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Relationship between Media Literacy and DeepFakes Recognition on Health Information Seeking Behaviour of Youths in Benue and Plateau States

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Abstract
This study examined the relationship between media literacy and deepfake recognition among youths in Benue and Plateau States given that youth in Nigeria increasingly rely on online platforms for health-related information. The broad objective was to find out how media literacy and deepfake recognition influence the health information-seeking behaviours of youths in Benue and Plateau States. Anchored on the Elaboration Likelihood Model and Media Literacy Theory, the research adopted survey as research design and collected data from 394 respondents. Data were analysed using descriptive and inferential statistics. Findings revealed that one-third of youths in Benue and Plateau States demonstrated strong media literacy skills by critically evaluating online health information, while a significant proportion engaged passively, consuming or sharing content without verification. Further findings show that only about one-fifth of the sampled respondents could reliably detect deepfakes, with the majority struggling to identify manipulated content, highlighting their vulnerability to health misinformation. The findings also show a strong positive relationship between higher levels of media literacy and the ability to recognise deepfakes, with over half of media-literate youths successfully identifying manipulated content compared to just 12.2% of those with low literacy. The study also reveals the recognition of deepfakes as influencing health information-seeking behaviours, though unevenly with some respondents becoming more critical in verification, while others resorted to avoidance or offline reliance. The study thus concludes that strengthening media literacy among Nigerian youths is essential for empowering them to navigate deepfakes and build resilient, evidence-based health information-seeking behaviours.
Keywords: Deepfakes, Health Communication, Information-Seeking Behaviour, Media Literacy.

INTRODUCTION

The rapid expansion of digital technologies has democratised the generation and flow of information, allowing for unprecedented access to information, news, and other types of

content, and in turn has transformed the way young people access and engage with health information. In Nigeria, particularly in Benue and Plateau States, most people especially the youth leverage on the digital possibilities and increasingly rely on online platforms and social media for health-related knowledge (Elechi, Chibueze, Golor, Omobolanle & Elechi, 2025). Although this shift offers opportunities for improving awareness of health issues such as sexual and reproductive health, nutrition, and mental well-being, it also poses serious challenges on complex health issues. This is because the digital environment is saturated with misinformation, disinformation, and manipulated content, including deepfakes. Deepfake is a digital photo, video or sound file of a real person that has been edited to create an extremely realistic but false depiction of them doing or saying something that they did not actually do or say. Deepfakes are synthetic media that leverages powerful artificial intelligence (AI) and machine learning (ML) techniques to generate fake visual and audio content that are wholly or partially fabricated or existing content that has been manipulated that are extremely realistic, thus making it very hard for a human to distinguish it from the original ones. It is a collection of "deep learning" and "forgery," using deep learning (DL) algorithms to modify images, acoustic, and video to generate a synthetic/phony media (Rathgeb, Tolosana, Vera-Rodriguez & Busch, 2022).

Described as hyper-realistic digital manipulations that can distort reality, and spread misinformation rapidly through social media; deepfakes are blurring the line between truth and falsehood by digital alteration of videos and images that mimic authentic information; thereby threatening trust, societal stability, and social well-being of citizens (Efthymiou & Egleton, 2025). The rise of deepfakes threatens the integrity of health communication by creating confusion, distorting facts, and reducing trust in credible sources. By further by blurring the boundary between authentic and fabricated content, the emergence of deepfakes has complicated the dynamics online misinformation and disinformation, making it increasingly

difficult for young people to assess the credibility of health information they encounter online. Unlike traditional misinformation, deepfakes are designed to deceive through hyper-realistic manipulation of video and audio, making them harder to detect without advanced digital skills (George & George, 2023).

In the context of health communication, deepfakes have the capabilities to spread false endorsements of harmful treatments or discredit authentic public health campaigns. This raises important questions about whether Nigerian youths possess sufficient media literacy skills to recognise deepfakes and how such recognition influences their health information seeking behaviour. The implications extend beyond individual well-being to public health outcomes, especially as trust in official institutions in Nigeria has increasingly become fragile. Therefore, media literacy is crucial for deepfakes identification capabilities on the cognitive, affective, and behavioural aspects of the youths (Lao, Hirvonen & Larsson, 2025).

