



Mitigating Fake News and Misinformation Using News Literacy Behaviours (NLBs)

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Abstract

The increasing presence of fake news and misinformation in the contemporary digital media landscape is of concern to practitioners, educators, policy makers, and the public alike. Whilst the existence of fake news is not new, audiences are aware that the ‘quality’ of information that poses as being factual has changed significantly and is experienced more often in our digital culture. Using the results of a survey ($n = 435$) this paper examines how young news consumers in the UAE are applying news literacy knowledge and skills to identify and manage incorrect news and information. By regarding this audience as having digital agency, the results of the study demonstrate how they apply aspects of the 5As of media literacy education to fake news and misinformation. The findings contribute to our understanding of how specific news literacy behaviours (NLBs), such as evaluating sources, verifying news content, and sharing responsibly can minimise exposure to and mitigate the impact of fake news.

Key words: fake news, mitigation, news literacy behaviours, active audience, digital agency.

Introduction

Fake news is not a 21st century phenomenon as it is often perceived to be. For centuries news and information has been conveyed with the objective of misleading audiences, creating discord between different groups, and convincing people to take sides with certain individuals, groups, or rulers (Mansky 2018). What we are currently experiencing however is a proliferation of fake messages and narratives in terms of both reach and impact reflected in the increased focus on the phenomenon (Perez-Escolar, Lilleker, and Tapia-Frade 2023). Our digital culture (Gere 2008) of which news is a critical component has enabled almost anyone with appropriate mechanisms to convey their version of the ‘truth’ making the potential for fake news infinite.

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As a result, educators, practitioners, policy makers, and concerned groups and individuals have been conscious of limiting the effects and impact of fake news and misinformation. The first step towards reducing this impact is to identify what constitutes fake, false, or misleading news and information and to recognise the variety of forms that it can be presented in. People can be empowered to detect fake news through the support of government interventions and journalistic practices but also significantly through their own digital agency. This paper focuses on audiences and examines how young people are adapting their news consumption behaviours to protect themselves and manage the potential exposure to and impact of fake news. It shows that they are an active audience able to assess news through exercising agency that is underpinned by news literacy behaviours (NLBs). Whilst being news literate will not eliminate the problem of fake news, it can equip audiences with the skills and knowledge needed to deal with it effectively (Buckingham 2019) by successfully employing certain processes and strategies.

Data for this study was collected in a survey ($n = 435$)¹ of university students and the results present evidence of how young people have developed and implemented NLBs to exert control over the content they access, consume and share. Even without formal news literacy training, this cohort of consumers who are often represented as being disinterested or disengaged from the world of news, apply several tactics that enable them to navigate and manage news content in a high-choice, cluttered media environment (Edgerly 2017).

Theoretical Framework

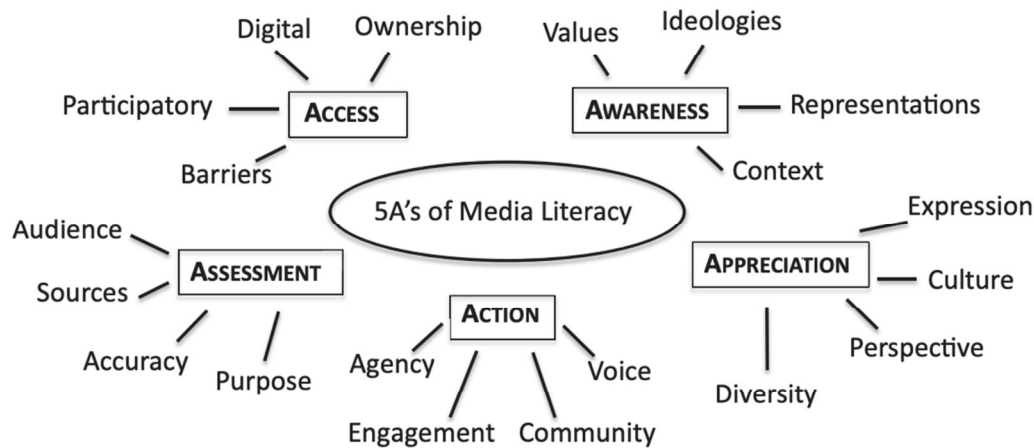
The study is situated in new audience research (Boyd-Barrett 2002) which posits that audiences are active agents (have agency) in the process of making sense of texts produced by the media. How they engage with media messages depends on several factors such as social and cultural context, competencies (literacies), dispositions, and demographic variables. In our digital society, the notion of agency has extended to digital agency – an individual's ability to control and adapt to a digital world (Passey et al 2018). This consists of digital competence, confidence, and accountability and allows a user to make choices, take action, and make a difference to their own life and that of others. Digital agency offers a deeper, richer, and more holistic concept compared to digital literacy as it emphasises meaningful and enhancing engagement rather than simply functioning with technology (Passey et al 2018).

¹ The responses for each question varied slightly so that n differs. In addition, slight discrepancies occur when comparing total figures with those calculated by gender because if participants did not answer the question for gender, n is higher (e.g., Q10 $n = 458$ total and 432 with gender breakdown).



The participants in this research study inhabit a digital culture of which the digital news sphere is a component. “Digital culture today frames our experience of the world around us and provides us with a complex set of digital tools for organising novel relations of information and global-local cultural interaction” (Uzelac 2008, 9). Gere (2008) shows there has been an almost total transformation of the world by digital technology, especially regarding developments in media and communications. Digital media has transformed the production, distribution, and consumption of news in ways that were inconceivable only a decade ago (Bengtsson and Johansson 2021). Definitions of news are changing and what is meaningful or useful news varies for different groups, especially younger audiences. The disrupted, fragmented, and incidental consumption of news via social networks (Vázquez-Herrero, Negreira-Rey, and Sixto-Garcia 2022) is becoming the norm for a greater number of younger news consumers who perceive news as being more than that produced by established news outlets. How then do we examine the consumption of news by young people who operate in a digital culture? Boyd (2014) cautions against perceiving young people as digital natives and assuming that because they have only ever lived in a digital world, “that they inherently have the knowledge or skills to make the most of their online experiences. The rhetoric of ‘digital natives’, far from being useful, is often a distraction to understanding the challenges that youth face in a networked world” (boyd 2014, 176). It may be more realistic to think of them as ‘social natives’ considering much of their interaction with ICTs relates to the social aspects of their lives and the skills transfer to other settings is not as seamless as educators or employers expect.

