

# Psychology of Popular Media

## **Lost in the Scroll: Emotional Impacts of Social Media Use Among Middle-Aged Adults**

Vasiliki Christodoulou, Pinelopi Konstantinou, Andrea Photiou, and Kalypso Iordanou

Online First Publication, June 25, 2026. <https://dx.doi.org/10.1037/ppm0000671>

### CITATION

Christodoulou, V., Konstantinou, P., Photiou, A., & Iordanou, K. (2026). Lost in the scroll: Emotional impacts of social media use among middle-aged adults. *Psychology of Popular Media*. Advance online publication. <https://dx.doi.org/10.1037/ppm0000671>

# Lost in the Scroll: Emotional Impacts of Social Media Use Among Middle-Aged Adults

Vasiliki Christodoulou<sup>1</sup>, Pinelopi Konstantinou<sup>1,2</sup>, Andrea Photiou<sup>1</sup>, and Kalypso Iordanou<sup>1</sup>

<sup>1</sup> School of Sciences, University of Central Lancashire, Cyprus (UCLan Cyprus)

<sup>2</sup> Department of Nursing, Cyprus University of Technology

This study examines the emotional experiences and impacts of social media use among middle-aged adults across six European countries (Belgium, Denmark, Greece, Italy, Kosovo, and the United Kingdom). Using a qualitative, cross-cultural approach, six focus groups were conducted with 46 individuals aged 40–65, most of whom were male ( $n = 30$ , 65.2%). Reflexive thematic analysis was used to analyze the data. Three primary themes were observed as follows: (a) emotional impacts of social media use and distancing, reflecting users' attempts to manage exhaustion, fatigue, and psychological strain by discontinuing their usage; (b) mistrust of social media and online news, with increased skepticism shared toward misinformation, algorithmic manipulation, and emerging artificial intelligence technologies; and (c) aggression on social media, including exposure to hostile environments and the adoption of defensive strategies to avoid them. Overall, findings illustrated a pattern of behavioral shift over time in this middle-aged group, where past habits of active engagement and sharing gave way to present-day mistrust and disengagement, as participants sought to protect themselves from emotional and informational harm and exhaustion. Although the literature has focused primarily on examining social media experiences of younger populations, this study addresses a gap by investigating the experiences of middle-aged individuals. Discussion highlights the need for interventions aiming to reduce fatigue, exhaustion, and distress, and to enhance skills for understanding misinformation and improving trust in social media.

## Public Policy Relevance Statement

Many middle-aged adults are stepping back from social media due to emotional exhaustion, exposure to overwhelming or negative content, and growing mistrust of online information. Concerns about misinformation and frequent encounters with online aggression further contribute to online passivity and disengagement. These findings highlight the need to create digital environments that help manage information overload and the spread of misinformation, so that middle-aged adults navigate social media safely and confidently.

**Keywords:** social media, middle-aged adults, emotional fatigue, qualitative, cross-country

**Supplemental materials:** <https://doi.org/10.1037/ppm0000671.supp>

Karen E. Shackleford served as action editor.

Vasiliki Christodoulou  <https://orcid.org/0000-0001-9215-0468>

Pinelopi Konstantinou  <https://orcid.org/0000-0001-8079-0417>

Because this research was funded in whole or in part by the Horizon Europe Framework Programme; (Grant 101095290 - SMIDGE - HORIZON-CL2-2022-DEMOCRACY-01).

There are no conflicts of interest to disclose. This work was funded by HORIZON Europe, Grant Agreement 101095290. We gratefully acknowledge the following members and organizations of the project consortium for supporting the data collection process: Sara Wilford, Jason Lee, Raouf Hamzaoui, and Nitika Bhalla from De Montfort University; Line Nybro Petersen and Mikkel Baekby Johansen from the University of Copenhagen; Giovanni Ziccardi and Paulina Kowalicka from the University of Milan; Inclusive Europe; Fondazione Hallgarten-Franchetti

Centro Studi Villa Montesca; and the Kosovar Centre for Security Studies.

Open Access funding provided by UCLan Cyprus: University of Central Lancashire - Cyprus Campus: This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0; <https://creativecommons.org/licenses/by/4.0>). This license permits copying and redistributing the work in any medium or format, as well as adapting the material for any purpose, even commercially.

Vasiliki Christodoulou served as lead for conceptualization, data curation, methodology, software, supervision, and writing—review and editing, contributed equally to formal analysis, investigation, project administration, resources, and visualization, and served in a supporting role for writing—original draft. Pinelopi Konstantinou served as lead for writing—original draft, contributed equally to data curation, formal analysis, investigation, methodology, and visualization, and served in a

*continued*

Social media has fundamentally transformed the way individuals communicate and interact with information and has become an essential part of our daily life (Ou et al., 2023; Sirikarn, 2017; Zhang et al., 2023). In 2022, over 70% of adults reported using social media worldwide, with an average adult spending approximately 180 min daily on social media (Ramezankhani et al., 2019; Xuan Vu, 2023; Zhang et al., 2023). Social media platforms such as Facebook, Twitter, Instagram, TikTok, LinkedIn, and YouTube play a central role in interpersonal communication, professional networking, and information sharing (Ramezankhani et al., 2019; Xuan Vu, 2023).

Although social media was initially adopted by younger generations, middle-aged adults born between 1960 and 1980 (usually considered as Generation X) grew up in a less technologically saturated era and have since undergone profound personal and professional transformations as they adapted to the digital revolution (Gao, 2024; Giarla, 2019). Often referred to as “digital immigrants,” individuals currently in their middle age had to adapt to the digital world later in life (Gurunathan & Lakshmi, 2025). According to previous studies focusing on this demographic in the United States, individuals in this age group have fully integrated the internet into their daily lives as 94% of them engage with social media, a percentage comparable to their use of traditional media, such as TV (Gao, 2024; Giarla, 2019). Previous studies have indicated a preference for using specific platforms such as Facebook, X (formerly Twitter), LinkedIn, and WhatsApp, while showing less engagement with more visual platforms like Instagram and TikTok (Calvo-Porrall & Pesqueira-Sanchez, 2019; Euajarusphan, 2021; Gao, 2024; Giarla, 2019; Gurunathan & Lakshmi, 2025). However, these findings may reflect cultural and contextual differences, and cross-cultural studies remain limited.

Social media platforms selected by middle-aged adults reflect this generation’s priorities and motivations for using these technologies. Studies have indicated a stronger interest in using social media for work-related purposes (Fietkiewicz et al., 2016), connecting with family and friends (Calvo-Porrall & Pesqueira-Sanchez, 2019; Giarla, 2019), as well as for information gathering, while placing less emphasis on social interaction (Berezan et al., 2018; Calvo-Porrall & Pesqueira-Sanchez, 2019). Research with this demographic also notes skepticism toward online content (Calvo-Porrall & Pesqueira-Sanchez, 2019) and concerns about privacy (Euajarusphan, 2021; Lissitsa & Kol, 2016). Despite this, the impact of social media use among middle-aged adults remains limited, as most studies focus on young adults in critical developmental stages (Carrillo-Durán et al., 2022; Hogeboom et al., 2010; Sirikarn, 2017), despite the substantial influence of individuals over 40, including leaders, technology entrepreneurs, advisors to youth, and politicians (Carrillo-Durán et al., 2022).

This literature gap is even more pressing when we consider growing challenges in online environments such as the growth of misinformation and fake content (Chen, 2023) and the erosion of individual agency and autonomy, which constitute threats to human rights and democracy (Christodoulou & Iordanou, 2021). Given middle-aged

individuals’ roles as societal leaders and decision-makers, their engagement with erroneous content may have substantial consequences such as influencing voting patterns, social and health-related behavior (e.g., Brashier & Schacter, 2020). Alarming, preliminary research suggests that middle-aged adults may be more vulnerable to misinformation and conspiracy theories online compared with other generations, in some cases lacking the necessary tools to distinguish between truth and misinformation (Giarla, 2019). Studies focusing on individuals over 55 have also indicated greater vulnerability with age, showing a lack of skills and confidence in discerning misinformation (Huguet et al., 2024) and higher endorsement of misinformation (e.g., de Oliveira et al., 2023; Guess et al., 2019; Wang et al., 2025). A U.K. Ofcom (2025) indicated that 10% of Gen X respondents admitted to sharing misinformation, whereas only about half (53%) reported confidence in identifying misinformation.

Growing concerns have also emerged about social media’s negative impact on users’ well-being, particularly in relation to problematic content, privacy, and security issues. Users are increasingly exposed to overwhelming amounts of information and pressure to stay connected to social media, which in turn creates feelings of mistrust, fatigue, distress, and exhaustion (Bright et al., 2015; Dhir et al., 2019; Sheng et al., 2023). Information overload occurs when users encounter more content than they can meaningfully process or evaluate (Fu et al., 2020; Sheng et al., 2023). Exposure to excessive or conflicting information can also foster mistrust in media sources, as users become unsure what is true and what is misleading. Concerns about unreliable news, privacy violations, and misinformation often lead to feelings of uncertainty and frustration, resulting in reduced engagement or reduction of online activity (Park et al., 2020). These reactions may even intensify when disagreeable content is shared by friends, family, or previously trusted sources (e.g., legacy media), further heightening annoyance and disillusionment with online interactions (Altay et al., 2025; Scott et al., 2023). As a result of these stressors, individuals may develop social media fatigue or exhaustion (Bright et al., 2015; Dhir et al., 2019; Fu et al., 2020; Sheng et al., 2023).