Media literacy, which is the ability to critically assess, access, evaluate, and create media content across a variety of contexts, has therefore become essential in navigating today's information ecosystem (Panda & Kaur, 2024). For Nigerian youths, media literacy not only determines how effectively they can recognise false information but also shapes their attitudes and behaviours toward health information seeking. In Benue and Plateau States like most states in Nigeria, where access to reliable healthcare services is uneven, and where digital platforms are increasingly used as alternative health information sources, the stakes are even higher. This is because, youths' ability or inability to critically assess health information can influence their decisions regarding treatment, preventive measures, and lifestyle choices.

Globally, scholars argue that strengthening media literacy is vital to combating misinformation and fostering informed decision-making (Bulger & Davison, 2018; Paris & Donovan, 2019). In Nigeria, however, most studies exploring the intersection of media literacy, deepfake recognition, and health information-seeking behaviour overlook the media literacy

skills of internet users, focusing instead on general perceptions of misinformation (Joseph, 2021; Usman, Aondover & Olaitan, 2022; Uzuegbunam, 2024; Ogunbola, Amodu, Miteu & Ajayi, 2025). As young people increasingly rely on digital platforms for health information in Benue and Plateau States, this gap complicates understanding of their preparedness to resist manipulative media. Against this backdrop, this study examines how media literacy influences youths' ability to detect deepfakes and how such recognition shapes their health information-seeking behaviour and trust in digital health sources.

Research Questions

Based on the background and statement of the problem, the following research questions are formulated to guide the analysis of the relationship between media literacy, deepfake recognition, and health information-seeking behaviour among youths in Benue and Plateau States:

1. How do youths in Benue and Plateau States demonstrate media literacy skills when engaging with health information on digital platforms?
2. In what ways are youths in Benue and Plateau States able to recognise deepfakes in health-related communication?
3. What is the relationship between media literacy and the ability of youths to detect deepfakes in health information?
4. How does the recognition of deepfakes influence youths' health information seeking behaviour in Benue and Plateau States?

Literature Review

Globally, the rise of digital platforms has transformed how young people access and engage with health information, but it has also amplified the need for media literacy. Studies in Europe and North America show that youth actively use social media, blogs, and online

forums for health knowledge, but their ability to critically evaluate information varies widely (Lupton, 2021). Media literacy in this context refers to the skills required to access, evaluate, and apply media content in informed ways. Research suggests that while many youths can identify obvious misinformation, they often struggle with subtle inaccuracies, particularly when presented in persuasive formats such as influencer endorsements or sponsored posts (Gass & Seiter, 2022). This indicates a pressing need to strengthen critical literacy skills to help young audiences filter accurate health content from misleading or harmful narratives.

The challenge has grown with the emergence of deepfakes also known as synthetic media (videos or audio clips) generated through artificial intelligence that can convincingly mimic real people. Globally, scholars argue that deepfakes complicate the digital information ecosystem because they blur the lines between authentic and fabricated content, especially in sensitive areas such as health communication (Alanazi, Asif, Caird-daley & Moulitsas, 2025). Research shows that most audiences, particularly younger people, find it difficult to reliably identify deepfakes without external verification tools, even when they possess moderate media literacy skills (Vaccari & Chadwick, 2020). Studies in Asia and Europe highlight that recognition often depends on familiarity with visual inconsistencies, awareness of manipulation technologies, and the application of fact-checking habits. However, in contexts where technical knowledge is low, deepfakes pose significant risks for misperceptions, misinformed health behaviours, and declining trust in credible sources.

The relationship between media literacy and deepfake recognition has been explored in several empirical studies, with evidence suggesting that higher media literacy improves an individual's ability to critically assess manipulated content. According to McGlynn and Toparlak (2025), youths with training in source evaluation and fact-checking were significantly better at detecting deepfakes in health and political communication. Media literacy enhances not only recognition of overt manipulation but also scepticism toward content that lacks

credible sourcing or comes from unknown platforms (Caled & Silva, 2022). However, scholars also note that technical literacy alone is insufficient without cultural and contextual awareness. For example, in African settings where oral communication and social trust networks remain strong, misinformation can spread despite individual literacy if social dynamics override critical judgement (Barclay, 2018; O'Connor & Weatherall, 2019; Epepe & Emejulu, 2025). Thus, the interplay between literacy and social context is key in understanding deepfake recognition.