It is the pervasiveness of digital culture that has exacerbated instances of fake news, so it is within this context that literacies can be utilised to help mitigate the problem. The participatory nature of digital culture (Uzelac 2008) in which consumers are also producers lends itself to studying audiences as active agents more so than when traditional media dominated. Using the notion of literacy, specifically the 5As (Figure 1), the relationship between readers and media messages can be examined. NLBs seeks to understand participants’ access, awareness, assessment, appreciation, and action in relation to news content (Mihailidis 2014).



Source: Mihailidis, 2014

Figure 1. 5As of media literacy.

The World Bank measured that 100% of the UAE population had access to the internet in 2021 and the drive to digitise most public and private services continues. In this sense, *access* is not an issue with few or no barriers in place and 98.9% of the population of around 10 million using social media accounts for 3 hours a day on average (GMI 2022). There is however a degree of control of media content in the UAE but most news consumers can expect to access a diverse variety of information, including regional and international news organisations. The core questions asked for *awareness* relate to the power of media – what values and ideologies it represents as all media messages are created. The social, cultural, and political contexts of national discourses may vary compared to other narratives and understanding this will impact how messages are perceived and processed. Stemming from this is the *assessment* or critical analysis of media messages including credibility, frame, agenda, and audiences. Understanding the purpose and intended outcome of media content is an essential part of news literacy. Critical thinking skills are further applied in *appreciation* of diverse voices and perspectives in media. Appreciating different perspectives means we can question narratives and compare across different cultures because media reflects and is reflected by the societies within which it exists. Finally, *action* looks at having a voice and engaging in the media landscape. How are consumers using their agency to actively participate in communities whilst all the time being accountable for their actions and behaviour in digital spaces? News literacy has direct applications for taking action – what you do can be beneficial or detrimental, whether it is sharing, creating, or deleting.

Literature Review

Fake news

The concept and occurrence of fake news is certainly not a new phenomenon in society but our current digital information age has enabled



greater opportunities for it to exist. Ashley (2020) presents historical examples of fake news and misinformation which he argues date back at least 500 years ago. Propaganda by individuals, organisations, or governments has been experienced for centuries before the advent of ‘mass media’ as we know it today and clearly “humans didn’t need the internet for any of this” (Ashley 2020, 7). Notwithstanding these early instances, legacy media in both Western and non-Western contexts has rarely been associated with manufacturing false or fake news as it strived to uphold the principles of truth and objectivity. More recent events, in particular the 2016 US elections, have made fake news an important global phenomenon accelerated by the mechanisms of the digital ecosystem (Chan, Lee, and Chen 2021). In addition to intentional manipulation of news content (disinformation), misinformation (false but not intended to mislead), associated especially with the COVID pandemic, is being spread and shared much more easily in this ecosystem (Jones-Jang, Mortensen, and Liu 2021). Both the deliberate and unintentional creation and circulation of incorrect information is an increasing problem in society and recent investigations have shown that hacking, sabotage, and automated disinformation teams are carrying out ‘black ops’ and meddling with elections around the world (Kirchgaessner et al 2023). Earlier models of journalism practices in which traditional professional journalists and organisations were the purveyors of news and credible content have given way to “a landscape of nearly unfettered participation and accessibility” (Vraga et al 2021, 1) where almost anyone with access to a digital device can produce and distribute content.

What has changed is the increasing frequency of fake news and misinformation resulting in diminished trust so that people no longer feel confident in the information they receive from the news (Bonnet and Rosenbaum 2020). In addition to these moments occurring with greater frequency, in each instance a new level of sophistication may be detected ranging from doctored content, counterfeit, conspiracy theories, fabricated content, and pseudoscience to deep fakes (eavi.eu, n/d). Trust in internet content has certainly fallen since Melki’s (2010) three nation study of Lebanon, Jordan, and the UAE which found ‘alarming levels of trust’, the latter registering the highest, with 88% saying the information acquired from the internet was ‘somewhat’ or ‘very trustworthy’.

The popularisation of the term is more recent and various categories of fake news have been defined by researchers (Tandoc, Lim, and Ling 2018; Cooke 2018). The ‘quality’ has developed in such a way that it is becoming increasingly difficult to detect the real from the fake as new software and applications are used to create and disseminate information. The harmful effects of fake news have been documented and extreme versions, such as deep porn, are an increasing menace in society. As Buckingham (2019, 215) argues “the prevalence of fake news is partly a consequence of the changing



business models of media and technology companies in the age of ‘digital capitalism’” whereby information can circulate from person to person bypassing regulatory structures and processes that formally control media output. He expounds how fake news tends to have two main motives: political influence and economic gain – though the two may overlap – and that in our post-truth society public trust has declined and lies are being told with impunity (Buckingham 2019). Similarly, Tandoc, Lim, and Ling (2018) describe these two motives as ideological and financial.

Pandemic and infodemic

Crisis communication has been researched in several other situations (e.g: H1N1, swine flu, Ebola), but the global impact of COVID resulted in extensive news coverage never experienced before on this scale. Coverage was focused and extensive in the beginning stages, which was to be expected, but it was not long before unverified and inaccurate data and narratives started to circulate around the world. Misinformation and disinformation were created or shared mostly through digital (social) media platforms ranging from humorous ideas about the virus to incorrect treatments which had fatal consequences (Forrest 2020). People experienced two new but interrelated issues: the disease itself and an infodemic defined by the World Health Organization (WHO) as “too much information including false or misleading information in digital and physical environments during a disease outbreak... [which] causes confusion and risk-taking behaviours that can harm health”. The digital media infrastructure present in almost every corner of the world enabled people with the right tools to create and share their own information and ‘news’. Governments and global institutions such as WHO were acutely aware of the problem of misinformation and disinformation about the disease and its impact, and several studies have shown that people were exposed to fake news and misinformation during this period (Simon, Howard, and Nielsen 2020). Subsequently audiences became aware of the influence of *sources* on statistics, narratives, and bias in news media and a distinction was made between traditional trusted sources and newer media platforms. Social media, as well as messaging applications, were the obvious spheres within which deliberate or accidental false information became prevalent (Austin, Liu, and Jin 2021).

Melki et al (2021) studied how trust in news (TV, social media, and interpersonal) from different sources (healthcare experts, government, and clerics) contributed to increased or decreased belief in COVID myths and false information. Their findings showed that media literacy training played a role in mitigating the infodemic during a time when fast spreading, false, inaccurate, and misleading information was widespread. Similarly, Vraga, Tully, and Bode (2020) explain how the infodemic was a novel context in which to consider the role of news and science or health literacy in



mitigating misinformation. By empowering social media users with the tools to identify, consume, and share high-quality information about the pandemic, NLBs can protect users themselves and others from misinformation.