Social media fatigue is defined as a mental health problem characterized by feelings of tiredness, anger, loss of interest, or reduced motivation to engage with social media platforms (Ravindran et al., 2014; Zheng & Ling, 2021). This phenomenon is increasingly prevalent among young and older adults, and it is often associated with withdrawing from social media when users feel overwhelmed by excessive information, digital interactions, content, and the pressure to constantly keep up (Bright et al., 2015; Fu et al., 2020; Ou et al., 2023; Sheng et al., 2023; Zheng & Ling, 2021). Social media fatigue can be explained through the principles of the stressor-strain-outcome (SSO) framework (Fu et al., 2020); which proposes that stressors such as information overload and mistrust lead to strain (e.g., social media fatigue, exhaustion, burnout) resulting in reduced social media use or withdrawal (Bright et al., 2015; Fu et al., 2020; Zheng & Ling, 2021). Research has shown that social media fatigue and exhaustion can

---

supporting role for conceptualization. Andrea Photiou contributed equally to formal analysis and investigation and served in a supporting role for writing-review and editing. Kalypso Iordanou served as lead for conceptualization, funding acquisition, project administration, and supervision and contributed equally to data curation, investigation,

methodology, resources, visualization, and writing-review and editing.

Correspondence concerning this article should be addressed to Vasiliki Christodoulou, School of Sciences, University of Central Lancashire, Cyprus (UCLan Cyprus), 12–14 University Avenue, Pyla 7080, Larnaka, Cyprus. Email: [Vchristodoulou2@uclan.ac.uk](mailto:Vchristodoulou2@uclan.ac.uk)

have serious consequences for users, including a decline in social media activity or usage termination, academic and work performance deterioration, and increased mental health issues such as anxiety, stress, and depression (Fu et al., 2020; Ou et al., 2023; Sheng et al., 2023). For example, Sheng et al. (2023) reported that over 60% of Facebook users who reported a need for a “Facebook vacation” avoided not only the platform but the internet entirely. The relevance of the SSO framework for middle-aged and older adults was underscored in COVID-19 studies, which showed that information overload and complexity were key drivers of passive social media use during that period (Zolkepli et al., 2024).

Building on this, social media fatigue may also affect misinformation discernment by increasing reliance on passive, low-effort engagement with platforms. Several studies across different age groups have shown that social media fatigue can negatively affect the engagement of analytical cognitive processes in online information discernment (Li et al., 2022; Tian et al., 2024), thereby increasing vulnerability to misinformation (Ahmed & Rasul, 2023; Apuke et al., 2024; Islam et al., 2020). According to the dual-process theory (Kahneman, 2011; Pennycook et al., 2015), information evaluation depends on the interaction between intuitive, automatic cognitive processes (System 1) and deliberate, analytic processes (System 2). Because analytic processing requires cognitive effort, fatigued users may be less likely to employ System 2 resources and may rely on heuristics, increasing their susceptibility to misinformation (Pennycook & Rand, 2019). Together, these patterns emphasize the need for qualitative research examining how middle-aged adults navigate online information environments, including misinformation and informational overload.

## The Present Study

Although there is growing research on the impacts of social media on young adults, studies focusing specifically on middle-aged adults remain limited. Existing work has mainly used quantitative methodologies, with an absence of qualitative studies examining the perspectives of middle-aged adults. By addressing these gaps, this study seeks to provide a more comprehensive understanding of middle-aged adults’ social media experiences. This study is part of a bigger project titled Social Media Narratives: Addressing Extremism in Middle Age (SMIDGE), which aims to examine how social media use, including exposure to conspiracy theories and misinformation, spreads and evolves among this demographic. Therefore, this study focuses on the emotional experiences and perceived impacts of social media among adults aged 40–65. A cross-country qualitative methodology was implemented to examine experiences from six different European countries (Belgium, Denmark, Greece, Italy, Kosovo, and the United Kingdom).

## Method

### Design

This was a qualitative, cross-cultural study consisting of six online focus groups and one follow-up interview involving individuals from the middle-age target group and conducted in Belgium, Denmark, Greece, Italy, Kosovo, and the United Kingdom. The

selection of countries from which to recruit participants was guided by several factors such as researchers’ fluency in their native languages and their local understanding of cultural and contextual nuances that could emerge in the focus groups. The selection aimed to represent diverse European regions and different media-literacy levels (clusters), according to the European Media Literacy Index (Lessenski, 2023) and was also guided by practical considerations—choosing among countries represented in the project consortium within which this study was conducted—thus ensuring that the researchers had easy access to participants and spoke the native language: Denmark (Cluster 1), the United Kingdom (Cluster 2), Belgium (Cluster 2), Italy (Cluster 3), Greece (Cluster 3), and Kosovo (Cluster 5).

### Sample

Participants aged 40–65 and fluent in the language in which each focus group was conducted in were eligible to participate. In total, 46 participants took part from six different countries: the United Kingdom ( $n = 11$ ), Belgium ( $n = 10$ ), Greece ( $n = 7$ ), Kosovo ( $n = 7$ ), Italy ( $n = 6$ ), and Denmark ( $n = 5$ ): four participants in the focus group and one participant in an interview who could not join the focus group as originally planned<sup>1</sup>. Most participants were male ( $n = 30$ , 65.2%). Participants’ age range was from 41 to 65 years old, with the most common age range being 51–60 ( $n = 23$ , 50%). Six participants (13%) completed secondary education, whereas 21 participants (45.7%) held a university or college degree. Fourteen participants (32.6%) had a master’s degree, and one participant (2.2%) had attained a PhD. Four participants (8.7%) did not indicate their level of education. Eleven participants indicated that they were self-employed (23.9%), whereas the rest were employees (76.1%). The professions indicated were diverse: legal professionals (e.g., lawyers), educators (e.g., teachers, lecturers), technical and engineering roles (e.g., engineers, project managers, quality managers, architects), administrative and advisory roles (e.g., administrators, privacy consultants), business-related occupations (e.g., business development, consultants, grocery store owners), and other professions such as artists and librarians. Three participants (6.5%) were retired.

### Procedure

Participants were recruited through multiple strategies across participating countries. Focus groups in Greece, the United Kingdom, and Italy invited participants who had previously completed an online survey under the same project, after being recruited through Prolific, an online crowdsourcing platform, and who had consented to future contact. In Denmark, Belgium, and Kosovo, where the prior survey had not been conducted, participants were recruited through the organizations’ social media channels using materials developed by the research teams. Exclusion criteria included individuals working in the media or social media industry and those who fell outside the age range of interest (40–65). No specific screening was conducted for mental health status, as the study focused on capturing a broad range of perspectives among

<sup>1</sup> Following the same interview guide and analytical procedures as in the focus group, given the flexibility of the reflexive thematic analysis (RTA) approach in accommodating multiple data types (Braun & Clarke, 2021).

middle-aged participants. A common information and consent letter was used across all the participating countries. Before the focus group meeting in each country, participants were sent information and consent material to read and sign. Recruitment took place between September and November 2024.

A comprehensive focus group interview guide was developed by Vasiliki Christodoulou and Kalypso Iordanou and finalized following consultation with the research team—partner representatives of the project SMIDGE from the participating countries (see [supplemental material](#)). Questions focused on use of social and online media in the middle-aged group including how it influences beliefs, behavior, reactions to online content and how individuals deal with inaccurate content on online platforms. An example of a question used in the interview schedule focusing on emotional experiences on social media was “Can social media offer a sense of community for individuals in your life stage? Explain.” In addition, a key aim of the study was to specifically investigate reactions toward inaccurate content, misinformation, or conspiratorial content on social and online media. As the focus group interview schedule was semistructured, any new topics (within the research focus) brought up by participants were explored. After the focus group ended, all participants were thanked and debriefed through email.

A detailed focus group and interview implementation guide was developed, and a training was delivered to all focus group facilitators by Vasiliki Christodoulou to achieve consistency in the research methodology. Each focus group lasted approximately 90–120 min and aimed to recruit 6–12 participants. Two facilitators were responsible for the delivery of each focus group. Vasiliki Christodoulou, Pinelopi Konstantinou, and Kalypso Iordanou conducted the focus group with Greek participants, whereas representatives from the research teams in participating countries conducted the focus groups in their respective native languages.

Focus groups were conducted on the Microsoft Teams meeting platform (General Data Protection Regulation compliant). All focus groups were video- and audio-recorded, although only transcribed audio was intended to be analyzed. Participants were informed of the video recording and were allowed to opt out, if preferred, by keeping their cameras off. Before participation, all the participants were provided with an online form for reporting their sociodemographic information including gender, age, highest level of education, and occupation. Participants were reimbursed for their time with either a voucher of up to 20 euros or Prolific platform compensation of the same total amount.

## Ethics

The study was centrally approved by the Cyprus National Bioethics Committee (EEBK EIT 2023.01.316) and from the separate Ethics committee of each research organization in the remaining countries. Participants provided written informed consent before the focus group meeting and verbal informed consent at the beginning of each focus group. The participant information letter included details on the study aims, contact information, the right to withdraw, data protection, and complaint procedures. Each participant was provided with the option of using a pseudonym for the duration of the focus group. All identifiable information (e.g., occupation, location) in the transcripts was duly anonymized before sending

the transcripts to the author team who then conducted the final analysis, to protect the confidentiality of participants' identity.

## Data Analysis

Focus groups were first transcribed in the focus group language from the original audio recordings by one of the researchers who conducted the session, to maintain contextual accuracy. Transcription was conducted based on [Braun and Clarke's \(2006\)](#) guidelines. Afterward, when needed, all transcripts were translated into English by the facilitators who conducted the focus group for the purposes of data analysis. To address the risk of loss of meaning in the translation process, a consultation procedure ensued between the two facilitators (lead and cofacilitator) as recommended by [Gawlewicz \(2019\)](#). All researchers had an excellent understanding of both English and of their local tongue.