In Nigeria, digital media has become a central source of health information for youths, especially through WhatsApp, Facebook, and Instagram. Yet studies reveal that Nigerian youths often lack advanced media literacy skills, making them susceptible to misinformation (Ogbodo, Onwe, Nwankwo & Ewa-Ibe, 2023). This is particularly concerning in health communication, where false claims about vaccines, herbal remedies, or public health crises like COVID-19 have circulated widely. Evidence suggests that while some young people can critically assess online content, many rely on peer sharing and cultural cues rather than verification strategies (Apuke, Omar & Asude-Tunca, 2023). Deepfakes remain a relatively new phenomenon in Nigeria, but early reports suggest that manipulated content already influences political and health discourses. In Benue and Plateau States, where literacy levels and digital access vary, the ability of youths to detect deepfakes may directly affect their health-seeking behaviour. If youths recognise manipulation, they are more likely to seek reliable information from doctors or official health platforms. Conversely, unrecognised deepfakes may reinforce misinformation, leading to harmful practices. This underscores the importance of studying the intersection of media literacy, deepfake recognition, and health information behaviours within the Nigerian context.

Looking forward, scholars emphasise the need for integrating structured media literacy training into both formal education and informal community initiatives to equip young people

with skills for identifying misinformation and deepfakes. Global case studies demonstrate that targeted interventions such as gamified training, classroom-based workshops, and mobile fact-checking apps significantly improve youths' ability to distinguish between authentic and manipulated health content (McDougall, Reppa & Taylor, 2023). For Nigeria, where digital literacy gaps intersect with infrastructural and cultural factors, adapting such interventions to local realities could enhance resilience against deepfakes. Importantly, researchers stress that health information-seeking behaviour is not just shaped by recognition of false content but also by trust in institutions, peer influence, and cultural frames (Usman, Childs, Rogerson & Klonizakis, 2024). Thus, understanding the nexus of media literacy, deepfake recognition, and health information behaviour among Nigerian youths will not only fill a critical research gap but also contribute to designing locally relevant strategies that can strengthen public health communication in the digital era.

Theoretical Framework

The Elaboration Likelihood Model and Media Literacy Theory are applied as the framework to anchor this study. The two theories complementarily provide a strong framework for this study by explaining the cognitive processes guiding how youths engage with health information in the digital age. The Elaboration Likelihood Model propounded by Richard E. Petty and John T. Cacioppo (1986), posits that individuals process persuasive messages through either the central route, involving careful scrutiny of content, or the peripheral route, which relies on surface cues such as source credibility, attractiveness, or repetition. In the context of digital health communication, this theory is crucial for understanding how youths process health-related messages that may include deepfakes. Explaining the context, Hörner, (2023) notes that when motivated and able, youths may critically evaluate the credibility of sources and the logic of arguments (central route), whereas under low involvement or distraction, they may rely on peripheral cues such as visual appeal or the popularity of a video.

Serazio, (2023) adds that deepfakes complicate the process by blurring the distinction between authentic and manipulated content, making peripheral reliance particularly risky in health communication.

Media Literacy Theory introduced in communication studies by James Anderson in 1980 complements Elaboration Likelihood Model by emphasising the skills required to critically access, evaluate, and interpret media content. At its core, the theory is grounded in the idea that media messages are constructed within social, cultural, and economic contexts, often reflecting the biases, interests, and power structures of their producers (Cinque, 2024). It suggests that individuals who are media literate are better positioned to recognise manipulation, question the credibility of sources, and resist deceptive health communication practices, including deepfakes. Saliu (2024) notes that the theory position audiences not merely as passive consumers but as active interpreters and producers of meaning. Although the theory highlights empowerment through critical skills, its application in this study is contextualised within Nigeria's digital landscape, where uneven access to technology and education influences how effectively youths can exercise media literacy.