News literacy

Many of the measures identified to reduce the occurrence, impact, and spread of fake news place the responsibility on audiences rather than formal content creators, including social media companies. In addition, most solutions emphasise training and education, not least because news producers cannot control manipulation of their content, nor can they police content created by other sources. Governments and corporations have a duty to manage fake news but users must also be part of the solution to mitigating fake news and misinformation. Buckingham (2019) states that in a free-market where governments are unlikely or unwilling to regulate media and technology companies, “media literacy is often seen as the acceptable answer: it’s the media fault – but let the teachers deal with it!” (217). The reality is that whilst teachers have taken this responsibility very seriously, consumers must also take measures to protect themselves.

Media literacy, and more recently digital literacy, has been taught for several decades in different parts of the world. Media literacy encompasses a wide but interrelated spectrum of skills of which news literacy is key to understanding how the information we receive from news media can be processed. Ashley (2020) echoes others when he makes the case for news literacy to be a distinct and focused aspect of a broader approach to media literacy because of the relationship between news and informed citizens. News literacy is the critical evaluation of not only content but of the contexts within which it is produced and how it is shared. We can think of news literacy as the set of knowledge, skills, and attitudes that a person brings to their personal consumption of information and to their understanding of the structure of the news media landscape (Ashley 2020). Furthermore, Ashley et al (2022) state that “while the lines between the various literacies remain blurry, we think *news literacy* best applies to research focused on how individuals experience media messages that have been created and distributed by content producers aiming to influence public understanding of current events” (6). Vraga et al (2021, 5) define news literacy “as knowledge of the personal and social processes by which news is produced, distributed, and consumed, and skills that allow users some *control* over these processes” (emphasis added). Working with this definition, they specify *behaviours* that result from the application of news literacy which they consider NLBs, such as “consuming news, evaluating it fairly, identifying misinformation, and verifying content”(Vraga et al. 2021, 2).



Rather than *measure* an individual's capability to determine, for example, bias or inaccuracies, here it is posited that young people are applying strategies that can be classified as NLBs as part of their routine news consumption. As Swart (2021) describes in her in-depth interviews with 36 young people in the Netherlands, the practice of news literacy changes depending on context and time and certain strategies and tactics can be expressions of NLBs at which point it becomes meaningful for managing news. Following Swart's (2021) audience-centric approach to news literacy, the data from this study also highlights how "learning-by-doing" (14) has been essential in understanding the recent engagement younger people have had with news. By using aspects of Mihailidis' (2014) conceptual framework of the 5As of media literacy, this study explains how undergraduates are applying NLBs in their news consumption patterns and in doing so are identifying and managing fake news and dubious information.

Hypotheses

By examining the relationship between fake news and news literacy, this study aims to understand how news literacy behaviours (NLBs) are being put into practice and in doing so tests the following hypotheses:

H1: The 5As of media literacy are evident in news literacy behaviours (NLBs) amongst young news consumers.

H2: News literacy behaviours (NLBs) help mitigate fake news in the digital news media environment.

Methodology

Survey Design

Data was collected using a Qualtrics survey between April and June 2022 in both face to face and online classes at the United Arab Emirates University (UAEU) in Al Ain, UAE. Faculty were approached to volunteer their classes to participate and students were given a brief introduction to the topic before they completed the questionnaire. A total of 555 questionnaires were initiated but not all were completed satisfactorily so that response rates for most questions varied between 435 and 470. The survey completion rate was therefore approximately 80% which is higher than most online surveys (Wu, Zhao, and Fils-Aime 2022).

The survey consisted of a 20 multi-item questionnaire (Dornyei and Csizer 2012) with questions categorised under the following sections: understanding, consuming, and evaluating news; verification practices; sharing, communicating, and creating habits; and news literacy (news production processes, skills, and knowledge; self-perceptions). Several questions dealt specifically with fake news and misinformation such as trust, evaluation, and actions. Survey questions were developed from previous studies (Maksl, Ashley, and Craft 2015; Chan, Lee, and Chen 2021; Ofcom



2022) and modified to suit the context of the institution. Most items were closed-ended questions or consisted of statements and employed a 5-point Likert type rating scale (strongly agree to strongly disagree; always to never) to reduce confusion in open-ended questions and increase validity by eliciting accurate answers to measure respondents' attitudes, behaviour, and practices (Wimmer and Dominick 2011). The Likert scale was utilised to minimise the time needed to complete the questionnaire and to ensure reliability of responses. Some questions required a dichotomous response (yes/no), others asked respondents to select all that applied (e.g. device usage), and several were multiple choice answers (e.g. relating to daily routines). Most answers were completed in the Qualtrics matrix layout for ease of navigation on mobile devices (laptops and smartphones). Further details or explanations were requested for some questions, especially when respondents were asked to name specific news organisations or channels. The final section of the questionnaire obtained demographic data. The researcher was present in both face-to-face and online settings for help with technical issues and to clarify questions and terminology. The survey results were analysed in relation to the themes listed above using features in Qualtrics (such as Results, Crosstabs iQ, Text iQ, and data visualisation).

Participants

Survey participants were selected through purposive sampling (van den Bulck 2002) as university undergraduate students were the target population. UAEU is a public university with approximately 14,000 full-time and part-time students (mainly undergraduates) studying in 9 colleges. Over 80% of the student body is female and the majority are Emirati (82%). For the survey respondents that answered the question about gender, 325 were female and 110 were male (total 435). Similarly, for age almost 19% (82) were under 20, 79% (345) were between 21-25, about 1% (6) were 25-30, and 0.6% (3) were over 30. Students were unevenly distributed between colleges with the majority from Humanities and Social Sciences (67%). Education, Business, Science, IT, and Engineering had between 5 and 7% each. Within the Humanities, many were majoring in Media/Mass Communication because this was the department of the principal investigator. Most of the respondents specifying their nationality were Emirati (almost 93%, 337 out of 363). Participants also came from GCC countries (Oman, Saudi Arabia and Qatar), other Arab countries (Yemen, Morocco, Jordan, Sudan, Somalia), as well as Afghanistan, Kazakhstan, Bulgaria, and Gambia but did not number more than three for any of these countries. These demographics represent the undergraduate student population of the university in terms of age, gender, and nationality. Respondents completed the survey online without disclosure of their identity to maintain anonymity. The questionnaire was approved by the



University's Social Sciences Ethics Committee (ERS-2022-8508) and included informed consent and the right to withdraw from research.

