referred both to themselves, as members of this demographic (for those who fit the profile), and to their experiences as expert content creators engaging with this audience. The theme resulted in several subthemes on which participants expressed varying degrees of agreement.

All of the focus groups/interviews discussed two key subthemes concerning the attractiveness of online content. The first was **the influence of personal interests** and **regional factors** on what makes content interesting and appealing. The second concerned the **characteristics that make a presenter or the source of a message influential** (mentioned in five focus groups/interviews).

Regarding personal interests and regional factors, all focus groups/interviews agreed that people's interests vary, and individuals tend to follow **content aligned with their prior beliefs or personal interests**. A journalist participant from Cyprus said:

“Okay, because Economy has a more targeted audience. And okay, LinkedIn works really well for her because it's filtered. I mean, someone who likes watching one-minute videos on TikTok isn't going to go there to read something about an economic or business opportunity, or to see how the NSP is doing or whatever. So LinkedIn suits me because it's not about volume, but about the target group you're looking for—your audience.”

On the other hand, the source of the message also emerged as important. Although the profile described was somewhat vague, key elements included:

- The use of **accessible language and platforms** (mentioned in three focus groups/interviews);
- A trustworthy profile (i.e., someone knowledgeable, with a positive public presence, or recommended by a friend—mentioned in two focus groups/interviews);
- Someone with **celebrity** status.

A participant from a Cypriot focus group said:

*“Also, they should show, in their own way, that they are **knowledgeable** in their field. What bothers me is when someone pretends to be smart when, in reality, they're not. By smart, I mean when*





someone acts like they know something, but actually they don't—and you can tell. I mean the pretentiousness.”

Another participant, commenting on celebrity influence, said:

*“Fidias has 300,000. I mean, he has the **power to influence**, and he does. He has the power to get elected. (.) So, across age groups...”*

A third subtheme regarding content attractiveness was the inclusion of **emotional content**, which was considered engaging and served as a type of clickbait for middle-aged individuals (six focus groups/interviews). Similarly, **fun and negative misinformation** content were also seen as attractive: the former for its entertainment value, and the latter for its emotionally charged and attention-grabbing nature.

A participant from the UK focus group said:

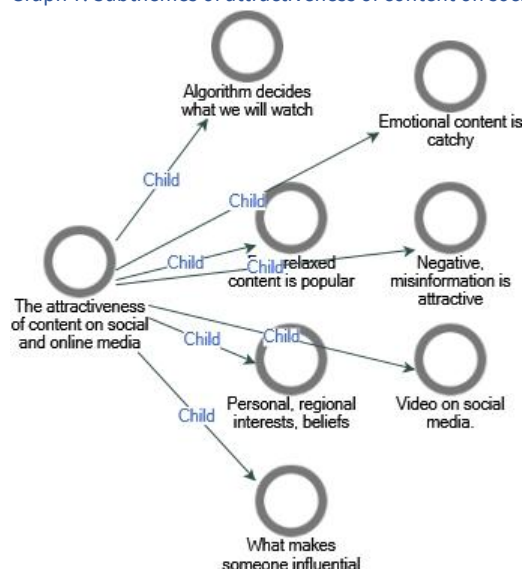
*“**Hate is more easily amplified** than good news, right? And I think this somehow plays into this. It plays into our biases and the way we function as human beings. No one wants to be a gossip queen, but then when gossip happens, we're still there listening to it, right? Also, it plays—yeah, I think this really plays into this bad situation.”*

Another important factor discussed was the **role of artificial intelligence (AI) algorithms**, which influence what becomes popular and what content users are exposed to—interacting dynamically with personal preferences. An influencer participant from Cyprus said:

*“But I honestly believe that if you post videos frequently, there's a very big chance that at some point the **algorithm will just show it to a lot of people in your country**, and from there, you can take it further and become known. That's it. I really don't believe there's a formula.”*

Finally, in terms of format, participants in five focus groups/interviews agreed that **video is currently the most attractive and popular format on social media**. It was described as highly engaging, although preferences for video length (short or long) varied across participants.

Graph 7 shows the key subthemes related to the attractiveness of content on social and online media according to the professional focus groups.



A second theme that emerged in the professionals' focus groups/interviews was related to the way in which **professional practices were affected** by the rise of social media and online news sources. This theme was mostly driven by comments provided by the subgroup of professional journalists within our interviewees, although contributions from the influencers were also noted in some subthemes that will be considered. A widely considered subtheme (discussed in all focus groups and interviews) was the **professional use of social media**. Professional use of social media was found to be an evolution for journalists and influencers alike, although for the latter, it is fundamentally relevant to their activities. Most specifically to journalists, however, social and online media had several purposes, including **work-related communication** (2 focus groups/interviews), **posting work-related content** (mentioned in 6 focus groups/interviews). Two substantial subthemes, however, regarded the use of social media for professional content creation and journalistic reporting purposes. One subtheme focused on the value of **social media as a source for real time information** collection that would then aid in real time news reporting and the use of social media as a tool for collecting information for work (journalism) either by following specific political or celebrity profiles on social media or certain groups or by certain journalistic websites. Illustratively, one professional journalist from Cyprus said,

Another point, although directly mentioned in 1 interview, was the question of direct access to real on-the-ground reporting. The Cypriot journalist said,

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*"if you're reporting on real time, if I'm reporting on, let's say.. There's a train, there's an explosion on a train, and the train is in the tunnel, okay, **you're gonna use whatever comes from the public.** This is the first time in history that, you know, public generate news, the public generates news. So, in that kind of situation, I would use whatever comes out, Instagram, you know, people put, like, if we look at the Gaza situation, you know, you know, the Palestinian people, you know, news crews were not allowed in. So, if the BBC is not allowed in, and CNN is not allowed in, you have to use what's coming out from the people. So, then I think Instagram and TikTok were very valuable tools. So, it really depends on the situation."*

Another related subtheme was that **journalism has changed dramatically**. Participants were commenting that people are receiving most of their news-related information from social media nowadays, and that more traditional formats (TV, newspaper) are not as widely used, **the speed of information sharing is not compatible with traditional journalism whilst traditional journalism is doubted and less trusted**. Participants also echoed a concern that traditional journalism is threatened by social media. One professional journalist from Cyprus said,

"We are a professional group that is suffering because of social media. And we are now being questioned to the point that even our very existence and our role as journalists are being called into question. We are also to blame—I'm not saying we're not."