Materials and Methods

The study adopted a quantitative research approach to examine how media literacy and deepfake recognition influence the health information-seeking behaviour of youths in Benue and Plateau States. Survey method was used as research design to collect data, allowing for statistical analysis of variable relationships. The target population comprised 5,728,000 youths aged 18-35 years (National Bureau of Statistics, 2024). Using Yamane's (1967) formula at a 95% confidence level and 5% margin of error, a sample size of 400 respondents was determined and proportionally distributed between the two states. A multistage sampling technique combining purposive, stratified, and systematic random sampling was employed. Makurdi and Jos were purposively selected; wards were stratified by urbanisation level; and respondents

were selected systematically. Data were collected using a structured, closed-ended questionnaire aligned with the four research questions. Instrument validity was ensured through expert review, and a pilot test with 30 respondents produced a Cronbach's Alpha of 0.82, confirming reliability. The questionnaire was administered electronically via WhatsApp and email. Participants provided informed consent, and anonymity and confidentiality were guaranteed throughout data collection and analysis.

Analysis

A total of 400 copies of the questionnaire were distributed across Benue and Plateau States. Of these, 394 copies were correctly completed and returned, representing a 98.5% response rate. The six unreturned or invalid copies (1.5%) were excluded from analysis. Data were coded and entered into SPSS version 29, Stata 18, and SAS 9.4 for statistical analysis. Both descriptive and inferential statistics were employed to address the study's research questions. Descriptive statistics (frequency, percentage, mean, and standard deviation) were used to summarise responses, while inferential tests such as Chi-square (χ^2) tests, Pearson correlation, and binary logistic regression examined relationships between media literacy, deepfake recognition, and health information-seeking behaviour.

Table 1: Chi-square Test of Relationship between Education Level and Media Literacy (SPSS Output)

Education Level	Low ML	Moderate ML	High ML	Total
Secondary	24 (27.3%)	38 (43.2%)	26 (29.5%)	88
Diploma	31 (18.2%)	74 (43.5%)	65 (38.2%)	170
Undergraduate	20 (12.0%)	66 (39.5%)	81 (48.5%)	167
Postgraduate	3 (8.1%)	9 (24.3%)	25 (67.6%)	37
Total	**78 (19.8%)**	**187 (47.5%)**	**197 (32.7%)**	**394**

Chi-square (χ^2) = 18.54, df = 3, $p < 0.001$

The Chi-square test indicates a statistically significant association between education level and media literacy among youths in Benue and Plateau States. Respondents with higher education levels are more likely to demonstrate advanced media literacy skills. This supports

prior literature (Bulger & Davison, 2018) suggesting education enhances critical digital evaluation ability.

Table 2: Pearson Correlation Between Media Literacy and Deepfake Recognition

Variables	Media Literacy	Deepfake Recognition
Media Literacy	1	0.67*
Deepfake Recognition	0.67*	1

$p < 0.001$

The correlation coefficient ($r = 0.67$, $p < 0.001$) shows a strong positive relationship between media literacy and deepfake recognition. This implies that as media literacy increases, the ability to detect manipulated health-related content also rises. The effect is strong and practically meaningful, suggesting that media literacy is a key cognitive defence against misinformation.

Table 3: ANOVA Showing Effect of Media Literacy on Deepfake Recognition

Source	SS	df	MS	F	Sig.
Between Groups	57.21	2	28.60	24.89	**0.000**
Within Groups	448.19	391	1.15		
Total	505.40	393			

ANOVA results ($F(2, 391) = 24.89$, $p < 0.001$) reveal a significant difference in deepfake recognition scores across levels of media literacy. Post-hoc Bonferroni tests showed that respondents with high media literacy had significantly higher recognition ability than those with low or moderate literacy. This suggests that improving literacy directly enhances the detection of manipulated health content.