Findings

News consumption

The survey asked questions about news consumption – amount, frequency, and motives. The majority (63%) of participants consumed less than 1 hour of news a day: 28% between 1-3 hours and 8% more than 3 hours. As such they cannot be described as heavy news consumers but within these results males were slightly heavier news users than females. In response to how *often* news was consumed, the results show that most respondents (39%) were consuming news throughout the day rather than at any given point and for others it was 2-3 times a day (24%), once a day (23%), or varied (14%). When asked about *why* they followed news, a large proportion (almost 70%) of respondents said they did so because they like to, almost 50% said they do so because they are supposed to, and over 85% said they felt it was important to be informed about news. Furthermore, nearly 54% stated that it was their habit or part of their routine to follow news showing that news consumption forms a considerable part of young people's daily routines (multiple answers were possible). Several studies have shown that smartphone usage amongst younger people (aged 18-24) is higher than the rest of the population and includes using social media, accessing the internet, and consuming news (Newman et al 2022; Dennis et al 2019). In line with these trends, smartphones were also popular for consuming news amongst the survey participants in this study.

One common stereotype of young adults is that they are not interested in or engaged with news and do not see it as valuable to their lives (Galan et al 2021). The reasoning for this may seem plausible, including the fact that young people are not concerned with politics, feel news is often negative and depressing, and their priorities are focused on their own lives and careers (Madden, Lenhart, and Fontaine 2017). In fact, studies have shown that even older people express a level of news fatigue and can adopt avoidance behaviours (Newman et al 2022) as well as experience anxiety caused by information overload (Bawden and Robinson 2009). The advent of the global pandemic in early 2020 has radically changed news consumption for obvious reasons and as such, school children and university students who may not have been high level news readers began to access, share, and even create news. These trends can be seen from the survey results with almost two-thirds (65.9%) of respondents saying they consume more news since COVID began. In addition, nearly 75% stated that they are well informed about the news with only 5% disagreeing with the statement.

This reflects an important development amongst younger people who may



not previously have been interested in news or had relatively low-level news consumption but who have become more engaged with it, even though it may be incidental and trust levels are still low (Madden, Lenhart, and Fontaine 2017). Being compelled to engage with information and news content during the pandemic, their news habits have altered and they have become more discerning of sources, platforms, and content (Ahmed 2020). In addition to this, the amount of news and information available continues to increase and the definition of news itself is changing (Galan et al 2021). Younger readers may be interested in ‘news’ that comes from different sources and is about topics that are of relevance to them. An increased engagement with news has brought with it an enhanced understanding of how news is constructed as well as the wider political economy of news structures and organisations. In a country where news is more tightly regulated and generally citizens do not question the veracity of information and news, a global pandemic has opened up information flows from around the world.

Channels and platforms

A result that was anticipated is that most respondents use social media to access news (always use: 67.3%). TV still forms part of the news diet for many people (always use: 17.2%, regularly: 21.4%, never: 12.1%) and radio and print newspapers are the least popular (always use: 5.1% and 6.9% respectively and never use: 38.2% and 36.3% respectively). News and messaging apps (mainly WhatsApp) are also popular with over 40% and almost 60% respectively saying they use them always or regularly (with 22% and 10% saying they never use them). News websites were always used by 18% and regularly used by 28% of respondents making them a similarly popular channel. Amongst the ‘other’ category that people named ‘family and friends’ was the most common. When asked which social media platforms were the most popular/widely used for news consumption, Instagram was the most cited as ‘always use’ (Table 1).

Table 1: Most popular platforms for news use.

Platform	Cited
Instagram	260
Snapchat	221
Twitter	219
WhatsApp	149
TikTok	147

YouTube and Google+ were also cited but figures were much lower. Whilst Facebook may be popular in other parts of the world, including other countries in Middle East and North Africa (MENA) (Everette et al 2019), most respondents in this survey were not using it for news (325, 71.7% said they never used it).



WhatsApp was almost equal for both genders but it is important to remember that respondents may be defining ‘news’ quite differently (Swart 2021) on a messaging platform which shares information by family and friends. TikTok is cited less than other platforms but considering it is a relative newcomer, it has managed to gain significant ground amongst the most popular social media platforms (Ofcom 2022). Its growing popularity is reflected in global trends as the Reuters report (Newman et al 2022) states that “TikTok has become the fastest growing network in this year’s survey, reaching 40% of 18-24s, with 15% using the platform for news” (5). They state that usage is much higher in some parts of the world and this can be seen from the data collected here. In fact, for the cohort in this study, and especially amongst females, the figure is even higher than the Reuters report average for news consumption (35.1% for females compared to 22.9% for males: always use).

Relating to this, participants also spoke about news outlets or platforms that they *avoid*. The most cited were Al Jazeera¹ (11), Fox News (6), WhatsApp (5), and CNN (4). The reasons given for avoidance were all similar – untrustworthy, unreliable, biased, inaccurate, exaggerated, or fake news, further reinforcing people’s ability to evaluate news sources and content and confirming both industry and academic findings that *news avoidance* is an increasing phenomenon (Newman et al 2022; Heinrichs 2023). Some respondents did not name any sources but stated in general that they avoided those that were unverified and two generic answers were ‘avoiding social media because it is not always right’ and ‘Western news because it is always biased’. Just as participants spoke about sources they avoid, they named sources that were more/most trusted which is an important aspect of understanding news consumption choices (Figure 2). Some others were named just once (ARN, WHO, *Khaleej Times*, *Al Alhadath*, and *Emarat Al Youm*). Government and official sources were the most frequently named, followed by established media organisations, demonstrating respondents were consciously evaluating where their news was coming from and judging the credibility and reliability of sources.

¹ Al Jazeera was cited because of political relations between the UAE and Qatar some years ago (Wintour 2017).

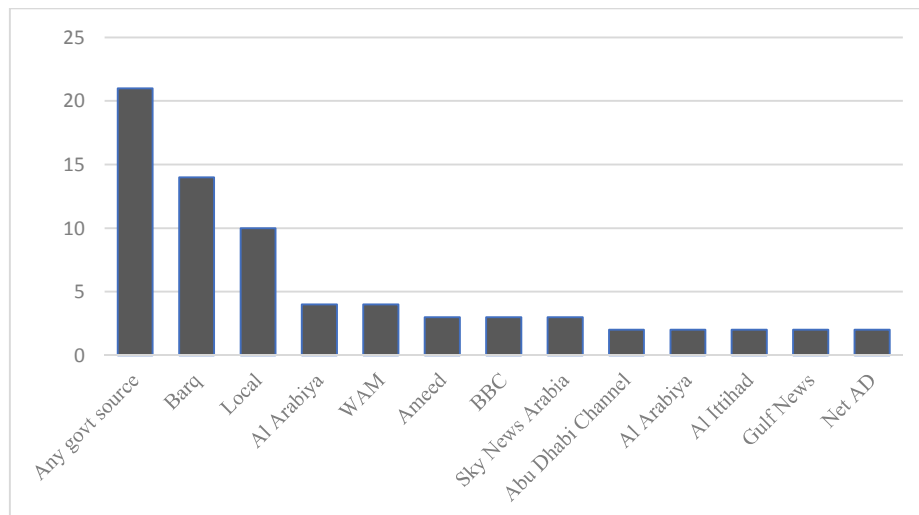


Figure 2: Most trusted sources.