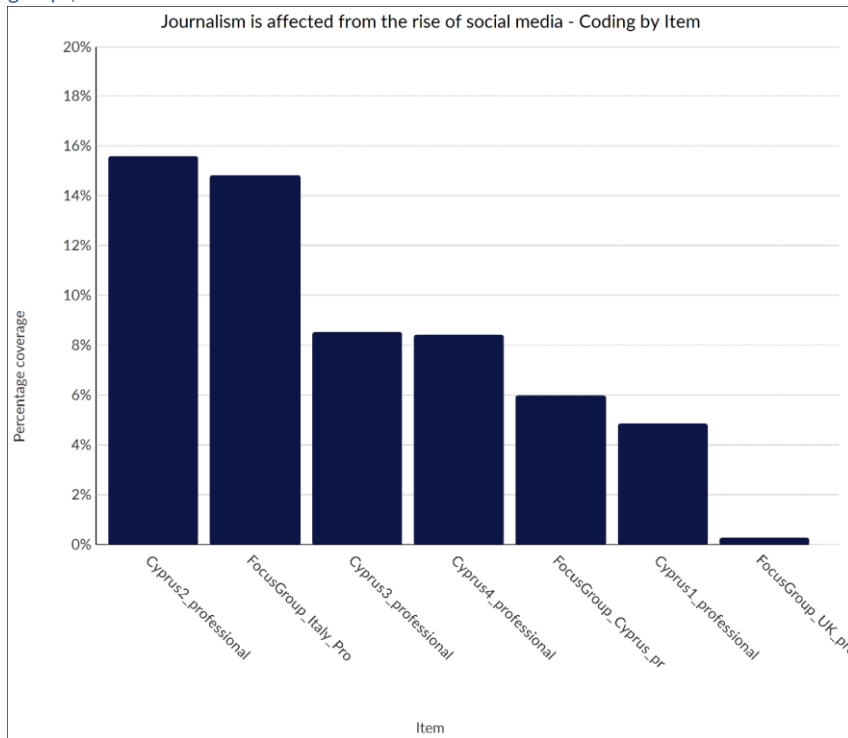
On a final point and an additional subtheme, **professionals also** reflected (in 5 focus groups/interviews) **that compared to content that is being circulated online by non-journalists, they as a professional group have training on ethics and research tactics which add credibility to their outcomes, however, this dimension is often not acknowledged or appreciated by the wider public** when accessing information online. To illustrate this point, a journalist from Cyprus in an interview said

*"Yes. And perhaps it's a trend—the idea that **everyone else knows better**. Objectively, not everyone else can know better. Why do I say this? Because I have sources, I have access, I have training. Am I infallible? Of course not, and that's not what I'm claiming. But I have a process. [...] **There was intellectual preparation, knowledge, information, and the cultivation of an ethical culture that comes from the academic framework.***

*For some reason, all of this is ignored. And people ignore the fact that we also have personal boundaries—our own ethics as journalists. (...) And that, surely, we don't wake up in the morning with someone telling us what to do. I know that should be self-evident. It's not, because I believe people don't understand how the media works—**just like they don't understand much about the scientific process either.**"*

Graph 8. Shows the distribution of this theme according to the various data sources and countries. This theme **did not emerge as strongly in the UK focus group** despite the participation of 4 journalists.

Graph 8. Distribution of theme: Journalism is changing with the rise of social media across focus groups/interviews



Note. The Italian focus group had 4 professional journalists participating; the Cypriot focus group had 1 professional journalist, while the Cypriot interviews 2-4 were all with professional journalists; the UK focus group had 4 professional journalists participating.

Recommendations for tackling misinformation, conspiratorial content online

Another rich theme also included the recommendations of professionals regarding the tackling of misinformation, conspiratorial and generally false content online. All the focus groups/interviews had content related to this theme, and the range of recommendations widely varied. In brief, the most discussed realisation across data sources (discussed in all the focus groups/interviews) is that **conspiracy beliefs are something natural that is very difficult to change**, as it is related to societal and historical causes.

Beyond this acknowledgement, the most frequent recommendations discussed in the narratives included introducing **media literacy education** (mentioned in all of the data), introducing **stricter regulation** on online platforms (mentioned in 4 focus groups/interviews), among other creative ideas such as using AI to discern misinformation, falling back on the use of books, disengaging or standing up to negative content online, discussed in less focus groups/interviews. Table 2 illustrates the list of recommendations with the associated number of



focus groups/interviews in which the idea was discussed. Graph 9 shows the contribution to the themes across the data sources.

Table 2. List of recommendations for managing misinformation and conspiracies, as derived from the focus groups/interviews.

Recommendation	Mentioned in # Focus Groups/ Interviews
Media literacy education	7/7
Choose trusted sources	4/7
Regulation & monitoring of platforms	4/7
Research, experiments to understand online biases	3/7
Disengage or defend from negative online content	3/7
Education and awareness	2/7
Use of AI for discernment	2/7
Use of books for information	2/7
Each person should make their own judgment	1/7
Good communication is needed to combat disinformation	1/7