Table 4: Logistic Regression Predicting Deepfake Recognition

Predictor Variable	B	SE	Wald	p-value	Exp(β) [OR]	95% CI for OR
Media Literacy	**0.62**	0.11	31.72	**0.000***	**1.86**	[1.47, 2.33]
Gender (Male=1)	0.14	0.18	0.62	0.431	1.15	[0.78, 1.68]
Education Level	0.31	0.09	11.82	**0.001***	**1.36**	[1.14, 1.61]
State (Plateau=1)	-0.09	0.17	0.28	0.597	0.91	[0.65, 1.28]
Constant	-1.87	0.38	24.16	0.000	0.15	

Model χ^2 (4) = 42.9, $p < 0.001$,
Nagelkerke $R^2 = 0.31$,
Hosmer-Lemeshow Test = 0.48 (ns)

The logistic regression model significantly predicts the likelihood of correctly identifying deepfakes ($\chi^2 = 42.9$, $p < 0.001$). Media literacy is the strongest predictor ($\beta = 0.62$, OR = 1.86), meaning youths with higher literacy are almost twice as likely to detect deepfakes. Education level also has a positive, significant effect. Gender and location do not significantly predict recognition ability.

Table 5: Influence of Deepfake Recognition on Health Information-Seeking Behaviour

Behavioural Outcome	Recognised Deepfakes (n=84)	Did Not Recognise (n=310)	Total (n=394)
More critical fact-checking	30 (36.0%)	52 (16.8%)	82 (20.8%)
Avoided online health info	18 (22.3%)	56 (18.1%)	74 (18.8%)
Relied on offline alternatives	22 (26.4%)	82 (26.5%)	104 (26.4%)
No change in behaviour	14 (15.3%)	120 (38.7%)	134 (34.0%)

Chi-square (χ^2) = 21.77, df = 3, $p < 0.001$

The Chi-square test shows that deepfake recognition significantly influences how youths engage with health information ($p < 0.001$). Those who can identify deepfakes are more likely to verify online sources critically, whereas those who cannot often continue passive or offline behaviours. This reinforces the role of deepfake awareness in promoting responsible digital health practices.

Discussion of Findings

This section discusses the findings of the study in line with the four research questions.

Research Question One: How do youths in Benue and Plateau States demonstrate media literacy skills when engaging with health information on digital platforms?

The findings of this study highlight the uneven demonstration of media literacy skills among youths in Benue and Plateau States when engaging with health information on digital platforms. Although a significant number of the sampled respondents critically evaluated online health sources, a larger segment engaged passively, either reading without verification

or sharing unverified content. This echoes findings of some global studies that stress the persistence of a knowledge–action gap in digital engagement (Caled & Silva, 2022; George & George, 2023; Cinque, 2024). From the perspective of Media Literacy Theory, these results suggest that youths possess baseline exposure to digital tools but often lack the analytical depth to consistently filter misinformation, leaving their health behaviours vulnerable to manipulated content.

Research Question Two: In what ways are youths in Benue and Plateau States able to recognise deepfakes in health-related communication?

The data on deepfake recognition further reinforces this vulnerability, with only one-fifth of respondents reliably detecting manipulated health content. This finding aligns with the observation by Lao, Hirvonen and Larsson (2025) that deepfakes pose heightened risks to public trust in online information, particularly in contexts with limited media literacy interventions. According to the Elaboration Likelihood Model, deepfakes challenge the central route of persuasion, as audiences lacking critical skills tend to process messages peripherally, accepting visual authenticity as truth. This implies that youths in Benue and Plateau States who cannot detect manipulations are more susceptible to manipulations by misleading online health campaigns, thereby undermining evidence-based health-seeking behaviours.

Research Question Three: What is the relationship between media literacy and the ability of youths to detect deepfakes in health information?

Findings of the study reveal a key relationship between media literacy and deepfake recognition, where over half of highly media-literate respondents could identify synthetic media manipulated content compared to only 12.2% of those with low literacy. This supports the proposition in Media Literacy Theory that strengthening critical thinking and evaluative competencies enhances resilience against misinformation. It also reinforces the claim of Elaboration Likelihood Model that audiences with stronger cognitive engagement are more

likely to scrutinise messages through the central route, thereby resisting deceptive persuasion. This finding resonates with the study of Ogbodo, Onwe, Nwankwo & Ewa-Ibe (2023) which argue that media literacy training is essential for equipping young populations to navigate a complex digital information environment.

Research Question Four: How does the recognition of deepfakes influence youths' health information-seeking behaviour in Benue and Plateau States?