Evaluating news

Survey participants were asked questions about opinions and practices for *evaluating* and *verifying* news. Whilst the concepts intersect, questions were divided into two broad categories: evaluation - those about news content or quality (truth, trust, bias) and verification - those examining people’s habits and practices (fact-checking, comparing, talking). Table 2 ($n = 446$) illustrates responses relating to truth, facts, trust, and bias.

Table 2: Responses about truth, facts, trust and bias.

Do you agree with the following? / %	Strongly agree	Agree	Neither	Disagree	Strongly disagree
I trust traditional media more than social media	13	34.4	39.1	11.4	1.8
News is biased	8.8	33.5	48.7	7	1.8
News does not reflect the facts	8.3	25.5	44.6	19.5	2
News is always true	8	17	30.8	30.6	13.4
News can be trusted	5.8	29.3	45.7	13.9	5.1

Evaluating news is a crucial aspect of news literacy and relates directly to fake news because readers and viewers are applying critical thinking to content they are exposed to. Far from being accepted as completely truthful and trustworthy, participants questioned news with only 25% of responses strongly agreeing or agreeing that it is ‘always true’ reflecting low expectations about news being true. When considering differences for gender, the figure was 55% for males and 40.8% for females showing that males were more sceptical about news content being true. Similarly trust in news was not particularly high and when asked about trust in mainstream or traditional media compared to social media, almost half of respondents agreed that they trusted the former more. The level of trust in traditional media was considerably higher for females (51.2%) compared to males (35.8%). This is reaffirmed when examining which news sources



respondents listed as being more trusted than others (several TV channels and newspapers were named).

In combination with the numbers saying news is biased (more than 40% strongly agreed and agreed), this portrays low levels of confidence in news content. Overall, males showed lower levels of trust (were more sceptical), thought news was biased, had a more global outlook, and disagreed that news was the same everywhere (46.8% compared to 37.7% for females). This is possibly a reflection of their consumption patterns, that is, more consumption of international news and the diversity of sources.

Verifying news

Very closely related to evaluating news content, is the practice of verification and fact checking. One way of verifying news was comparing the same story from different sources. Of the 435 who responded to this question, 40.9% said yes, they read the same story from different sources with 46.4% of males and 39.1% of females saying they did. Table 3 shows selected reasons cited for this practice.

Table 3: Reasons for reading same story from another source.

Reason	Cited
Different perspective	28
To be sure	27
Truth/accuracy	25
Understand better	15
Confirm/check	14
Compare	10
Biassed	4
Fake news/misinformation	3

This demonstrates that readers who are unsure about the truth or accuracy of news stories will find other versions from different sources to check and confirm information and details. Clearly truth, accuracy, and being sure were important factors in people’s decision-making processes but so was the need to understand content better and from different perspectives. For those stories that were deemed significant, people invested time and effort into finding alternative perspectives and supplemented their knowledge. Luhtala and Whiting (2018) emphasise that investing time and effort into separating truth from fiction, information from persuasion, and reality from deception are key news literacy practices needed to evaluate and verify content to combat fake news. Table 4 ($n = 435$) shows that rather than being passive and uncritical news consumers, young people, females more so than males, are checking, talking about, reading, and confirming the truth and accuracy of news. The percentages for females for each practice are higher than males with almost 50% of females saying yes, they check for any misinformation, and two thirds say they are aware of false or fake news. The proportion



saying ‘no’ for all practices is between 10-20% showing there are high levels of verification and fact-checking taking place amongst the participants.

Table 4: Selected verification *practices*.

Practice/%	Yes	Sometimes	No
Check if it may be false/fake	67.4	21.8	10.7
Check facts from another source	62.3	27.4	10.1
Compare with government version	62	20.1	17.8
Talk to others to confirm	58	23.6	18.3

The lack of trust identified above manifests itself in tangible NLBs whereby consumers are fact checking news stories in social media in several ways. These NLBs are framed within the context of fake news in our news environments and subjects such as politics (elections), climate change, and pandemics may be more prone to fake news. Subsequently people are wary of the ideological narratives as well as data presented in these stories making them more attentive to the possibility of fake news. An increasing number of news subjects are now regarded with varying levels of scepticism and critical inquiry. In Edgerly’s (2017) study, this information scepticism can be divided into high and low news media literacy strategies. Those with high levels seek out and verify news media accounts whilst those with low literacy sought out official government sources.

Fake news

A direct question about false or fake news was asked in the survey to which 67% of respondents stated that they had checked if news may be false or fake, 22% said they did so sometimes, and only about 10% said they did not (Table 4). The awareness of fake news is therefore apparent from these numbers. To further support the idea that participants were mindful of the possible existence of fake news and the importance of making sure a story was true, a few fact-checking behaviours were identified. Almost 48% said ‘yes’ they looked for misinformation and when adding the number who did so ‘sometimes’, the total is over 80%. This is a significant proportion and confirms that NLBs are being applied in people’s news consumption with a clear focus on identifying fake news. A variety of techniques are employed to determine the truth of news reports, including verifying from trusted sources and talking to family and friends. In the context of this study, government sources were given complete credence and comparing with official sources or the government version of a story was an important method of identifying or avoiding fake news (80% stated they did this).

Several questions in the survey asked participants about social media as a news source for which levels were high, confirming numerous other studies (Galan et al 2021; Madden, Lenhart, and Fontaine 2017; Ofcom 2022; Newman et al 2021). The ease with which news can be accessed via social media platforms and applications, combined with the smartphone being the



primary first access device used by most respondents, makes it an obvious choice. However, as the percentages show in Table 4, almost 90% would check the facts from another media source. This demonstrates the NLBs are implemented to check the veracity of news accessed via social media (other than government accounts). The results show that participants are undertaking NLBs because after determining the reliability of a source or perhaps being cautious for some other reason, they proceed to fact-check using different techniques and thereby confirm or refute the content. This was related in earlier research using media diaries in which participants had 'ordered' news sources from most (government) to least (WhatsApp) 'reliable, credible, and valid', and practised inter-platform reliability (Ahmed 2020). Similarly, the data from this study shows that if news is received through reliable and trusted sources, it is engaged with whereas if it has come through WhatsApp or personal social media accounts, it may not be believed or shared and may even be deleted. In this way filtering and gatekeeping behaviours were evident with almost 65% of respondents warning others about news content and almost three-quarters (73%) deleting news content that they did not trust, with no significant differences for gender.