All transcripts were uploaded into NVIVO software (v15; 2024) for analysis. RTA was used to analyze the data as it allows for the interpretation of participants' thoughts and feelings in a realistic context ([Braun & Clarke, 2006](#)). RTA was selected because it provides a flexible method of approaching qualitative data and allows for the appropriate selection of a theory and epistemology ([Braun & Clarke, 2022](#)). This study embarked from assuming a constructionist epistemology, which was appropriate given our interest in how participants collectively as well as individually constructed their understanding of their online and social media experience ([Burr, 1995](#)). A constructionist epistemology therefore allowed us to emphasize both themes that cut across participant contributions and unique expressions of experience within individual narratives. Data were analyzed with an emphasis on an inductive approach using open-coding and the creation of a custom-made, draft thematic map. Deductive analysis was used at a secondary level to meaningfully organize codes and themes.

The analysis followed the six-phase approach as described by [Braun and Clarke \(2012\)](#). After the transcription and translation of all interviews, the first phase involved Vasiliki Christodoulou, Pinelopi Konstantinou, and Andrea Photiou reading through the interview transcripts and discussing them to familiarize themselves with the data. The second phase involved Vasiliki Christodoulou, Pinelopi Konstantinou, and Andrea Photiou engaging in line-by-line coding of one transcript together and generating initial codes related to the research questions. Data were approached at both the semantic and latent levels, when relevant, to guide a more interpretative engagement with the material. Subsequently, the remaining focus groups/interview transcripts were allocated among the author team (Vasiliki Christodoulou, Pinelopi Konstantinou, and Andrea Photiou) for further analysis (two transcripts each). In the third phase, in joined meetings, researchers focused on developing the initial themes by organizing coded clusters into conceptual themes and presenting them into thematic tables. Upon completion of this coding stage, Vasiliki Christodoulou took the lead in reviewing all the codes, removing duplicates, and categorizing them into a draft thematic map. At this stage, an interrater agreement toward the final thematic map was pursued. To be specific, 20% of the total project coded extracts were randomly extracted from and allocated to the two researchers, who were not involved in the theme/subtheme finalization (Pinelopi Konstantinou and Andrea Photiou). They then recoded these extracts according to the proposed thematic map to ascertain agreement and thematic map appropriateness, reaching 93% agreement (Pinelopi Konstantinou)

and 92% agreement (Andrea Photiou), respectively. The fourth phase included reviewing identified themes and collapsing them with other potentially similar themes to create overarching conceptual groupings. On the fifth phase, themes were conceptually defined and named by Vasiliki Christodoulou and finalized upon consultation with the rest. Themes were reviewed so that they were focused and aligned with the research questions as well as presenting a cohesive story emerging from the data. Finally, during the sixth phase, we focused on extracting Figures 1–4 representing our findings from NVIVO and completing the project write-up. Fully anonymized excerpts and coding materials are available from the authors, subject to ethical and data protection requirements, and have been deposited in the Zenodo repository (DOI reserved: <https://doi.org/10.5281/zenodo.19223297>) and will be made publicly available upon publication.

### Authors' Reflexive Note

A brief note is needed regarding the authors' perspective in relation to the research themes, as these likely affected both research questions and procedures. All authors were previously engaged in academic research with different areas of focus. Vasiliki Christodoulou, Pinelopi Konstantinou, and Andrea Photiou focused on mental health and prevention, with backgrounds in different fields of applied psychology. Vasiliki Christodoulou also had substantial experience conducting RTA. Kalypso Iordanou, whose expertise lies in reasoning and epistemic cognition, contributed to securing the project's funding and designed and led the work package through which this study was conceptualized. As psychologists with diverse backgrounds, we approached the data with an interest in individuals' cognitive and emotional experiences, as well as their use of arguments, facts, and explanations when making decisions in the online sphere. Our shared psychology backgrounds may have directed attention toward participants' meaning making and emotional responses, whereas the diversity of our subfields encouraged alternative thematic interpretations. We recognize that our common disciplinary lens may have supported individual-level interpretations over sociocultural or technological perspectives. At the time of study conception and data collection, all authors were actively engaged in the project (SMIDGE), which investigated engagement with misinformation and conspiratorial content in the middle-aged group on social media.

### Results

Three main themes were generated from the data: aggression on social media; getting distance and the emotional impacts of social

media use, and mistrust of online news and social media. These themes, along with their subthemes, are discussed later with direct quotes. Themes are presented in order of their prevalence. A graphical representation of themes and subthemes can be found in Figure 1. Across all three themes, participants reported reevaluating and changing their social media behavior due to cumulative negative experiences. In Theme 1, participants described experiencing emotional overload, prompting some to discontinue their social media usage. Social media was seen not only as a source of stress but also as an overwhelming source that required behavioral change to maintain well-being. In Theme 2, participants expressed increasing skepticism toward the information shared on these platforms, mentioning misinformation, manipulation, and even artificial intelligence (AI)-driven false information as causes of distrust. Finally, in Theme 3, participants described exposure to aggressive interactions, personal attacks, and hostile environments, prompting defensive behaviors such as avoiding debates and withdrawing from specific groups. These interactions often led to psychological strain and exhaustion, linking back to Theme 1. Overall, these themes illustrate a pattern of behavioral shift over time, in which past habits of active engagement and sharing gave way to present-day mistrust and disengagement, as participants sought to protect themselves from emotional and informational harm and exhaustion.

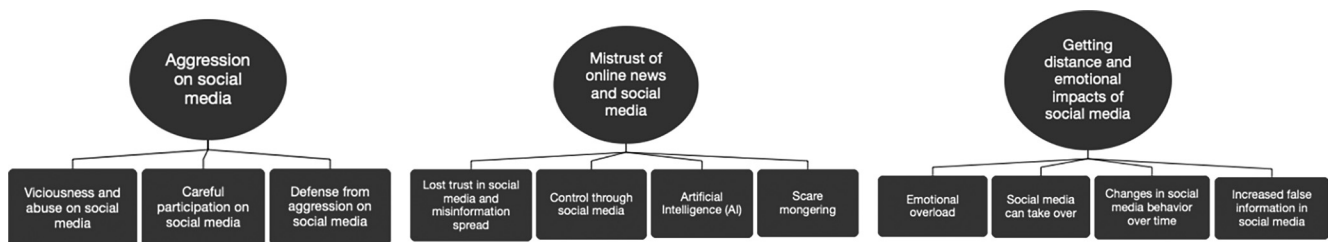
### Theme 1: Getting Distance and Emotional Impacts of Social Media Use

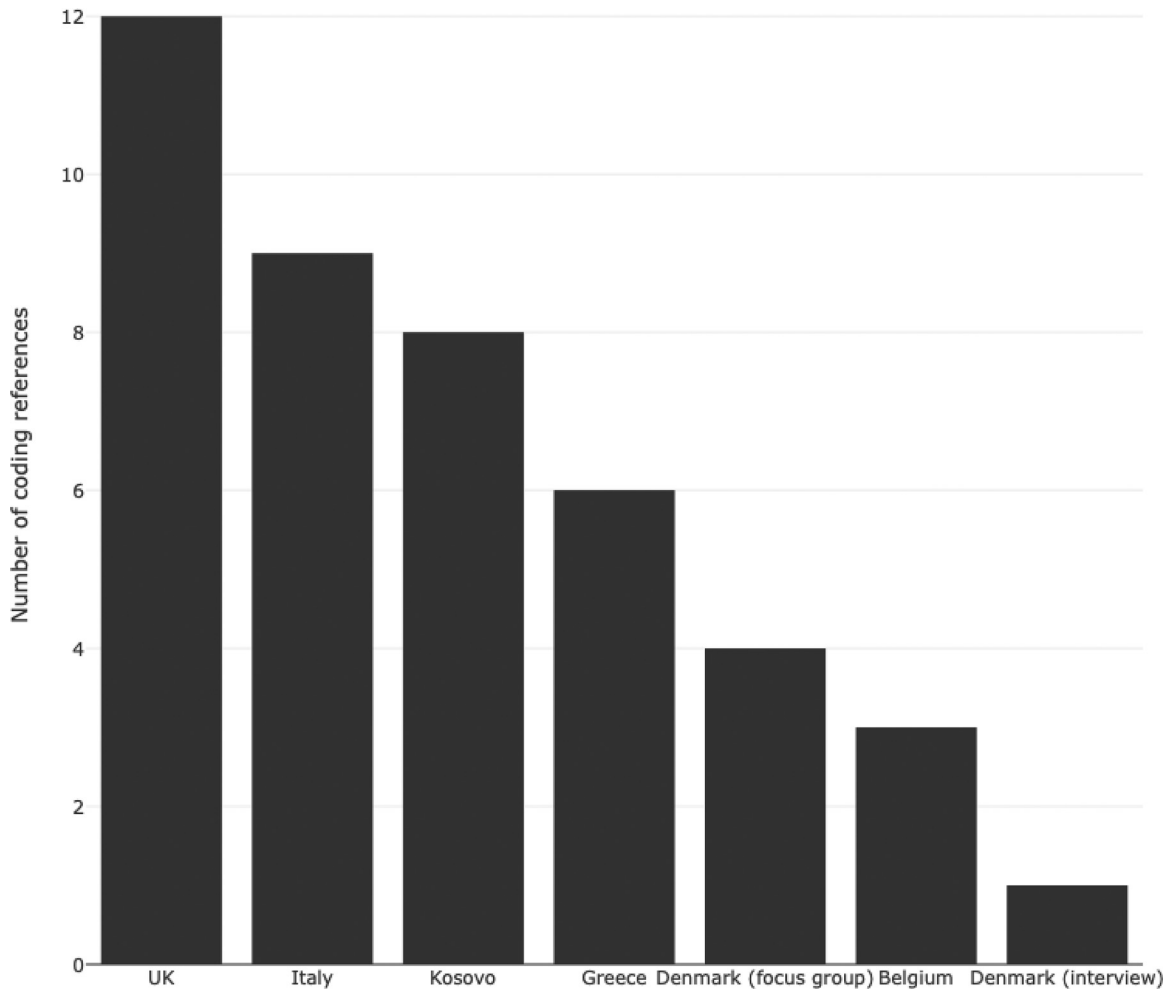
Twenty-three participants across all six countries (the United Kingdom = 7, Kosovo = 4, Italy = 4, Greece = 3, Denmark = 3, Belgium = 2) reported significant concerns about social media use, highlighting its emotional impact, potential for overuse, cautious engagement, and the spread of misinformation (Figure 2). Emotional overload was the most common subtheme, with some participants reporting withdrawing from social media to protect their mental well-being. In addition, participants expressed concerns about social media taking over their lives, leading some to step back from its use. A shift toward more cautious sharing and heightened concern about false information was also mentioned.