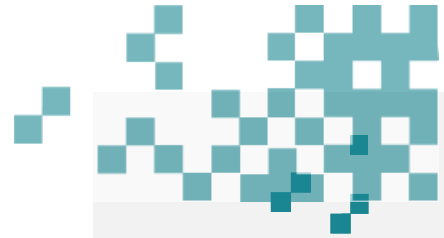
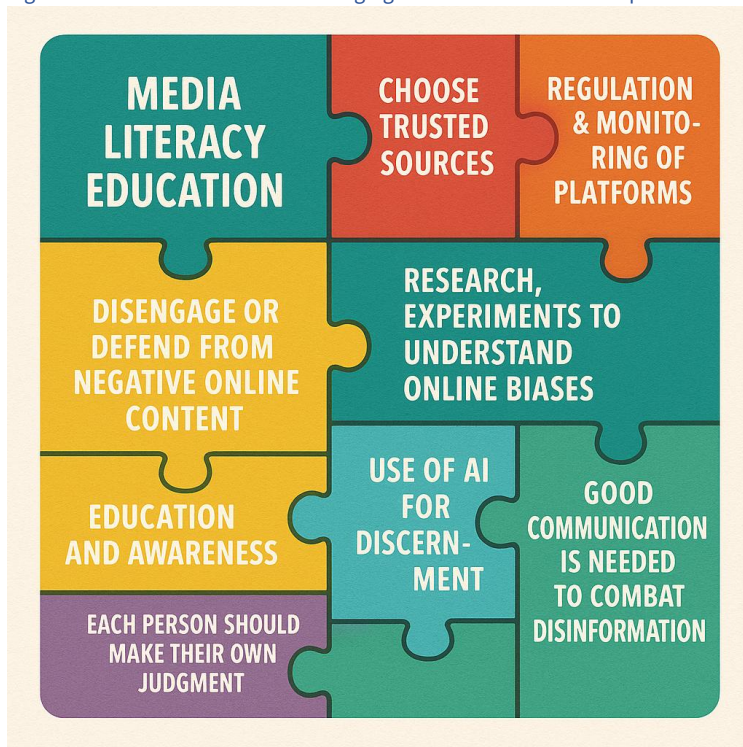


Figure 1. Recommendations for managing misinformation and conspiracies.



Individual differences affect social media and online engagement

This theme focused on professionals' perception of individual differences regarding online behaviour and related vulnerabilities on social media. Contrary to the citizen's focus groups, **professionals believed that middle-aged people are more vulnerable** to misinformation online and discussed how middle-aged people have different behaviour online compared to their younger counterparts. Specifically, all focus groups/interviews included at least one mention to the fact that older people are considered more vulnerable online, either by being more susceptible to being influenced politically, to being more careless with their privacy or to being influenced by younger people. Although not widely discussed among the data, some other concerns were that data literacy is lower in this group (3 focus group/interviews) and that older individuals are more set in their views and may be more inclined to agree with erroneous information that fits pre-existing views. As an example to this latter point, a journalist from Cyprus said

"It's not just a matter of media literacy. It's a broader societal issue. That's why, perhaps, it's extremely difficult to address. I mean, how do you uproot a belief that someone has held for 50 years? There are mechanisms that can try to do that, but they're not going to go back to school and

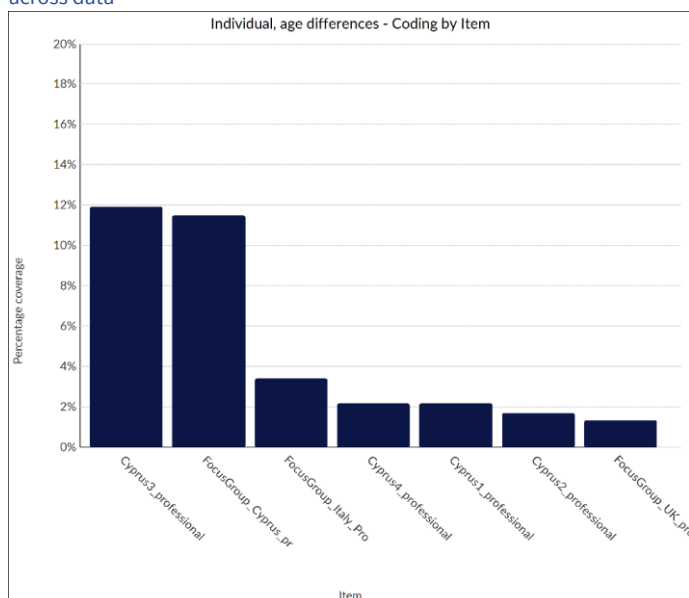




be taught it from scratch. If you make a TV spot, it doesn't mean they'll see it. All of these are options, but that doesn't mean they'll reach the person."

Discussions on differences regarding their online behaviour (compared to younger individuals) echoed similar concerns with being characterised as more 'passive online' (1 focus group), preferring more traditional media still (4 focus groups/interviews) and having their platform preferences (such as Facebook). Graph 9. Shows that such age-related concerns were mostly considered in the Cypriot context compared to the Italian and UK focus groups.

Graph 9. Frequency of theme: Individual differences affect social media and online engagement across data



Social media's impact on users

In terms of professionals' impressions of social media's impact on middle-aged users, the comments were largely concerned with negative outcomes, despite participants' apparent use of the media for personal and professional purposes. For example, participants in 5 focus groups/interviews acknowledged that **social media can be a harmful and dangerous place** in which one can observe abuses of human rights, the spread of misinformation, security breaches and even addiction to social media. Moreover, 6 focus groups/interviews also raised concerns that **social media content can be used to 'control the masses'** in that people rely on content that they are exposed to online which goes unchecked, and that **AI provides people with ideas consistent with their prior views** increasing suggestibility to specific content, that compared to the past conspiracies can be spread very quickly, and that finally, **the spread of false information online may have an intend and a purpose that is not always known.**

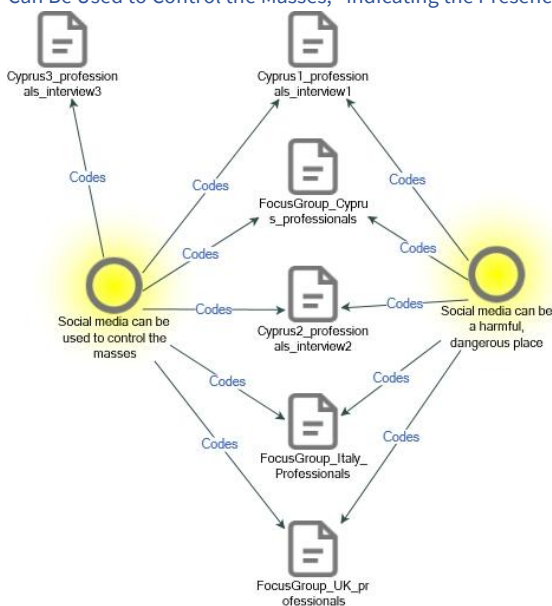
Similar concerns were also discussed under the subtheme social media can **polarise and control us** (4 focus groups/interviews). Specifically, a professional journalist from Cyprus said:

*"And this kind of thing can be done on another level as well. That is, **controlling the masses—it might sound a bit conspiratorial, but it's true.** (.) They buy the masses—I mean, the public. The masses are bought by states, by secret services. I heard a lecture by a very well-known scientist who works on these issues related to social media. Her name is (masked), if you know her, and she's based at a university in the United States. Her specialty is the sociological study of social media. She explained how the state of Myanmar used social media in such a way that it managed to wipe out an entire ethnic group by promoting messages and racist rhetoric against them, ultimately inciting violence against them."*

Finally, only 2 sources from Cyprus mentioned **the potential of social media for spreading awareness** of positive content. One participant (a journalist) said:

"I see the value of TikTok. Should I give you an example? Like, I'm an activist, right? And we had a social influencer who uses TikTok come to the group homes, and he did a little short piece, and he interviewed me. You know, I've been knocking on doors for three years with my message, but his little video of the group homes and our community and our residents, I mean, he has a following of 100,000 people. So, he got like 10,000 likes or 12,000 likes. So, that spread awareness in a huge way."

Graph 10. Relationship Between the Subthemes "Social Media Can Be Harmful" and "Social Media Can Be Used to Control the Masses," Indicating the Presence of Subthemes Across Data





Social media as a community

The final and less discussed theme was participants considering the role of social media as a type of **community for the middle-aged user**. This topic was discussed in 6 focus groups/interviews with most comments considering the role of social media in communication with colleagues, friends' and people with similar interests. Fewer participants talked about social media as a **replacement for social life**, with one participant comparing them to 'modern cafes'. This participant from Cyprus said:

*"And Facebook also very much reflects **the logic of the modern café**. At least in the Cypriot context, where there was a tradition of going to the café to discuss current affairs—and now, with modern lifestyles, that has been lost—I believe that, to some extent, it has been transferred into this digital era, into this platform."*

Discussion

This activity sought to explore citizens' and professionals' perceptions of how individuals in the middle age demographic engage with, experience and process information obtained from online and social media. By completing 14 focus groups and 5 interviews with citizens and professionals across six European countries, this deliverable provides deep insights into middle-aged individuals' online interests, experiences, content preferences and verification strategies. The results from both types of data (citizen and professional) highlighted some commonalities and differences in perceptions among this age group. Importantly, this deliverable also points to a wide selection of interesting suggestions for creating counter-narrative messages and strategies aiming to reduce the impact of conspiratorial and extreme content. The following sections outline key patterns in the data and considers some commonalities and difference among the citizen and professional focus groups.

Participants described using social media primarily for content aligned with their personal interests, with a preference for lighter and funnier material. Privacy was emphasized in platform choice, and many reported adjusting their usage based on perceived safety and control over their information. In many focus group discussions, participants described methods that they use for cross-checking information retrieved online, particularly being critical of content and evaluating the credibility of sources (e.g. who is the presenter and what is their profile).

When discussing solutions to misinformation and conspiratorial content encountered online, participants proposed several ideas—such as the creation of more credible websites, having access to easier-to-understand scientific information, and the use of dialogue-based interventions to support individuals with more extreme views in reconsidering their opinions and ideas. At the same time, they acknowledged barriers to fact-checking, including that it requires significant effort and time and their lack of topic-specific knowledge as well as information overload. In terms of demographic and individual characteristics, consensus among participants was weak with a strong impression that the middle age demographic is not as vulnerable as one might think in tackling online information.

These challenges were often tied to a broader sense of mistrust and suspicion toward online content. Participants also emphasized that whether some content is conspiratorial is often subjective, shaped by individual beliefs and perspectives—making such views difficult to change.



Additionally, aggression on social media was linked to emotional overwhelm, prompting some participants to reduce their use of social media or even withdraw from certain platforms. Views on whether social media fosters a sense of community were mixed. While some participants appreciated the ability to meet online and interact with like-minded individuals and or maintain social contact with friends, others felt that social media contributed to a loss of real connections and increased alienation.

Focusing on the professionals' data, participants emphasized that they believed that content was most attractive when it aligned with personal interests, was emotionally engaging, and delivered by a relatable or credible source. This was similar to what citizens said about content attractiveness. Video formats were considered most effective, along with algorithmically chosen content and regional relevance. Moreover, professionals, particularly journalists, described social media as affecting journalism. They described social media as a useful tool for real-time reporting but also as a development which has disrupted traditional journalism. Although they acknowledged the utility of social media for content creation and audience engagement, they discussed concerns about public mistrust of traditional media sources. Some felt their professional training and ethical standards were often overlooked in today's speedy news environment. Contrary to citizens, professionals' suggestions focused on media literacy education and platform regulation, although discussion and communication-based techniques were also mentioned. Contrary to citizens, professionals perceived middle-aged individuals to be more vulnerable to misinformation due to lower data literacy, stronger pre-existing beliefs, and a tendency toward more passive online engagement. Consistent with citizens, professionals were more concerned with social media being harmful and susceptible to manipulation, by expressing concerns about misinformation, mass control funded by specific interests, and polarisation, though a few acknowledged its potential to amplify positive messages and social causes.