Such actions are clear indicators of how news literacy knowledge and skills are being applied to daily news diets for the individual consumer themselves as well as for those they would subsequently connect with. In the UAE context, the government implemented a new federal law in January 2022 (Federal Decree Law No. 34 of 2021 on Combating Rumours and Cybercrimes, Article 52¹) criminalising spreading rumours and fake news, punishable by imprisonment and a fine of at least 100,000 AED, though the problem was identified as early as 2020. So, whilst sharing news 'via social media' always, frequently and sometimes was over 70% and 'via messaging apps' was 65%, young people were careful about *what* they shared, proving that they distinguish between trustworthy news and potentially fake news and consider their actions carefully.

Being able to judge the quality of news forms part of the knowledge and skills set needed to be news literate. It is by making the judgement between what is quality journalism and what is not that people can process information and react accordingly. Responses in Table 5 show that almost 60% (strongly agree 14.3%, agree 45.4%) said that they can judge the quality of news and 57% (strongly agree 13.2%, agree 44.1%) said that they had the skills and knowledge to detect bias in news. Less than 10% said they could not judge the quality of news and again about 10% said they could not detect bias. So, whilst self-efficacy is not always an accurate measure for a person's actual skills or ability, it does provide an indication of whether

¹ <https://u.ae/en/information-and-services/justice-safety-and-the-law/cyber-safety-and-digital-security/law-on-combatting-rumours-and-cybercrimes>



people *perceive* they are able to make judgements about news quality (Maksl, Ashley, and Craft 2015). These figures therefore demonstrate a confidence in respondents’ ability to filter good quality news from amongst the vast range and amount of news content that is available to consumers.

Table 5: Perceived self-efficacy - judging quality, bias and control.

Do you agree with the following statements? / %	Strongly agree	Agree	Neither	Disagree	Strongly disagree
I am in control of the information I get from news	19.5	40.5	29.9	6.4	2.1
I can judge the quality of news	14	44.6	30.6	7.4	1.4
I have the skills and knowledge to detect bias in news	12.9	42.8	31	9.7	0.9

As noted above, being in control of the information obtained from news plays an important role in determining how news literate a person is. In response to this statement, 60% felt they were in control, further reinforcing confidence in their ability to manage the news content they consumed.

Sharing habits

When looking at habits of the survey respondents, sharing news via social media was the most popular with 43% saying they do so always (22.8%) or frequently (20.5%). The figure for sharing via a messaging app was 38% (always 15.1% and frequently 23.6%) and for email was less than 20% (always 7.6% and frequently 12%) with 50% saying they never shared via email. Sharing or sending news related pictures and videos on social media was evenly spread. When asked about reasons for sharing news, Figure 3 shows which were cited most. Figures for rating, commenting, voting, posting, uploading, and writing a blog were considerably lower (between 20-30%) demonstrating that higher order activities were less common amongst the participants.

Table 6: Most cited reasons for sharing news.

Reason	Cited
Inform/make aware	45
Benefit/help others	10
Important	8
Interest	8
Discuss	6
Truth	4

Discussion

Dealing with fake news in a post-truth digital culture is a challenge of our current times. Of all the information and media available to consumers, it is journalism that upholds principles of truth, quality, and credibility. These fundamentals are in danger of being eroded as digital platforms offer alternative ways of producing, distributing and consuming news. News serves the critical function of keeping communities informed and for this



reason news literacy skills are necessary to successfully regulate, navigate, and mitigate factually incorrect information. Any celebration of access to vast amounts of information in today's world must be qualified by the potential problems of overload, fatigue, avoidance, fake news, and a variety of mis-, dis-, and mal-information. The need to identify and debunk incidences of fake news means that news consumers are developing news literacy in organic ways as well as through formal literacy education and training offered in educational institutes.

Using data from a survey that examined attitudes towards news consumption patterns, and evaluation and verification strategies, this study has demonstrated that an effective intervention to the problem of fake news is news literacy knowledge, skills, and behaviour. To return to each of the hypotheses:

H1: The 5As of media literacy are evident in news literacy behaviours (NLBs) amongst young news consumers.

Whilst all five aspects of Mihailidis' (2014) framework relate to news literacy and NLBs, awareness, assessment, and action will be discussed here as these are the most relevant to fake news. Verification practices are clear in awareness and these are being undertaken more effectively using digital tools, for example, cross platform verification. Respondents are increasingly aware of global issues and debates but they understand that context matters because global issues have local connotations (for example COVID lockdowns or international politics). Awareness manifests itself in NLBs through an understanding of context and differing media representations due to media regulations, structures, and processes around the world. This awareness helped participants think through conflicting news narratives by preferring certain sources over others and asking questions about the values and ideologies of different news organisations.

The next step in the process – assessment - relates to questions about bias, credibility, and fact-checking. A story from the BBC or Al Jazeera will be checked by reading local news for which there are higher levels of trust. Assessment is the logical extension of awareness as it highlights sources, authorship, ownership, power, and control, all of which are linked to news (media) literacy. Depending on the source and purpose of messages, participants make judgements about quality, trust, and the need to verify content. This is especially important for news coming from non-official (non-government) platforms and producers. Here again, the digital framework of news influenced how participants responded whereby one digital tool was used to verify the accuracy of another and evaluating accuracy determined whether stories were fake or not.

The final aspect of the media literacy framework relates to action and this is where engagement, control, and agency amongst students is apparent. Did



survey respondents believe everything they read? Clearly they did not because they were cognizant of the existence of fake or inaccurate news but mitigated this through their considered and responsible actions, that is, only sharing credible news, warning others about unsubstantiated content, and deleting news which was incorrect. The reach and rapid speed at which fake news spreads in digital spaces means taking action to prevent or minimise this is of paramount importance. This shows a commitment and responsibility towards the online communities with which they share space. Each of the As in this model has a particular focus but in practice they are not completely distinct but overlap. Neither is the process linear where one A is completed and then the user moves on to another. They are often implemented at the same time and support each other in achieving intended outcomes. Furthermore, news content itself is no longer as straightforward as it was previously. Buying a print edition of a national newspaper is very different from accessing multiple formats from multiple sources offering multiple versions in the digital news-scape. In theory, these readers can create their own versions of news (textual and visual) but the data showed that content creation was very limited and respondents were more likely to consume rather than produce. These results show how the 5As of media literacy, to varying degrees, are evident in the NLBs of the survey participants so H1 is supported.

H2: News literacy behaviours (NLBs) help mitigate fake news.