#### Emotional Overload

Experiencing emotional overload from social media was commonly reported across all countries, with many participants reporting instances and examples. Specifically, a few participants mentioned experiencing emotional overload due to exposure to negative content and global events presented on social media. For example, a

**Figure 1**  
*Themes and Subthemes From Focus Group Analysis*



**Figure 2***Reference to Getting Distance and Emotional Impacts of Social Media Use During Discussion*

participant from Belgium mentioned, “a dead baby from a war or the actual war, we feel fear or insecure or anxious, not only for them but also for us.” Exposure to social media was also reported by a few participants from the United Kingdom as increasing their wariness of the world, as well as feelings of anxiety and worry. Some examples that led to emotional overload and feelings of being fed up were also reported by a few participants, such as news about the Israel–Palestine war and the American elections. In addition, a participant from the United Kingdom mentioned:

I used to be an avid follower of the news and watched Sky News about four times a day, seven days a week. But, in the last fortnight I’ve not watched any TV news because it’s so depressing and continuous and overwhelming.

A participant from Italy also reported that he had previously engaged in debunking and fact-checking but had stopped because he was “tired.” Social media withdrawal was also reported as a result of overexposure during COVID-19. This emotional overload was described by a participant from the United Kingdom as leading to withdrawal from social media:

“Looking at lots of social media concerning political issues, [I] got more engaged and passionate about the subject. Also made me more anxious and worried. Eventually made me cut down on social media use.”

### ***Social Media Can Take Over***

Some participants from Greece, Denmark, Italy, and Kosovo expressed concerns about social media beginning to take over their lives. A participant from Denmark shared that he deleted his Instagram account due to excessive mindless scrolling, whereas another from Italy withdrew from social media to prioritize real human connections: “I’m generalizing here, but the pandemic made me withdraw from social media, narrowing down my time and friendships. However, I sense that it’s a new world [meaning social media] where people connect, and where one also has an identity.” One participant from Kosovo mentioned distancing himself from social media to focus on reading books. Similarly, a participant from Greece stated that he avoids social media, as past usage had led to insufficient sleep. Two participants from Greece also suggested setting boundaries, such as engaging in purposive scrolling as a way to use social media more mindfully.

### *Changes in Social Media Behavior Over Time*

Several participants from Kosovo, Italy, Denmark, and the United Kingdom mentioned that they are careful about what they share on social media, providing examples of how their social media use has changed over time. For example, a participant from Italy reported, “since I was hacked and my Instagram account was stolen . . . , so, I stopped using it.” A participant from Denmark also mentioned that, although he had previously shared political beliefs on social media, he now avoided sharing posts or engaging in such discussions due to perceived lack of impact. Similarly, a participant from Kosovo mentioned that he used to express polarized political opinions but later discontinued. Social media activity had also changed for a participant from the United Kingdom, who stated that in the past he “used to be an avid follower of the news” but had now stopped. In addition, a participant from Italy reported that he had previously been more active on social media, frequently sharing all sort of information including politics, news and local updates, and using it more often than he does now.

### *Increased False Information in Social Media*

Few participants from Belgium, Italy, and the United Kingdom expressed avoidance of social media use because of the rise of false information. A participant from the United Kingdom stated that he avoided social media news due to its lack of truthfulness, particularly regarding the American election. Similarly, a participant from Belgium reported avoiding social media engagement because of the prevalence of fake news, especially in international politics. A participant from Italy highlighted how people today are overwhelmed by misinformation, emphasizing the challenge of distinguishing reliable information from fake news:

Today, we are overwhelmed by information, and [. . .] sometimes it seems there are no limits. When Participant 5 mentioned earlier, ‘Maybe I didn’t notice it,’ it’s true! I sometimes ask myself that question. If it’s work-related information, I’ve probably looked into it and know how to discern whether it’s reliable, but with other things – like fake news – it’s more difficult.

## **Theme 2: Mistrust of Online News and Social Media**

Nineteen participants across all six countries (the United Kingdom = 7, Belgium = 3, Greece = 3, Italy = 3, Denmark = 2, Kosovo = 1), expressed mistrust in social media and concerns about misinformation and manipulation. Coded references indicating mistrust of online news and social media by country can be found in [Figure 3](#). Many acknowledged that misinformation is difficult to stop and noted AI as a major factor in its spread. As a result, many participants reported losing trust in various well-known platforms and even reputable news sources due to scams, biased reporting, and the spread of false information.

### *Lost Trust in Social Media and Misinformation Spread*

Many participants from the United Kingdom, Belgium, Italy, Greece, and Denmark expressed that they had lost trust in social media, possibly due to the spread of misinformation. To be specific, one participant mentioned distrust toward social media platforms, believing they exerted control over users by collecting personal information and promoting certain products and views,

“... the internet knows about my activities [. . .] I don’t think I’m controlled by them, but [. . .] it’s something to be aware of [. . .] how much Big Brother is collecting about you and using it to control you.” Another from the United Kingdom stated that he no longer trusted any social media platform, including reputable sources like the British Broadcasting Corporation (BBC), due to the great amount of misinformation. Similarly, two participants from Belgium reported distrusting Facebook due to scams, whereas a participant from Greece expressed skepticism toward news shared on Facebook, as “anyone can post without accountability.” An example was further mentioned by a participant from the United Kingdom, who encountered false comments on Facebook regarding a local event on the Southport riots, where the attacker was falsely identified as a Muslim immigrant:

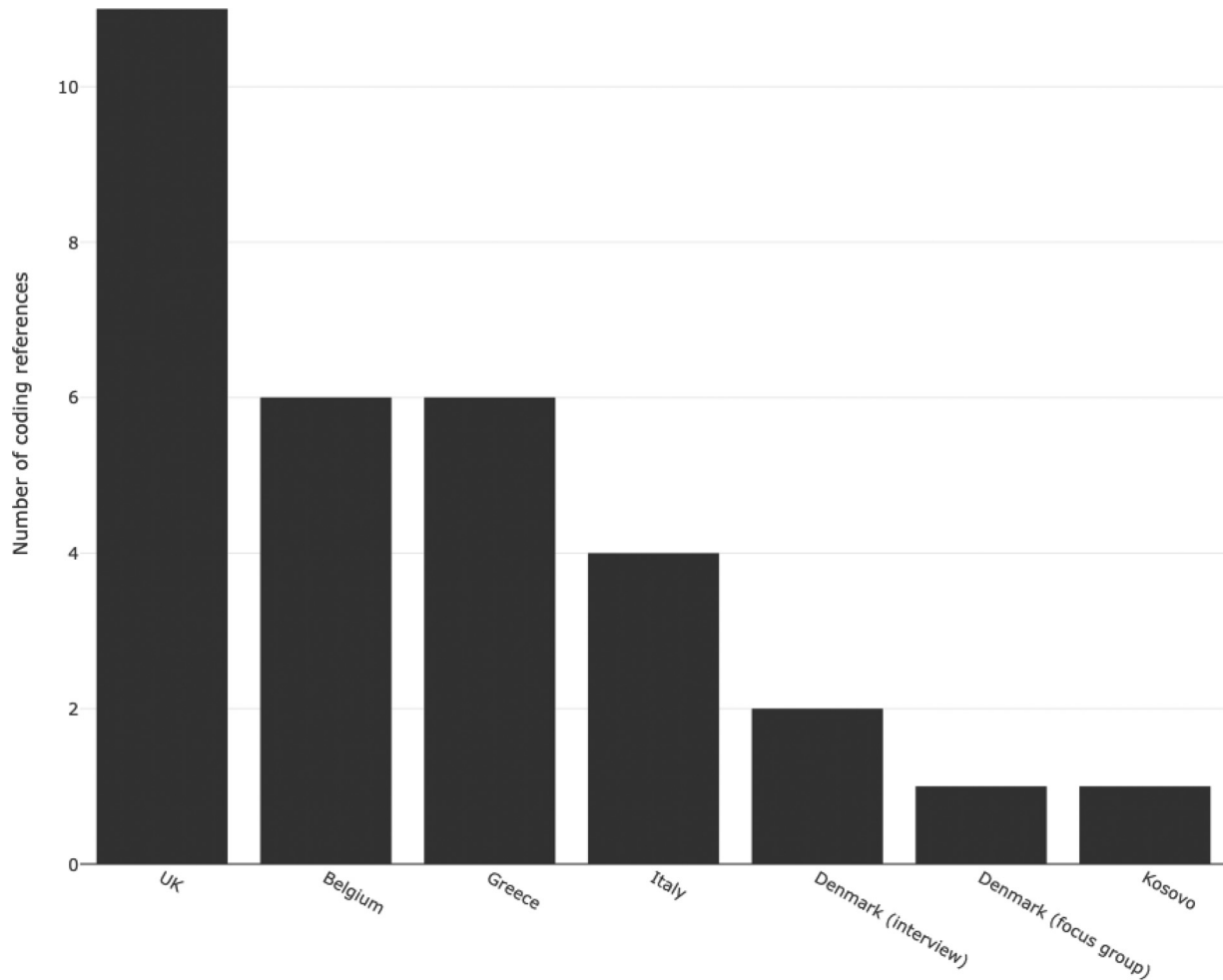
Going back a bit though, in time, what did stand out was Facebook and the Southport riots and all the comments on social media about the man being a Muslim and an immigrant. Which was false, because he was from Wales and a Roman Catholic. But it took me a day or two to sort of get to the truth of that matter.