Considering our findings in the wider literature, the findings from SMIDGE focus groups align with previous findings, both considering individuals of their general and a wider demographic. In terms of their online and social media usage habits, citizens appeared to actively engage with social and online media echoing their generational traits as 'digital immigrant' as they use platforms like preferably Facebook or LinkedIn to interact with content of personal interest, cater for professional needs and activities as well as engage with content that addresses their emotional preference (e.g., relaxation; Gao, 2024; Gurunathan & Lakshmi, 2025). Echoed in previous research, the citizen participants in our focus groups also emphasized maintaining their privacy online, a finding which may be particularly reflective of this generation (e.g., Calvo-Porrall & Pesqueira-Sanchez, 2019). Moreover, citizen's consideration of source credibility and employing verification strategies was also considered a priority in previous research (e.g., Calvo-Porrall & Pesqueira-Sanchez, 2019), although our findings highlighted specific methodologies employed by this demographic.

The focus group findings related to emotional exhaustion and distancing from social media, particularly observed in the citizen demographic, corroborates earlier findings (Sheng et al., 2023; Zheng & Ling, 2021) which reported that increased exposure to emotionally charged or overwhelming amount of information can cause feelings of fatigue, mistrust and exhaustion. Increased social media fatigue can be also explained with the principles of the widely used



framework of the stressor-strain-outcome (SSO) framework. The SSO attempts to understand how various stressors (e.g., information overload, mistrust) contribute to developing strain (e.g., social media fatigue, exhaustion, burnout), with this strain leading to outcomes such as reduced social media use and social withdrawal (Fu et al., 2020; Zheng & Ling, 2021). Consistent with our findings, that information overload particularly was reported as an important stressor, as the users reported receiving an excessive amount of information that than what they can could handle, which might apparently lead into higher levels of social media fatigue, exhaustion or abandonment (Sheng et al., 2023).

In alignment with SMIDGE's goal of increasing citizens' ability to discern online information, an important finding was that both citizens and professionals identified several challenges in trying to verify and cross-check information retrieved from online and social media sources. They attributed these difficulties to limited topic-specific knowledge, lack of time, and the effort required—echoing Hadlington et al.'s (2022) and Urakami et al.'s (2022) findings on emotional overload and verification fatigue. This finding is particularly significant, as it highlights a mechanism through which both citizens and professionals may become more susceptible to accepting misinformation and conspiratorial content—simply due to the overwhelming volume of content requiring scrutiny.

On a related point, highlighting the challenges of discerning information, professionals noted that algorithms tailor and shape content exposure, thereby deepening individuals' vulnerability by pushing content aligned with their existing interests or previously held beliefs. This was considered especially risky for middle-aged users, who were described as being more passive or set in their views—an observation also supported in a study by Enders et al. (2023). The emotionally overwhelming nature of social media contributed to some citizens expressing a desire to withdraw or limit their use, while professionals raised concerns about the rapid spread and wide reach of erroneous information, which they believed undermines trust in traditional journalism. Similar concerns were echoed by journalists in van Antwerpen et al. (2023). While some participants across groups acknowledged the potential of digital platforms for civic awareness and activism, the prevailing narrative emphasised the risks, pointing to the need for critical dialogue, media literacy, and greater platform accountability among other solutions.

Recommendations for developing SMIDGE videos

Participants in all interviews and focus groups were explicitly asked about the characteristics of effective counter-narrative videos. However, responses to this question were often hesitant and typically focused more on general counternarrative techniques than on specific video features.

Nonetheless, several key themes related to content attractiveness and approaches to addressing misinformation allowed us to draw some recommendations for SMIDGE videos. First, the presenter's profile should be carefully designed to convey trustworthiness, expertise, or relatability. Second, both citizens and professionals emphasized that content should align with the viewer's interests and be accessible and easy to understand. A recurring message was that social media content should maintain a light, entertaining tone—even when delivering important advocacy or awareness messages.



Aggressive, strict, or overbearing language was consistently described as unappealing, whereas approaches involving communication and dialogue were strongly favored by citizens. This suggests that videos incorporating elements of debate or open conversation may be more engaging and acceptable. Similarly, SMIDGE participants considered the inclusion of humorous elements potentially valuable, provided that humour is used thoughtfully and avoids sounding patronizing or ironic.

Regarding video length, while a few participants preferred longer and more detailed formats, most highlighted the importance of short, concise videos to effectively capture and maintain audience attention.

Table 3. SMIDGE Video Creation Recommendations from Focus Groups

Feature	Recommendation
Presenter Profile	Choose a presenter who appears trustworthy, relatable, or knowledgeable, depending on the audience and message.
Content Relevance	Ensure the video aligns with viewers' interests and is easy to understand—aim for clarity and accessibility.
Tone and Style	Use a light, engaging tone. Avoid aggressive or overbearing language. Favor communication and dialogue over didactic or strict approaches.
Format and Communication	Include debate-style elements or open conversation to support engagement. Dialogic formats feel more natural and less patronizing.
Use of Humor	Humor can be effective if used respectfully and thoughtfully—avoid sarcasm or irony that may alienate or confuse viewers.
Video Length	Keep videos short and concise to maintain attention. Most participants prefer brief formats over long, detailed ones.

Limitations

This research activity had certain limitations that should be acknowledged. The interviews and focus groups conducted with professionals were fewer in number and spanned fewer countries compared to those conducted with citizens. Additionally, some professionals were slightly younger than the intended demographic. Moreover, although we employed a broad recruitment strategy for professionals, we cannot be certain that it successfully captured the full range of opinions and voices within this professional group, as we had noticed low interest from professionals in joining SMIDGE focus groups overall. Reasons for not joining the project included busy and demanding work schedules. Generalisability of findings is a common challenge for qualitative research which is limited in the number of responses and perspectives. Moreover, the richness of the narratives strengthens our confidence that both citizen and professional focus groups and interviews sufficiently captured the experiences of middle-aged individuals with online and social media. The alignment of our findings with those of the online survey reported in D5.2 further supports the validity of our conclusions.



A second limitation is that cross-cultural differences across European countries were not systematically explored in our analysis. Although some cross-cultural differences emerged in the data, it remains unclear whether these reflect genuine cultural variations in thematic emphasis or are simply artifacts of the specific composition of each focus group. While cultural nuances may have influenced the perspectives of both citizens and professionals, this was not the primary focus of the current analysis. Aside from a few region-specific events mentioned in participants' narratives, the resulting themes appeared largely consistent across the participating countries.