Choice of channels and sources, evaluation of sources, verification processes, sharing habits, and awareness of fake news, all of which require news literacy knowledge and skills, are apparent in survey responses. NLBs are an antidote to the problem of fake news and misinformation both at source (assessment of trustworthy news providers) and in subsequent action (making decisions about how to process content). “The modern media age offers unprecedented choice. As a result, it is important for individuals to know how to navigate this world – to have a way of carving up the media environment, drawing distinctions between news organizations, and evaluating the quality of sources providing content. Armed with this type of knowledge, they have the power to use a wide array of information and news media sources in the high-choice media environment” (Edgerly 2017, 375). Clearly the participants in this study are undertaking these actions and then further practising a variety of NLBs to ensure what they access is trusted, verifiable news content.

In a study by Ashley et al (2022) individuals with higher levels of news literacy were more likely to reject COVID misinformation and conspiratorial thinking suggesting clearly that improved news literacy could be part of the strategy to equip individuals to reject (health) misinformation. Jones-Jang, Mortensen, and Liu (2021) ask the question ‘does media literacy help identification of fake news?’ and they suggest that of the four – media,



information, news, and digital – it is information literacy that significantly increases the likelihood. Somewhat surprisingly they found that news literacy did not have a significant impact on ability to identify fake news but this may be due to the limitations they note in the study (only 6 statements were used to measure news literacy and between 4 and 10 for the other 3). This study has asked a similar question, ‘do news literacy (NLBs) help mitigate fake news?’ and the results support the fact that they do. Young adults are implementing NLBs at all stages of the news consumption process, including a critical understanding of how news is produced, and are thereby identifying and managing fake news and other inaccurate information that they encounter. H2 is supported.

Conclusion

The findings from this study demonstrate clearly that NLBs help mitigate fake news. As active audience members, the survey respondents show that media and news literacy knowledge and skills help to identify potential occurrences of fake news and misinformation, evaluate and verify content, and take appropriate action to limit the impact of that information. Whilst not uncritically describing young people as digital experts, the data has shown that participants are confident of their ability to navigate digital news environments and exhibit agency in how they filter content for quality, trustworthiness, credibility, and truth. Ultimately respondents have been empowered to successfully practise a variety of NLBs via the tools available to them in contemporary digital spaces to deal with the increasing problem of fake news and misinformation. If this is the case for young people who have not had any formal instruction in contemporary literacies (media, news, digital), then the ability of those who undertake systematic training will be greatly enhanced paving the way for better informed, aware, and engaged news consumers.

Limitations and Future Research

The data collected in the survey provided a snapshot of how university undergraduates are using news literacy knowledge and skills to work with the news content they are consuming. This cohort is not representative of the population, being in higher education and aged mainly between 18-25. If the demographic variables were broadened to include other groups, a useful comparison could have been made between different sections of the population. Further research could be undertaken to compare similar groups regionally and internationally, especially in countries where media and news literacy education is more established. Other studies have used a control group which has had exposure to or training in media or news literacy courses and compared this with a group that has not. This would have improved the significance of the results in this study. Many of the participants for this study were from the Media/Mass Communication department which certainly influenced the results positively.



The context for this study must be borne in mind with respect to media laws and regulations, social and political expectations, and indeed attitudes towards research itself. The study would also have benefited from ascertaining actual examples of fake news or misinformation that participants had experienced adding another layer of understanding to the phenomenon.

References

- Ahmed, Sameera Tahira. 2020. "Managing News Overload (MNO): The COVID-19 Infodemic" *Information* 11, no. 8: 375. <https://doi.org/10.3390/info11080375>
- Ashley, Seth. 2020. *News Literacy and Democracy*. New York: Routledge.
- Ashley, Seth, Stephanie Craft, Adam Maksl, Melissa Tully, and Emily K Vraga. 2022. "Can news literacy help reduce belief in COVID misinformation?". *Mass Communication and Society*, DOI: 10.1080/15205436.2022.2137040
- Austin, Lucinda, Brooke Fisher Liu, and Yan Jin. 2011. "How Audiences Seek Out Crisis Information: Exploring the Social-Mediated Crisis Communication Model". *Journal of Applied Communication Research*, 40, no. 2: 188-207. <https://doi.org/10.1080/00909882.2012.654498>
- Bawden, David and Lyn Robinson. 2009. "The dark side of information: overload, anxiety and other paradoxes and pathologies". *Journal of Information Science*, 35, no. 2: 180–191. <https://doi.org/10.1177/0165551508095781>
- Bengtsson, Stina and Sofia Johansson. 2021. "A phenomenology of news: Understanding news in digital culture". *Journalism*, 22, no. 11: 2873–2889. <https://doi.org/10.1177/1464884919901194>
- Bonnet, Jennifer L. and Judith E. Rosenbaum. 2020. "‘Fake news,’ misinformation, and political bias: Teaching news literacy in the 21st century". *Communication Teacher*, 34, no. 2: 103-108.
- boyd, danah. 2014. *It's Complicated: The Social Lives of Networked Teens*. Yale: University Press.
- Boyd-Barrett, Oliver. 2002. "Theory in Media Research". In *The Media Book*, edited by Chris Newbold, Oliver Boyd-Barrett and Hilde van den Bulck, 1-40. London: Arnold.
- Buckingham, David. 2019. "Teaching media in a 'post-truth' age: fake news, media bias and the challenge for media/digital literacy education". *Culture and Education*, 31, no. 2: 213-231.
- Chan, Michael, Francis L., F. Lee, and Hsuan-Ting Chen. 2021. "Examining the Roles of Multi-Platform Social Media News Use, Engagement, and Connections with News Organizations and Journalists on News Literacy: A Comparison of Seven Democracies". *Digital Journalism*, 9, no 5: 571-588.
- Cooke, Nicole A. 2018. *Fake News and Alternative Facts: Information Literacy in a Post-Truth Era*. American Library Association: Chicago.
- Dennis, Everette E., Justin D. Martin, and Fouad Hassan. 2019. "Media Use in the Middle East, 2019: A Seven-Nation Survey." Northwestern University in Qatar, 2019. www.mideastmedia.org/survey/2019