Similarly, a participant from Italy described Facebook as a “waste of time” for news consumption due to advertisements, distractions, and subscription-based content. A few noted that online news is not always fully accurate and that people sharing information online are not always reliable or authentic. In an interesting parallel, a participant from Italy also questioned the credibility of traditional newspapers, stating that they do not always tell the full truth either. The frustration caused by misinformation was highlighted by two participants who noted that false news spreads rapidly online and that many people accept it either as a fact or as the norm. Similarly, a participant from Belgium mentioned that true facts are often mixed with conspiracy theories, making it difficult to discern the truth. Thus, the main challenge with social media was figuring out what can truly be trusted. A participant from the United Kingdom summarized this point: “I think the main issue is what can you trust. Everything seems to have bias and agenda. That includes the main social media and supposed independent sources.”

### *Control Through Social Media*

Some participants from the United Kingdom and Greece reported issues of imposed control through social media. A participant from the United Kingdom highlighted how platforms monitor user activity and influence behavior through targeted advertisements and curated content. Similarly, a participant from Greece stated that people are aware and suspicious of how social media platforms tailor content to their interests. However, as mentioned by a participant from the United Kingdom, an uncertainty remains about who controls the information on social media and whether it is truly unbiased:

I feel very fortunate to have the BBC – but, even then, I have become more aware of how much each political party is able/trying to control BBC content – and how this is affecting the nature of BBC reporting. I am also affected by bad press about the BBC (e.g., that the BBC is not abiding by impartiality rules) – and, then again, when Nigel Farage is given a lot of air play, I wonder if the BBC has capitulated under pressure. It becomes confusing as to who controls the information – and whether it is unbiased. I switch off for months on end these days.

**Figure 3***Coded References Indicating Mistrust of Online News and Social Media per Country*

Another participant from the United Kingdom pointed out that social media companies exploit users to maximize engagement, whereas a participant from Greece emphasized that these platforms do not care about blocking people from using them if they share false information, as their priority is to make money. Political differences were also highlighted regarding who controls social media, as noted by a participant from the United Kingdom:

The culture in USA is based on freedom of expression, and here social media can amplify political differences and make for a more toxic culture – thinking of the past and present differences between Democrats and Republicans. On the other hand, in China and Russia, I perceive much more stricter government control of social media – this is due to cultural differences, as they are not democracies.

### **Artificial Intelligence**

Few participants from Belgium, Kosovo, and the United Kingdom expressed concerns about the growing impact of AI on daily life, particularly in relation to social media. A participant from the United Kingdom highlighted the increasing presence of generative AI in producing highly realistic fake videos, making it difficult to distinguish truth from misinformation:

I think the other big thing with social media in the last eight months is generative artificial intelligence producing very realistic fake videos. And, you know, I've seen some strange videos of Kamala Harris. It's difficult to ascertain if these are true or not, I suppose you've just got to exercise common sense and perhaps verify it with a more reputable source, but I think in the last 18 months, generative AI has perhaps had a lot of an impact on social media videos.

Another participant from Kosovo reported on how frightening it was to notice how AI algorithms “read your mind” by showing personalized content. Similarly, a participant from Belgium expressed concerns about the reliability of news generated by AI tools, questioning their accuracy and trustworthiness.

### **Scaremongering**

Few participants from Italy and the United Kingdom highlighted how social media induce fear, shaping beliefs and driving increased platform use. A participant from the United Kingdom noted that social media articles and videos often target individuals' physical or mental vulnerabilities, such as poverty and low socioeconomic status, influencing their perceptions. Similarly, a participant from Italy emphasized that social media thrives on fear, using it as a tool for engagement:

And the content is always the same: news about someone who stole from someone else, and the thief is, of course, an undocumented immigrant. From there, the debate begins with “send them all home,” and things spiral into violence. These are things that exploit fear: fear is the currency, the driving force behind engagement on social media.

### Theme 3: Aggression on Social Media

Seventeen participants across all participating countries (the United Kingdom = 7, Denmark = 5, Italy = 2, Kosovo = 1, Belgium = 1, Greece = 1) reported significant concerns about hostility and abuse on social media, highlighting the aggressive nature of online interactions. Coded references to this theme were most frequently observed among participants from Denmark and the United Kingdom (Figure 4).

#### *Viciousness and Abuse on Social Media*

Many participants (the United Kingdom, Denmark, Italy, Greece) referred to experiencing viciousness and abuse on social media platforms. This experience was more prevalent among the U.K. participants, with six of them indicating that people on social media had become abusive and aggressive. For example, One U.K.

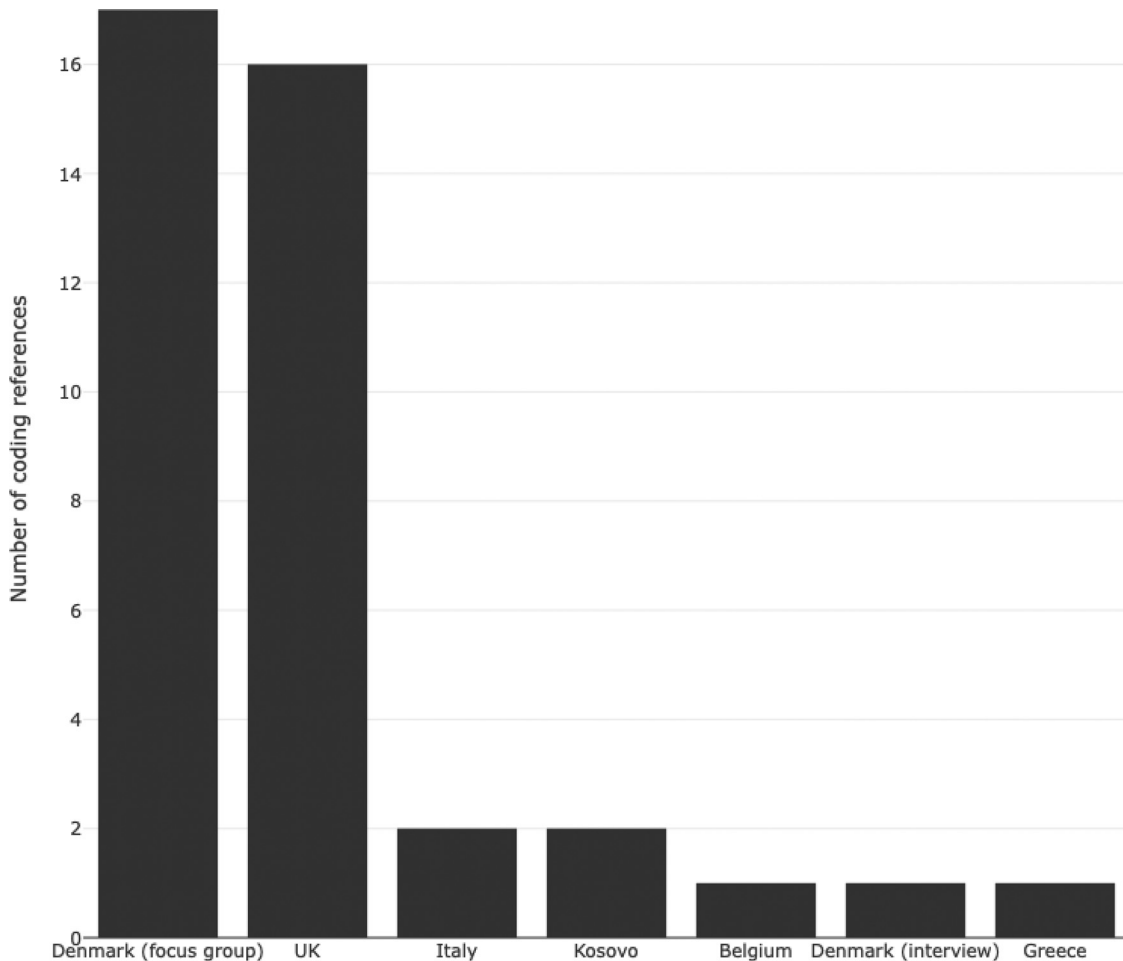
participant mentioned that he discontinued Facebook use because it became a vicious battleground of opposing opinions:

I came off Facebook, most notably a number of years ago, just because of how vicious it got, and how, see, politically motivated it became, and how it became this battleground for those was kind of arguments, and it was never for the sake of trying to reason with someone.

A participant from Denmark also mentioned that people on social media can “get so angry and toxic,” and explained that one can choose how to handle this “by either leaving or scrolling past it.” It was also mentioned that even incorrect punctuation on social media could make people frustrated. This was further supported by another participant from the U.K., who mentioned that social media has different rules than face-to-face interactions, facilitating people to be ruder and more aggressive. An example was offered by another participant from the U.K., referring to a Facebook video that received intense criticism and led to its takedown:

There’s a particular live stream podcaster that live-streams [...] football related content, and they mentioned that they had posted, at the weekend, on their Facebook page, a video pertaining to our particular

**Figure 4**  
*Reference to Aggression on Social Media During Discussion*



team's success, and it was just a short 10-second video. But that they have received some absolutely horrendous and really awful comments, to the point where he took the video down. So, kind of just a reminder [...] of how vicious social media can be, and the levels that people will go to abuse other people.

In addition, one participant from Italy referred to being fed up with fact-checking online in general, as he often ended up arguing with people. A few participants from the U.K. mentioned that posting something on social media can even risk someone being "cancelled" or punished with prison.