As a final reflection, participants in the focus groups did not openly endorse conspiracy theories or false information. It is likely that disclosing such personal beliefs may have felt threatening or socially awkward within the context of a group discussion. Nonetheless, the focus and aim of the SMIDGE focus group activity was not on 'calling out' individuals for their personal beliefs, but rather on identifying the features that make content attractive on online and social media, an area that was clearly discussed across all focus groups.

Conclusions and future research

D5.3 sought to collect middle-aged citizens' and professionals' experiences of interacting and engaging with social and online media. Our findings highlight that middle-aged participants are aware of the risks involved in retrieving information online and employ several methods to validate information—although they acknowledge that these efforts are not always successful. Our findings also highlight that individuals are mostly attracted by light and fun content that is aligned with personal interests. Concerns about the validity of online content are often linked to feelings of fatigue and overwhelm. Consistent with previous literature, this demographic places a high value on online privacy and uses it as a key factor in choosing social media platforms. Despite concerns, social media has also been described by participants as having a significantly positive side for both citizens and professionals, offering access to light entertainment, avenues for professional promotion and content creation, and opportunities for socialization. A number of meaningful solutions for countering misinformation and conspiratorial content online were proposed including the provision of social media education, discursive techniques and posing more structural controls on social media platforms, with differing emphases between citizens and professionals.

Future research within the SMIDGE project (D5.4) might delve more into investigating further how different emotional tones within online messages and content (e.g., humorous, emotive, dialogic, educational) can influence the formation of beliefs, citizen interest and engagement and entertainment of alternative viewpoints.

The findings from D5.3 can be utilized for the development of a series of policy recommendations with respect to online environments for this demographic and beyond.

1. Participants emphasized the need for easily accessible and credible, evidence-based content.
In this respect, additional funding is recommended for the creation of short, culturally appropriate, and evidence-based content to be promoted across social media platforms on a range of topics.
2. Algorithmic influence on content visibility was a key concern among both citizen and professional participants.



A related policy recommendation is for social media platforms to adjust their algorithms to prioritize the promotion of well-supported, evidence-based, and properly cited content.

3. Participants noted that content is more impactful when it aligns with personal interests. Therefore, policies should support the co-creation of content with specific target groups (e.g., middle-aged adults, youth) to ensure greater relatability and engagement.
4. Concerns were raised about the ethical standards governing content approval and promotion on social media platforms. Policymakers and educational bodies should collaborate to develop cross-European ethical standards for platform operations, particularly concerning the approval and dissemination of content.
5. Both citizens and professionals highlighted the importance of media literacy, education, and critical thinking in navigating the online information environment. Policy can support the funding and scaling of related educational programs tailored to different demographics, with content adapted to users' needs, contexts, and life stages.



References

Abidin, C. (2021). Mapping Internet celebrity on TikTok: Exploring attention economies and visibility labors. *Cultural Science Journal*, 13(1), 77–103.

<https://doi.org/10.5334/csci.140>

Berezan, O., Krishen, A. S., Agarwal, S., & Kachroo, P. (2018). The pursuit of virtual happiness: Exploring the social media experience across generations. *Journal of Business Research*, 89, 455–461. <https://doi.org/10.1016/j.jbusres.2017.11.038>

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

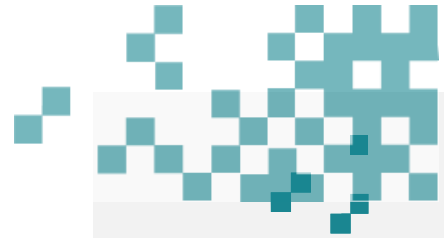
Braun, V., & Clarke, V. (2022). *Thematic analysis: A practical guide*. SAGE Publications.

Cabeza-Ramírez, L. J., Muñoz-Fernández, G. A., & Santos-Roldán, L. (2022). Information disorder on social media: Social media literacy as an effective tool. *Technological Forecasting and Social Change*, 178, 121562.

<https://doi.org/10.1016/j.techfore.2022.121562>

Calvo-Porral, C., & Pesqueira-Sanchez, R. (2019). Generational differences in technology behaviour: Comparing millennials and Generation X. *Kybernetes*, 49(1), 275–295.

<https://doi.org/10.1108/K-09-2018-0506>



Enders, A. M., Uscinski, J. E., Seelig, M. I., Klofstad, C. A., Wuchty, S., Funchion, J. R., Murthi, M. N., Premaratne, K., & Stoler, J. (2023). The relationship between social media use and beliefs in conspiracy theories and misinformation. *Political Behavior*, 45, 781–804.

<https://doi.org/10.1007/s11109-021-09734-6>

Euajarusphan, N. (2021). Trust in social media, privacy concern, and sharing of personal health information on social media. *Journal of Health Communication*, 26(6), 428–435.

<https://doi.org/10.1080/10810730.2021.1940457>

Fu, S., Li, H., Liu, Y., Pirkkalainen, H., & Salo, M. (2020). Social media overload, exhaustion, and use discontinuance: Examining the effects of information overload, system feature overload, and social overload. *Information Processing & Management*, 57(6), 102307.

<https://doi.org/10.1016/j.ipm.2020.102307>

Gao, X. (2024). *Digital behavior of Generation X in the age of misinformation*. Springer.

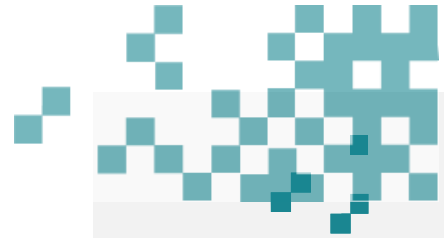
Giara, R. (2019). Social media usage among Generation X: An exploratory study. *Journal of Digital and Social Media Marketing*, 7(1), 13–25.

Grinberg, N., Joseph, K., Friedland, L., Swire-Thompson, B., & Lazer, D. (2019). Fake news on Twitter during the 2016 U.S. presidential election. *Science*, 363(6425), 374–378.