- Dornyei, Zoltan and Kata Csizer. 2012. "How to design and analyse surveys in second language acquisition research". In *Research Methods in Second Language Acquisition: A Practical Guide*, edited by Alison Mackey and Susan M Gass, 74-94. New Jersey: Blackwell Publishing.
- Eavi.org. n/d. 'Beyond fake news': 10 types of misleading news. <https://eavi.eu/beyond-fake-news-10-types-misleading-info/>
- Edgerly, Stephanie. 2017. "Seeking out and avoiding the news media: young adults' proposed strategies for obtaining current events information". *Mass Community and Society*. 20, no. 3, 358-377.
- Forrest, A. 2020. "Coronavirus: 700 dead in Iran after drinking toxic methanol alcohol to 'cure Covid-19'". April 28, 2020.
<https://www.independent.co.uk/news/world/middle-east/coronavirus-iran-deaths-toxic-methanol-alcohol-fake-news-rumours-a9487801.html>
- Galan, Lucas, Jordan Osserman, Tim Parker, and Matt Taylor. 2021. "How Young People Consume News and The Implications for Mainstream Media". Flamingo Report, Oxford: University Press.
<https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-02/FlamingoXREUTERS-Report-Full-KG-V28.pdf>
- Gere, Charlie. 2008. *Digital Culture*. London: Reaktion Books.
- Global Media Insight (GMI). 2022. *UAE Social Media Statistics 2022*.
<https://www.globalmediainsight.com/blog/uae-social-media-statistics/>
- Heinrichs, Ellen. 2023. "How to stay relevant in times of crisis", conference presentation, WAN-IFRA Media Leaders Summit Middle East, Dubai, 3 May 2023.
- Jones-Jang, S. Mo, Tara Mortensen, and Jingjing Liu. 2021. "Does Media Literacy Help Identification of Fake News? Information Literacy Helps, but Other Literacies Don't". *American Behavioral Scientist*, 65, no. 2: 371–388.
<https://doi.org/10.1177/0002764219869406>
- Kirchgaessner, Stephanie, Manisha Ganguly, David Pegg, Carole Cadwalladr, and Jason Burke. "Revealed: the hacking and disinformation team meddling in elections". *The Guardian*, February 15, 2023.
<https://www.theguardian.com/world/2023/feb/15/revealed-disinformation-team-jorge-claim-meddling-elections-tal-hanan>
- Luhtala, Michelle, and Jacquelyn Whiting. 2018. *News literacy: The keys to combating fake news*. Libraries Unlimited, 2018. <http://publisher.abc-clio.com/9781440861536>
- Madden, Mary, Amanda Lenhart, and Claire Fontaine. 2017. "How youth navigate the news landscape: recent qualitative research". Knight Foundation.
https://knightfoundation.org/wp-content/uploads/2020/03/Youth_News.pdf
- Maksl, Adam, Seth Ashley, and Stephanie Craft. 2015. "Measuring News Media Literacy". *Journal of Media Literacy Education*. 6, no. 3, 29-45.
<https://doi.org/10.23860/jmle-6-3-3>



- Mansky, Jackie. 2018. "The age-old problem of 'fake news'". *History, Smithsonian Magazine*. May 7, 2018. <https://www.smithsonianmag.com/history/age-old-problem-fake-news-180968945/>
- Melki, Jad. 2010. *Media Habits of MENA Youth: A Three-Country Survey*. Working Paper Series # 4. American University of Beirut and UNICEF.
- Melki, Jad, Hani Tamim, Dima Hadid, Maha Makki, Jana El Amine, and Eveline Hitti. 2021. "Mitigating infodemics: The relationship between news exposure and trust and belief in COVID-19 fake news and social media spreading". *PLoS ONE*, 16, no. 6: 1-13.
- Mihailidis, Paul. 2014. *Media Literacy and the Emerging Citizen*. New York: Peter Lang.
- Newman, Nic, Richard Fletcher, Craig T. Robertson, Kirsten Eddy, and Rasmus Kleis Nielsen. 2022. Reuters Institute Digital Media Report 2022. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2022-06/Digital_News-Report_2022.pdf
- Ofcom. 2022. News consumption in the UK: 2022. https://www.ofcom.org.uk/__data/assets/pdf_file/0027/241947/News-Consumption-in-the-UK-2022-report.pdf
- Passey, Don, Miri Shonfeld, Lon Appleby, Miriam Judge, Toshinori Saito, and Anneke Smits. 2018. "Digital Agency: Empowering Equity in and through Education". *Technology, Knowledge and Learning*, 23: 425-439.
- Pérez-Escobar, Marta, Darren Lilleker, and Alejandro Tapia-Frade. 2023. "A Systematic Literature Review of the Phenomenon of Disinformation and Misinformation". *Media and Communication*, 11, no. 2: 76-87.
- Simon, Felix, Philip N. Howard, and Rasmus Kleis Nielsen. 2020. "Types, sources, and claims of COVID-19 misinformation". <https://reutersinstitute.politics.ox.ac.uk/types-sources-and-claims-covid-19-misinformation#header--0>
- Swart, Joelle. 2021. "Tactics of news literacy: How young people access, evaluate, and engage with news on social media". *New Media & Society*. <https://doi.org/10.1177/14614448211011447>
- Tandoc Jr, Edson C, Zheng Wei Lim, and Richard Ling. 2018. "Defining 'fake news'. A typology of scholarly definitions". *Digital Journalism*, 6, no. 2: 137-153.
- Uzelac, Aleksandra. 2008. "How to understand digital culture: Digital culture – a resource for a knowledge society?" In *Digital Culture: The Changing Dynamics*, edited by Aleksandra Uzelac and Biserka Cvjeticanin, 7-21. Zagreb: Institute for International Relations.
- Vraga, Emily K, Melissa Tully, and Leticia Bode. 2020. "Empowering users to respond to misinformation about Covid-19". *Media and Communication*, 8, no. 2: 475-479.
- Vraga, Emily K, Melissa Tully, Adam Maksl, Stephanie Craft, and Seth Ashley. 2021. "Theorizing News Literacy Behaviors." *Communication Theory*, 31: 1-21.
- Van den Bulck, Hilde. 2002. "Tools for Studying the Media". In *The Media Book*, edited by Chris Newbold, Oliver Boyd-Barrett and Hilde van den Bulck, 55-100. London: Arnold.



- Vázquez-Herrero, Jorge, María-Cruz Negreira-Rey, and José Sixto-García. 2022. “Mind the Gap! Journalism on Social Media and News Consumption Among Young Audiences”. *International Journal of Communication*, 16: 3822–3842.
- Wimmer, Roger D and Joseph R Dominick. 2011. *Mass Media Research: An Introduction*. (9th ed). Boston: Wadsworth.
- Wintour, Patrick. 2017. “Gulf states hint at possible expulsion of Qatar from regional bloc”, *The Guardian*, July 17, 2017.
- Wu, Meng-Jia, Kelly Zhao, and Francisca Fils-Aime. 2022. “Response rates of online surveys in published research: A meta-analysis”. *Computers in Human Behavior Reports*, 7: 1-11. <https://doi.org/10.1016/j.chbr.2022.100206>