### ***Careful Participation on Social Media***

Several participants from Denmark, Kosovo, and Italy mentioned that they participate carefully on social media, using specific techniques to cope with aggression. A few participants from Denmark reported that they avoid engaging in discussions on social media and ignore inquiries about why they choose to share specific posts. Avoidance of online conflicts and conspiratorial content, as well as leaving groups or threads that appeared to have a conflictual focus, was also reported by one participant from Denmark. For example, he mentioned leaving a male gaming group due to its antiwoke and antifeminist content:

The gaming community can be pretty toxic, so things mustn't be too 'woke.' Then a new Star Wars game came out, and it was accused of being woke simply because it had a female protagonist. And that was actually what pushed me over the edge—I just didn't want to deal with it anymore.

Similarly, an Italian participant mentioned stepping back from pointless conflicts on social media, whereas a Kosovar avoided sharing content due to increased aggression and attacks. A Danish participant likewise preferred not to share personal or emotional content on social media. One participant from Denmark also reported using a specific strategy: "if they get personal, if it becomes unpleasant, then I block them".

### ***Defense From Aggression on Social Media***

Some participants from Denmark, Belgium, and the United Kingdom, referred to having to defend themselves from aggression on social media. Specifically, they mentioned that in instances of experiencing aggression in online communities, they often felt pressure to take sides or a perceived need to stand up and defend others, especially for minorities and vulnerable people. In addition, a participant from Denmark mentioned that self-defense on social media is an issue concerning all ages, as people lack the skills. Another recommendation was mentioned by a participant from Belgium on the need for Facebook to address and prevent online attacks: "Sites like Facebook should make sure fake news isn't spread, and they should take extra precautions to avoid unnecessary attacks on people. It's harmful, especially for our age, also psychologically, what people are being dragged into online."

## **Discussion**

This qualitative study aimed to examine the emotional experience and impact of social media use among 46 middle-aged adults (aged 40–65) in Belgium, Denmark, Greece, Italy, Kosovo, and

the United Kingdom. Findings revealed three major themes: emotional overload and distancing, mistrust of online news and platforms, and aggression on social media. These themes collectively illustrate the shifting relationship between middle-aged users and social media use across time, characterized by increased mistrust, disengagement, emotional fatigue, and a reevaluation of online behavior.

With respect to the first theme, "Getting distance and emotional impacts of social media use," participants described experiencing emotional overload, social media fatigue, which led them to shift from their past levels of online activity by limiting screen time, deleting apps, filtering content, or even withdrawing from social media entirely. These feelings were commonly attributed to increased exposure to negative content (e.g., global crises, wars, elections) and to the presence of misinformation or fake news, which participants described as emotionally consuming. This corroborates earlier findings, which reported that heightened exposure to emotionally charged or overwhelming information can cause feelings of fatigue, mistrust, and exhaustion (Bright et al., 2015; Dhir et al., 2019; Fu et al., 2020; Iordanou et al., 2026; Ou et al., 2023; Sheng et al., 2023; Zheng & Ling, 2021).

The findings are consistent with the principles of the SSO framework, which conceptualizes a link between online stressors, the development of emotional strain, and subsequent withdrawal (Bright et al., 2015; Fu et al., 2020; Zheng & Ling, 2021). Consistent with our findings, information overload was reported as an important stressor, as the users described receiving more information than what they could process, which in turn led to higher levels of social media fatigue or exhaustion (Fu et al., 2020; Sheng et al., 2023). A further stressor that appeared relevant to our middle-aged demographic was mistrust of online content, including concerns about the trustworthiness of news sources, privacy violations, and misinformation. Participants suggested that these types of content also contributed to fatigue and distress, resulting in social media disengagement (Park et al., 2020).

In particular, the second theme, "mistrust of social media and online news," showed widespread skepticism and concerns about misinformation and manipulation across countries. Participants doubted the credibility of news shared online, including content from well-known and legacy platforms (e.g., the BBC), and expressed concerns about manipulation and misinformation. Our findings align with previous work showing that mistrust can arise from exposure to excessive and conflicting information, making it difficult for users to determine what is true (Park et al., 2020). This erosion of trust in previously trusted news sources was often accompanied by frustration and withdrawal from social media. Notable concerns about AI use and algorithmic control (e.g., through targeted ads and content tailoring) were also reported, with participants describing an environment in which truth is difficult to discern, and fear-based content is used to drive engagement. These reactions are consistent with previous studies documenting fear-eliciting messages and scaremongering on social media (Ou et al., 2023).

An observed pattern in the data was participants' disengagement from both legacy and general social media news sources, reflecting a broader decrease in trust and heightened suspicion toward online information. Beyond the established link between low-quality or inaccurate content and online fatigue (Bright et al., 2015), participants' experiences also echoed the well-documented declining

trust in institutions and news outlets (Newman et al., 2023; Park & Marchi, 2024). Several authors have proposed that general fatigue and disengagement from online environments can create a ripple effect, undermining individuals' overall sense of trust, including toward long-standing and reputable institutions, ultimately leading to reduced engagement with news sources (Bennett & Livingston, 2018; Van Dijck & Poell, 2015). This finding also aligns with the widely debated media malaise theory, which suggests that repeated exposure to confusing or negative information may increase skepticism and withdrawal, fostering feelings of uncertainty that can generalize beyond online media to broader social institutions (Mutz, 2015; Schuck, 2017).

Participants did not identify instances of personally self-reported engaging with misinformation or acknowledge errors in their understanding of social media content. This may be recruitment-related bias or may reflect previous findings that greater exposure to false information can both erode trust and paradoxically increase overconfidence in one's ability to discern online content (Altay et al., 2025). Nonetheless, they shared strong concerns about the effort required to critically evaluate and discern online content. Although not directly addressed in this study, it is worth considering whether social media fatigue may reduce individuals' likelihood of employing System 2, analytically driven reasoning while discerning online information (Bago et al., 2020). Previous work suggests that social media fatigue is associated with susceptibility to misinformation (Ahmed & Rasul, 2023) and that online fatigue is associated with more passive or "lurking" online behavior; a pattern consistent with disengagement from effortful cognitive processing (Qin et al., 2024). Future studies would benefit from experimentally testing the relationship between social media fatigue and activation or deactivation of System 2 analytical processing.

The third theme, "aggression on social media," revealed that participants frequently encountered abusive online interactions, ranging from toxic debates to personal attacks. These encounters were typically described as occurring in broader online groups rather than within close social circles; however, previous qualitative work showed that disagreements among family and friends about what content to share can generate conflict and emotional burden, as they tend to violate expectations of interpersonal trust (e.g., Majerczak and Strzelecki, 2022; Scott et al., 2023). In our data, this deeper sense of disillusionment emerged primarily when participants reflected on online groups that they had been a part of for some time and ultimately chose to abandon (e.g., gaming group). To cope with this type of aggression, many individuals reported adopting self-protective behavioral strategies, such as avoiding conflicts, reducing online visibility, or even exiting specific groups. Our results align with those reported by Bright et al. (2015) and Dhir et al. (2019), who found that social media can be increasingly aggressive, contributing to additional sources of user fatigue, exhaustion, and withdrawal. Notably, country differences, particularly the higher prevalence of such reporting among participants in the United Kingdom and Denmark, may reflect broader cultural norms and social media dynamics affecting online interpersonal interactions across European countries. These differences may also reflect a higher media literacy skill in these two countries, as recognized by the European Media Literacy Index (Lessenski, 2023). These patterns suggest that cultural expectations around communication style, tolerance for conflict,

and different media literacy levels may influence how individuals perceive and report aggressive online behaviors.

Combined with prior research, this study adds new information on the social media experience by focusing on middle-aged adults, a group often overlooked in social media literature. Although more attention has been given to younger people due to their high engagement levels and developmental vulnerability (Carrillo-Durán et al., 2022; Gao, 2024; Giarla, 2019; Zhang et al., 2023), middle-aged individuals also experience unique emotional and psychological challenges, as many adapted to the digital world later in life (Gurunathan & Lakshmi, 2025). The results of the present study reinforce earlier research indicating that this demographic is especially concerned with privacy, information accuracy, and data security issues. Findings also suggest that middle-aged adults may be susceptible to feelings of overwhelm and exhaustion due to the fast-paced and often chaotic nature of social media.

In a digital environment where misinformation thrives and trusted sources can be difficult to identify, these users may face increased stress and uncertainty. This may undermine confidence in the media and increase vulnerability to manipulation. Social and online media may become fertile ground for the development or reinforcement of more extreme views, as individuals may seek certainty in ideologically rigid communities. Although this pattern was not directly evident within our sample, participants observed this tendency in online spaces (e.g., subtheme scaremongering), and it has been documented in previous studies (Boulianne et al., 2020; Terren & Borge, 2021). Therefore, the combination of mistrust, emotional exhaustion, and heightened vulnerability among middle-aged users on social media represents a social problem that warrants further investigation.

Another novel contribution of this study is its cross-country perspective, which allows for some comparative analysis of cultural and contextual factors. Although emotional overload was reported across all countries, it was mentioned most frequently in participants from the United Kingdom, who referred to repeated exposure to war-related content and political news on social media. In contrast, participants from Denmark emphasized experiencing aggression on social media, providing examples of defending themselves and others from hostile interactions and careful participation. Although identifying cross-country differences was not the primary aim of the present study, these patterns suggest that the social media experience is highly contextual, with cultural norms and political climates influencing users behaviorally and psychologically.

## Implications

First, our findings suggest that social media fatigue is a significant and common stressor among middle-aged adults. Clinicians may therefore consider incorporating psychoeducation on media literacy and strategies for setting online boundaries into their interventions. Participants' concerns about misinformation, deception, and manipulation through social media, particularly as these issues become more pronounced with the use of AI, align with concerns raised by experts about the challenges social media poses to individual and societal well-being and the need for platform redesign (Christodoulou & Iordanou, 2021; Iordanou & Antoniou, 2022). The widespread distrust and fatigue expressed by participants

highlight the importance of designing platforms using more user-centered principles, such as greater algorithmic transparency. Building on intervention programs that have shown promise in promoting individuals' reasoning skills (Iordanou & Fotiou, 2025; Iordanou & Rapanta, 2021) and engagement in more reflection and evaluation when reading information (Iordanou et al., 2025); there is a need to design accessible training tailored to the needs of middle-aged adults; training focused on discerning misinformation, using less cognitively laborious fact-checking strategies, and addressing privacy concerns. Moreover, the effectiveness of psychological interventions such as cognitive behavioral therapy (Zhou et al., 2021) in helping middle-aged adults cope with emotional overload and social media fatigue should also be examined experimentally.