<https://doi.org/10.1126/science.aau2706>

Gurunathan, K., & Lakshmi, R. (2025). Middle-aged digital immigrants and misinformation: A cross-cultural perspective. *Journal of Cyberpsychology and Behavior*, 8(2), in press.





Hadlington, L., Harkin, L. J., Kuss, D., Newman, K., & Ryding, F. C. (2022). Perceptions of fake news, misinformation, and disinformation amid the COVID-19 pandemic: A qualitative exploration. *Psychology of Popular Media*. Advance online publication. <https://doi.org/10.1037/ppm0000387>

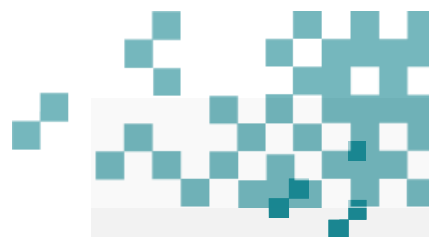
Lazer, D. M. J., Baum, M. A., Benkler, Y., Berinsky, A. J., Greenhill, K. M., Menczer, F., Metzger, M. J., Nyhan, B., Pennycook, G., Rothschild, D., Schudson, M., Sloman, S. A., Sunstein, C. R., Thorson, E. A., Watts, D. J., & Zittrain, J. L. (2018). The science of fake news. *Science*, 359(6380), 1094–1096. <https://doi.org/10.1126/science.aao2998>

Levy, N. (2017). The bad news about fake news. *Social Epistemology Review and Reply Collective*, 6(8), 20–36.

Lissitsa, S., & Kol, O. (2016). Generation X vs. Generation Y—A decade of online shopping. *Journal of Retailing and Consumer Services*, 31, 304–312. <https://doi.org/10.1016/j.jretconser.2016.04.015>

Newman, N., Fletcher, R., Robertson, C. T., Eddy, K., & Nielsen, R. K. (2023). *Digital News Report 2023*. Reuters Institute for the Study of Journalism. <https://reutersinstitute.politics.ox.ac.uk/digital-news-report/2023>

Saldaña, M., & Vu, H. T. (2021). You are fake news! Factors impacting journalists' debunking behaviors on social media. *Digital Journalism*, 10(5), 823–842. <https://doi.org/10.1080/21670811.2021.2004554>



Sheng, N., Yang, C., Han, L., & Jou, M. (2023). Too much overload and concerns: Antecedents of social media fatigue and the mediating role of emotional exhaustion. *Computers in Human Behavior*, 139, 107500. <https://doi.org/10.1016/j.chb.2022.107500>

Urakami, T., Mori, Y., & Yamamoto, M. (2022). Finding strategies against misinformation in social media: A qualitative study. In *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems* (pp. 1–7).

van Antwerpen, N., Turnbull, D., & Searston, R. A. (2023). Perspectives from journalism professionals on the application and benefits of constructive reporting for addressing misinformation. *The International Journal of Press/Politics*, 28(4), 1037–1058. <https://doi.org/10.1177/19401612211072782>

Wasike, B. (2022). “When the influencer says jump!” How influencer signaling affects engagement with COVID-19 misinformation. *Social Science & Medicine*, 315, 115490. <https://doi.org/10.1016/j.socscimed.2022.115490>

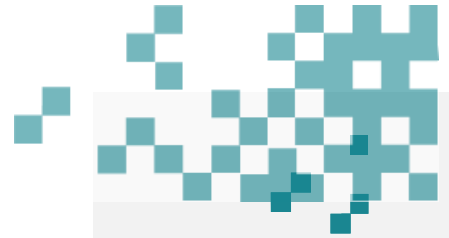
Wasike, B. (2025). Influencing the news: How social media influencers affect news media trust. *Information, Communication & Society*. Advance online publication. <https://doi.org/10.1080/1369118X.2025>.

Yılmaz, H., & Özkoçak, S. A. (2010). Exploring Generation X’s use of digital technology: The Turkish case. *European Journal of Communication*, 25(3), 245–259.





Zheng, H., & Ling, R. (2021). Drivers of social media fatigue: A systematic review. *Telematics and Informatics*, 64, 101696. <https://doi.org/10.1016/j.tele.2021.101696>





Appendix 1

1. Participants' media practices: How often do you use online media? For how long?
2. Which platforms do you use and why? (Use: a picture of all online media of interest)
3. Which social media apps do you use and why? (Social media may be different to online media, which also include online news outlets).

Prompt 1: If they mention that they use online media to be informed on topics then ask: What types of topics do they use online media to be informed of – for example: Do you use online media to be informed of medical issues, give us an example? Do you use online media to be informed of local news, give us an example? Do you use online media to be informed of entertainment (cultural events, recreation), give us an example?).

4. What features do you find attractive on these platforms/applications? Explain why.
5. What formats appeal to you and your peers in short online videos (e.g. chat show, satirical, “hard” news)? Explain.

Type of content shared on social media, why, and its evaluation

6. What type of content do you engage with and share?
7. What type of content has attracted your attention in the past six months on online news or media featuring current affairs?
8. How do you choose which online media sources or social media application to use to remain up to date with current affairs?
9. How strongly do you agree with what you share in social media?
10. Are you concerned with the accuracy of others' posts that you are sharing in social media?
11. How do you personally evaluate the quality of information of online media sources or social media platforms?

Influence of social media on behaviour and community

12. Does participation in these platforms offer a sense of belonging/community? Explain.
13. Can social media offer a sense of community for individuals in your life stage? Explain.
14. Do you believe that social media influences people in your life stage in shaping their beliefs about social issues and current affairs? Can you provide some examples?
15. Which features/elements of an article/video in social media do you think might influence people, in your life stage, to be convinced/shape their beliefs?
16. Do you think there are cultural differences in the way that social media affects citizens' beliefs? Explain. Give examples.
17. Do you think there are gender differences in the way that social media affects citizens' beliefs? How Explain. Give examples.