### Limitations

Limitations should be acknowledged before generalizing this study's findings to middle-aged adults in different European countries, as the sample size was limited and participants were not screened for mental health conditions, which may have introduced some bias. Moreover, given the subjective nature of reflexive thematic analysis, generalization was not the primary goal but rather to achieve a deeper engagement with the meanings given by middle-aged citizens to their experiences of online and social media use (Braun & Clarke, 2019). Similarly, although reflexive thematic analysis does not employ a strict codebook or formal interrater reliability procedures, which may heighten researchers' interpretive lens, our research team prioritized transparency through ongoing discussions and implemented a customized interrater reliability check at the level of the final thematic map.

In addition, although the cross-country data provided rich information, cultural barriers might have impacted how participants expressed their experiences or how researchers interpreted them. Language diversity across countries may have also introduced nuances in translation and interpretation. To address this, each national focus group team kept a detailed field observation diary documenting linguistic and contextual cues and other interpretatively relevant details, thus facilitating the contextualization of findings (Phillippi & Lauderdale, 2018).

One criticism of the use of focus groups concerns the influence of group dynamics on findings, particularly the effects of social desirability bias (Aronson et al., 1990) and groupthink (Johnson & Johnson, 2000). Recognizing these risks, we implemented preventive measures, although their influence cannot be fully ruled out. All facilitators received training (Chioncel et al., 2003) emphasizing adherence to research questions and protocol, guiding discussions in new directions, and encouraging diverse viewpoints (Field, 2000; Morgan & Krueger, 1993). Second, participants had varied demographic backgrounds to reduce homogeneity effects, while group size followed established methodological guidelines to manage group dynamics (Kidd & Parshall, 2000).

### Conclusion

In conclusion, this study provides important insights into the emotional experience and impact of social media in middle-aged adults. Although social platforms offer opportunities for connection and learning, they also expose users to aggression, misinformation,

and emotional fatigue. As middle-aged individuals interact with this new social world, many are opting to reduce engagement or even discontinue their use. Findings of the present study highlight the need for context-specific research, particularly age-specific investigations that examine the concerns and needs of different age groups, while also considering cultural factors (Iordanou et al., 2026). These insights can inform the development of tailored intervention programs to ensure that social media remains a tool for enhancing psychological well-being rather than a source of distress, exhaustion, and fatigue.

### References

- Ahmed, S., & Rasul, M. E. (2023). Examining the association between social media fatigue, cognitive ability, narcissism and misinformation sharing: Cross-national evidence from eight countries. *Scientific Reports*, 13(1), Article 15416. <https://doi.org/10.1038/s41598-023-42614-z>
- Altay, S., Lyons, B. A., & Modirrousta-Galian, A. (2025). Exposure to higher rates of false news erodes media trust and fuels overconfidence. *Mass Communication and Society*, 28(2), 301–325. <https://doi.org/10.1080/15205436.2024.2382776>
- Apuke, O. D., Omar, B., Tunca, E. A., & Gever, C. V. (2024). Information overload and misinformation sharing behaviour of social media users: Testing the moderating role of cognitive ability. *Journal of Information Science*, 50(6), 1371–1381. <https://doi.org/10.1177/01655515221121942> (Original work published 2022)
- Aronson, E., Ellsworth, P. C., Carlsmith, J. M., & Gonzales, M. H. (1990). *Methods of research in social psychology* (2nd ed.). McGraw-Hill.
- Bago, B., Rand, D. G., & Pennycook, G. (2020). Fake news, fast and slow: Deliberation reduces belief in false (but not true) news headlines. *Journal of Experimental Psychology: General*, 149(8), 1608–1613. <https://doi.org/10.1037/xge0000729>
- Bennett, W. L., & Livingston, S. (2018). The disinformation order: Disruptive communication and the decline of democratic institutions. *European Journal of Communication*, 33(2), 122–139. <https://doi.org/10.1177/0267323118760317>
- 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>
- Boulianne, S., Koc-Michalska, K., & Bimber, B. (2020). Right-wing populism, social media and echo chambers in Western democracies. *New Media and Society*, 22(4), 683–699. <https://doi.org/10.1177/1461444819893987>
- Brashier, N. M., & Schacter, D. L. (2020). Aging in an era of fake news. *Current Directions in Psychological Science*, 29(3), 316–323. <https://doi.org/10.1177/0963721420915872>
- 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. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology: Vol. 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 55–71). American Psychological Association. <https://doi.org/10.1037/13620-004>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative Research in Sport, Exercise and Health*, 13(2), 201–216. <https://doi.org/10.1080/2159676X.2019.1704846>

- Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3–26. <https://doi.org/10.1037/qup0000196>
- Bright, L. F., Kleiser, S. B., & Grau, S. L. (2015). Too much Facebook? An exploratory examination of social media fatigue. *Computers in Human Behavior*, 44, 148–155. <https://doi.org/10.1016/j.chb.2014.11.048>
- Burr, V. (1995). *An introduction to social constructionism*. Routledge.
- Calvo-Porrà, C., & Pesqueira-Sanchez, R. (2019). Generational differences in technology behaviour: Comparing millennials and Generation X. *Kybernetes*, 49(11), 2755–2772. <https://doi.org/10.1108/K-09-2019-0598>
- Carrillo-Durán, M.-V., Ruano-López, S., Fernández-Falero, M.-R., & Trabadelo-Robles, J. (2022). Understanding how baby boomers use the internet and social media to improve the engagement with brands. *Comunicação e Sociedade*, 41, 261–284. [https://doi.org/10.17231/comsoc.41\(2022\).3516](https://doi.org/10.17231/comsoc.41(2022).3516)
- Chen, S. (2023). Spread of misinformation on social media: A systematic and structured overview of the factors influencing misinformation diffusion. *Computers in Human Behavior*, 140, Article 107643. <https://doi.org/10.1016/j.chb.2022.107643>
- Chioncel, N. E., van der Veen, R. G. W., Wildemeersch, D., & Jarvis, P. (2003). The validity and reliability of focus groups as a research method in adult education. *International Journal of Lifelong Education*, 22(5), 495–517. <https://doi.org/10.1080/0260137032000102850>
- Christodoulou, E., & Iordanou, K. (2021). Democracy under attack: Challenges of addressing ethical issues of AI and big data for more democratic digital media and societies. *Frontiers in Political Science*, 3, Article 682945. <https://doi.org/10.3389/fpos.2021.682945>
- de Oliveira, R. M., de Sousa, Á. F. L., de Sousa, A. R., Araújo, A. A. C., Muniz, V. O., Fronteira, I., & Mendes, I. A. C. (2023). Misinformation about COVID-19 among middle-aged and older migrants residing in Brazil and Portugal. *Revista da Escola de Enfermagem da U S P*, 57, Article e20220401. <https://doi.org/10.1590/1980-220X-REEUSP-2022-0401en>
- Dhir, A., Kaur, P., Chen, S., & Pallesen, S. (2019). Antecedents and consequences of social media fatigue. *International Journal of Information Management*, 48, 193–202. <https://doi.org/10.1016/j.ijinfomgt.2019.05.021>
- Euajarusphan, A. (2021). Online social media usage behavior, attitude, satisfaction, and online social media literacy of generation X, generation Y, and generation Z. *Asian Interdisciplinary and Sustainability Review*, 10(2), 44–58. <https://so05.tci-thaijo.org/index.php/PSAKUIJIR/article/view/255898>
- Field, J. (2000). Researching lifelong learning through focus groups. *Journal of Further and Higher Education*, 24(3), 323–335. <https://doi.org/10.1080/030987700750022262>
- Fietkiewicz, K. J., Baran, K., Lins, E., & Stock, W. G. (2016). *Other times, other manners: How do different generations use social media?* Paper presented at the 2016 Hawaii University International Conferences: Arts, Humanities, Social Sciences & Education, Honolulu, HI, United States.
- 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 and Management*, 57(6), Article 102307. <https://doi.org/10.1016/j.ipm.2020.102307>
- Gao, X. (2024). *A comparative study of social media interaction and user engagement between Gen Z and Gen X* [Unpublished master's thesis]. California State University.
- Gawlewicz, A. (2019). *Translation in qualitative methods*. SAGE Publications.
- Giarla, V. (2019). *Generational social media: How social media influences the online and in-person relationships of gen X gen Y and gen Z* [Unpublished honors thesis]. Salem State University.
- Guess, A. M., Nagler, J., & Tucker, J. A. (2019). Less than you think: Prevalence and predictors of fake news dissemination on Facebook. *Science Advances*, 5(1), Article eaau4586. <https://doi.org/10.1126/sciadv.aau4586>
- Gurunathan, A., & Lakshmi, K. S. (2025). Social media and digital marketing perceptions: Intra- and inter-generational similarities and differences among Gen X, Y and Z. *Journal of Informatics Education and Research*, 5(1), Article 2227. <https://doi.org/10.52783/jier.v5i1.2227>
- Hogeboom, D. L., McDermott, R. J., Perrin, K. M., Osman, H., & Bell-Ellison, B. A. (2010). Internet use and social networking among middle aged and older adults. *Educational Gerontology*, 36(2), 93–111. <https://doi.org/10.1080/03601270903058507>
- Huguet, A., Kaufman, J. H., & Diliberti, M. K. (2024). *Media habits and misinformation susceptibility of adults aged 55 years and older: Findings from a RAND American Life Panel survey* (Research Report RRA2909-1). RAND Corporation. [https://www.rand.org/pubs/research\\_reports/RRA2909-1.html](https://www.rand.org/pubs/research_reports/RRA2909-1.html)
- Iordanou, K., & Antoniou, J. (2022). Tackling bias in AI and promoting responsible research and innovation: Insights from discussions with different stakeholders. In C. El Morr (Ed.), *AI and society* (1st ed., pp. 141–157). Chapman and Hall/CRC. <https://doi.org/10.1201/9781003261247-11>
- Iordanou, K., Antoniou, A., & De Vos, M. (2026). Public trust in science: A systematic literature review. *Journal of Academic Ethics*, 24, Article 56. <https://doi.org/10.1007/s10805-026-09732-5>
- Iordanou, K., & Fotiou, C. (2025). Supporting integration of multiple source perspectives through dialogic argumentation. *Frontline Learning Research*, 13(1), 22–44. <https://doi.org/10.14786/flr.v13i1.1241>
- Iordanou, K., & Rapanta, C. (2021). “Argue with me”: A method for developing argument skills. *Frontiers in Psychology*, 12, Article 631203. <https://doi.org/10.3389/fpsyg.2021.631203>
- Iordanou, K., Fotiou, C., Manoli, A., & Zembylas, M. (2025). Examining myside bias on a controversial historical event after engagement in dialogic argumentation: Insights from a think aloud study. *Learning and Instruction*, 100, Article 102209. <https://doi.org/10.1016/j.learninstruc.2025.102209>
- Islam, A. K. M. N., Laato, S., Talukder, S., & Sutinen, E. (2020). Misinformation sharing and social media fatigue during COVID-19: An affordance and cognitive load perspective. *Technological Forecasting and Social Change*, 159, Article 120201. <https://doi.org/10.1016/j.techfore.2020.120201>
- Johnson, D. W., & Johnson, F. P. (2000). *Joining together: Group theory and group skills*. Allyn & Bacon.
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus & Giroux.
- Kidd, P. S., & Parshall, M. B. (2000). Getting the focus and the group: Enhancing analytical rigour in focus group research. *Qualitative Health Research*, 10(3), 293–308. <https://doi.org/10.1177/104973200129118453>
- Lessenski, M. (2023). *The media literacy index 2023: “Bye, bye, birdie”: Meeting the challenges of disinformation*. Open Society Institute – Sofia. <https://osis.bg/wp-content/uploads/2023/06/MLI-report-in-English-22.06.pdf>
- Li, J., Guo, F., Qu, Q. X., & Hao, D. (2022). How does perceived overload in mobile social media influence users’ passive usage intentions? Considering the mediating roles of privacy concerns and social media fatigue. *International Journal of Human-Computer Interaction*, 38(10), 983–992. <https://doi.org/10.1080/10447318.2021.1986318>
- 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>
- Majerczak, P., & Strzelecki, A. (2022). Trust, media credibility, social ties, and the intention to share towards information verification in an age of fake news. *Behavioral Sciences*, 12(2), Article 51. <https://doi.org/10.3390/bs12020051>