18. Other than resharing material, has online content ever changed your behaviour? In what way?

Prompt 1: Have you ever changed your health behaviour (e.g. smoking, exercise, nutrition, medicine use) as a result to content you engaged with on online media?

Prompt 2: Have you ever changed lifestyle habits (e.g., work-life balance, parenting style, career goals) as a result to content you engaged with on online media?

Challenges faced on social media and how they deal with misinformation and conspiracy theories

19. What are the challenges do you - and people of your age - face for accessing accurate information that you can trust in the media?
20. What are the three most important activities that should be undertaken to deal with the issue of misinformation and conspiracy theories in the media that haven't been adequately addressed yet?

Introduce SMIDGE project

21. In the context of the SMIDGE project, we plan to develop some videos to help the public deal with conspiracy theories and misinformation. What kind of information do you think it would be useful to include?

Prompts:

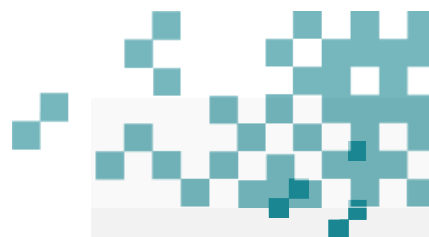
1. Would tips on how to identify conspiracy theories and misinformation be useful?
2. Would forewarning people of possible conspiracy theories and misinformation on a particular topic and how to refute them (prebunking) be useful?
3. Would correcting misinformation/conspiracy theories by providing a counter-message with information (debunking) be useful?

Appendix 2

Focus Group Questions for Journalists/Bloggers (message developers)

Type of selected social media, their features and why

1. Which platforms/ online media do you use for your work (for communicating your message) and why?



2. Which social media apps do you use for your work and why?
3. How do you choose which online media source or social media application to use for your work?
4. What features do you find attractive on these platforms/applications? Explain why.
5. What formats appeal to you in short online videos e.g. chat show, satirical, “hard” news”? Explain.
6. What formats do you think appeal to audiences in short online videos e.g. chat show, satirical, “hard” news”? Explain.

Prompt 1. Are there any formats that are more appealing to middle-aged audiences in your opinion?

Type of content shared on social media, why and its evaluation

7. What type of content do you write/post about?
8. What type of content do you believe attracts audience attention on online news or media featuring current affairs?
9. How do you personally evaluate the quality of information of online media sources or social media platforms?

Influence of social media on behaviour and community

10. Do you think that participation in these platforms offers a sense of belonging/community to middle-aged users? Explain.
11. Do you believe that social media influences middle-aged people in shaping their beliefs about social issues and current affairs? Can you provide some examples?
12. Which features/elements of an article/video in social media do you think might influence middle-aged people to be convinced/shape their beliefs?
13. Do you think there are cultural differences in the way that social media affects citizens’ beliefs? Explain. Give examples.
14. Do you think there are gender differences in the way that social media affects citizens’ beliefs? Explain. Give examples.
15. Other than resharing material, has online content ever changed your behaviour? In what way?

Challenges face on social media and how they deal with misinformation and conspiracy theories

16. What challenges do you and your colleagues face when posting trustworthy information in the media?
17. What are the three most important activities that should be undertaken to deal with the issue of misinformation and conspiracy theories in the media that haven’t been adequately addressed yet?

Introduce SMIDGE project





22. In the context of the SMIDGE project, we plan to develop some videos to help the public deal with conspiracy theories and misinformation. What kind of information do you think it would be useful to include?

Prompts:

1. Would tips on how to identify conspiracy theories and misinformation be useful?
2. Would forewarning people of possible conspiracy theories and misinformation on a particular topic and how to refute them (prebunking) be useful?
3. Would correcting misinformation/conspiracy theories by providing a counter-message with information (debunking) be useful?

SMIDGE

Social Media Narratives - Addressing Extremism in Middle Age

Appendix 3



INVITATION TO PARTICIPATE IN A FOCUS GROUP



We want to hear your opinion on how social media affects our lives and beliefs!

IF YOU ARE BETWEEN THE AGES OF 45-65, FOR MORE INFORMATION AND TO REGISTER YOUR PARTICIPATION, CLICK HERE:

<https://forms.gle/cyxpB6nv8BJVPCE56>

The research has been approved by the Cyprus Bioethics Committee (protocol number: EEBK EP 2023.01.316)

The focus group will be conducted online and will last 90 minutes.

For your participation, you will receive a €20 gift voucher!



Commented [VC1]: Add flyer



Appendix 4

Invitation to Participate in a Focus Group Discussion

Are you a professional journalist or online news content creator? Or "If you are aged 45 to 65 and enjoy sharing your thoughts on the news or social media, we'd love to hear your perspective!"

Are you interested in influencing the future of online and social media communications in Europe?

Join us for a dynamic and interesting focus group discussion as part of the SMIDGE research Project!

The SMIDGE Project is an innovative European-funded initiative aimed at understanding how citizens engage with, consider, and evaluate important and current topics on online media. Our research spans multiple countries, including Denmark, the UK, Austria, Italy, Belgium, Kosovo, and Cyprus.

We are interested in exploring how social media influences perceptions and discussions surrounding popular sociopolitical and scientific issues. During the focus group, you'll have the opportunity to share your experiences and insights on how you use social media to promote and shape views on these topics.

Participants are expected to spend approximately 90 minutes engaging in an online focus group discussion. Your input will be invaluable in informing the development of new communication strategies on European social media platforms.

The focus group will be conducted on an online platform, allowing you to participate comfortably. Rest assured that your identity will be anonymized during the task to ensure confidentiality.

By participating in the focus group, you'll contribute to cutting-edge research that aims to enhance online discourse and communication across Europe.

If you're interested in participating, please [insert instructions for how participants can express interest, whether it's through a registration form, email, or other method].

Thank you for considering joining us in this important endeavour to shape the future of online communication in Europe!

Your voice matters, and together, we can make a meaningful impact.

For more information or inquiries, please contact [insert contact information].