- Morgan, D. L., & Krueger, R. A. (1993). When to use focus groups and why. In D. L. Morgan (Ed.), *Successful focus groups: Advancing the state of the art* (pp. 3–19). Sage, Inc. <https://doi.org/10.4135/9781483349008.n1>
- Mutz, D. C. (2015). *In-Your-face politics: The consequences of uncivil media*. Princeton University Press.
- Newman, N., Fletcher, R., Robertson, C. T., Eddy, K., & Nielsen, R. K. (2023). *Reuters Institute Digital News Report 2023*. Reuters Institute for the Study of Journalism, University of Oxford. [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2023-06/Digital\\_News\\_Report\\_2023.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2023-06/Digital_News_Report_2023.pdf)
- Ofcom. (2025). *Adults' media use and attitudes report 2025* [Data report]. <https://www.ofcom.org.uk/siteassets/resources/documents/research-and-data/media-literacy-research/adults/adults-media-use-and-attitudes-2025/adults-media-use-and-attitudes-report-2025.pdf?v=396240>
- Ou, M., Zheng, H., Kim, H. K., & Chen, X. (2023). A meta-analysis of social media fatigue: Drivers and a major consequence. *Computers in Human Behavior*, 140, Article 107597. <https://doi.org/10.1016/j.chb.2022.107597>
- Park, S., & Marchi, R. (2024). The relationship between news trust, mistrust, and disengagement. *Journalism*, 25(1), 3–20. <https://doi.org/10.1177/14648849241299775>
- Park, S., Fisher, C., Flew, T., & Dulleck, U. (2020). Global mistrust in news: The impact of social media on trust. *International Journal on Media Management*, 22(2), 83–96. <https://doi.org/10.1080/14241277.2020.1799794>
- Pennycook, G., Cheyne, J. A., Barr, N., Koehler, D. J., & Fugelsang, J. A. (2015). On the reception and detection of pseudo-profound bullshit. *Judgment and Decision Making*, 10(6), 549–563. <https://doi.org/10.1017/S1930297500006999>
- Pennycook, G., & Rand, D. G. (2019). Fighting misinformation on social media using crowdsourced judgments of news source quality. *Proceedings of the National Academy of Sciences of the United States of America*, 116(7), 2521–2526. <https://doi.org/10.1073/pnas.1806781116>
- Phillippi, J., & Lauderdale, J. (2018). A guide to field notes for qualitative research: Context and conversation. *Qualitative Health Research*, 28(3), 381–388. <https://doi.org/10.1177/1049732317697102>
- Qin, C., Wang, L., Lei, Y., Liu, S., Guo, J., & Zhang, R. (2024). Too much social media? Unveiling the effects of excessive social media use, social media fatigue and lurking behaviour. *Frontiers in Psychology*, 15, Article 1277846. <https://doi.org/10.3389/fpsyg.2024.1277846>
- Ramezankhani, A., Yadegarynia, D., Dorodgar, S., & Arab-Mazar, Z. (2019). Impact of social media on psychological health: Challenges and opportunities. *Novelty in Biomedicine*, 7(3), Article 22805. <https://doi.org/10.22037/nbm.v7i2.22805>
- Ravindran, T., Yeow Kuan, A. C., & Hoe Lian, D. G. (2014). Antecedents and effects of social network fatigue. *Journal of the Association for Information Science and Technology*, 65(11), 2306–2320. <https://doi.org/10.1002/asi.23122>
- Schuck, A. R. T. (2017). Media malaise and political cynicism. In P. Rössler, C. Hoffner, & L. van Zoonen (Eds.), *The international encyclopedia of media effects*. Wiley. <https://doi.org/10.1002/9781118783764.wbieme0066>
- Scott, L., Coventry, L., Cecchinato, M. E., & Warner, M. (2023). “I figured her feeling a little bit bad was worth it to not spread that kind of hate”: Exploring how U.K. families discuss and challenge misinformation. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (pp. 1–15). ACM. <https://doi.org/10.1145/3544548.3581202>
- 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, Article 107500. <https://doi.org/10.1016/j.chb.2022.107500>
- Sirikarn, T. (2017). *Social media and Thai baby boomers: Focus on needs satisfied by social media usage*. Ritsumeikan Asia Pacific University.
- Terren, L., & Borge, R. (2021). Echo chambers on social media: A systematic review of the literature. *Recerca: Revista de Pensament i Anàlisi*, 26(2), 1–28. <https://doi.org/10.6035/recerca.2021.26.2.5>
- Tian, Y., Chan, T. J., Ng, M. L., & Liu, H. (2024). Perceived overload in social networking sites affect the users' passive usage intention: A cognition–affect–conation approach. *International Journal of Data and Network Science*, 8(4), 2509–2518. <https://doi.org/10.5267/j.ijdns.2024.5.007>
- van Dijck, J., & Poell, T. (2015). Social media and the transformation of public space. *Social Media + Society*, 1(1), 1–5. <https://doi.org/10.1177/2056305115622482>
- Wang, Y., Xu, Y., & Wu, S. (2025). “Sharing is caring even when it's wrong”: The factors influencing health misinformation sharing and relational correction among Chinese older adults from a cultural perspective. *Health Communication*, 40(11), 2389–2403. <https://doi.org/10.1080/10410236.2025.2457188>
- Xuan Vu, H. (2023). Exploring the impact of social media on mental health from a psychological perspective: A review of the contemporary literature. *International Journal of Current Science Research and Review*, 6(10), 6542–6546. <https://doi.org/10.47191/ijcsrr/V6-i10-05>
- Zhang, Y., Gaggiano, J. D., Yongsatianchot, N., Suhaimi, N. M., Kim, M., Sun, Y., Griffin, J., & Parker, A. G. (2023). What do we mean when we talk about trust in social media? A systematic review. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems* (pp. 1–22). ACM. <https://doi.org/10.1145/3544548.3581019>
- Zheng, H., & Ling, R. (2021). Drivers of social media fatigue: A systematic review. *Telematics and Informatics*, 64, Article 101696. <https://doi.org/10.1016/j.tele.2021.101696>
- Zhou, X., Rau, P.-L. P., Yang, C.-L., & Zhou, X. (2021). Cognitive behavioral therapy-based short-term abstinence intervention for problematic social media use: Improved well-being and underlying mechanisms. *The Psychiatric Quarterly*, 92(2), 761–779. <https://doi.org/10.1007/s1126-020-09852-0>
- Zolkepli, I. A., Tariq, R., Isawasan, P., Shamugam, L., & Mustafa, H. (2024). The effects of negative social media connotations on subjective wellbeing of an ageing population: A stressor–strain–outcome perspective. *PLoS One*, 19(1), Article e0296973. <https://doi.org/10.1371/journal.pone.0296973>

Received June 30, 2025

Revision received March 9, 2026

Accepted March 18, 2026 ■