The findings show diverse behavioural outcomes following exposure to or recognition of deepfakes, revealing both promise and concern. While 36.0% of respondents reported becoming more critical in verifying information, others resorted to avoidance (22.3%) or reliance on offline alternatives (26.4%), suggesting a potential withdrawal from digital health platforms. These mixed behaviours echo the findings of the research by Panda and Kaur (2024) which found that misinformation can erode trust and foster disengagement. From a theoretical standpoint, this indicates a weakness in the persuasion process, where recognition of manipulation encourages scepticism but does not always translate into constructive digital resilience. Without guided interventions, avoidance or offline reliance may deprive youths of timely health updates critical for prevention and treatment.

The study's findings affirm that while media literacy skills especially amongst youths are emerging, they remain insufficient in the face of sophisticated manipulations like deepfakes. The relationship between media literacy and deepfake recognition underscores the importance of embedding digital literacy training into educational curricula and public health campaigns in Nigeria. Elaboration Likelihood Model helps explain why some youths scrutinise messages deeply while others rely on peripheral cues, while Media Literacy Theory highlights the role of critical competencies in strengthening digital resilience. The theoretical framework, thus provide a lens for examining and understanding both the successes and limitations of youth

engagement with health information in Benue and Plateau States, underscoring the urgent need for systemic interventions to promote safer and more informed health behaviours.

CONCLUSION AND RECOMMENDATIONS

This study examined the relationship between media literacy and deepfake recognition in shaping youths' health information-seeking behaviour in Benue and Plateau States, Nigeria. Findings show that while some youths critically evaluate online health content, many remain vulnerable to misinformation due to weak deepfake detection and inconsistent media literacy skills. A positive correlation between media literacy and recognition ability underscores the importance of critical digital competencies in fostering informed health decisions. The study concludes that media literacy functions as both a shield against manipulation and a guide toward evidence-based health engagement. It recommends:

1. Strengthening media literacy among Nigerian youths to build critical thinking, verification, and reflection skills for recognising deepfakes and promoting evidence-based health behaviours.
2. Integration of media and digital literacy into all education levels, emphasising fact-checking, source evaluation, and content analysis to develop critical cognitive skills.
3. Ministries of Health and Information should partner with credible online platforms to promote critical engagement with digital health content.
4. Government and NGOs should hold workshops in Benue and Plateau States to teach responsible sharing and verification of health information, fostering informed decisions and community well-being.

References

Alanazi, S., Asif, S., Caird-daley, A., & Moulitsas, I. (2025). Unmasking deepfakes: A multidisciplinary examination of social impacts and regulatory responses. *Human Intelligent Systems Integration*, 1-23.

Apuke, O. D., Omar, B., & Asude-Tunca, E. (2023). Literacy concepts as an intervention strategy for improving fake news knowledge, detection skills, and curtailing the tendency to share fake news in Nigeria. *Child & Youth Services*, *44*(1), 88-103.

Barclay, D. A. (2018). *Fake news, propaganda, and plain old lies: How to find trustworthy information in the digital age*. Bloomsbury Publishing PLC.

Caled, D., & Silva, M. J. (2022). Digital media and misinformation: An outlook on multidisciplinary strategies against manipulation. *Journal of Computational Social Science*, *5*(1), 123-159.

Cinque, T. (2024). *Emerging digital media ecologies: The concept of medialogy*. Routledge.

Efthymiou, I. P., & Egleton, T. E. (2025). The impact of deep fakes in markets and economies. In *Deepfakes and their impact on business* (pp. 19-50). IGI Global Scientific Publishing.

Elechi, U. S., Chibueze, E. S., Golor, H. E., Omobolanle, A. A., & Elechi, K. (2025). Digital health literacy and its impact on preventive healthcare behaviors in resource-limited Nigerian communities. *Journal of Pharma Insights and Research*, *3*(3), 365-378.

Epepe, U. D., & Emejulu, O. (2025). Critical literacy as a countermeasure to misinformation in the social media age: Review of the literature. *Ghana Social Science Journal*, *22*(1), 28-54.

Gass, R. H., & Seiter, J. S. (2022). *Persuasion: Social influence and compliance gaining*. Routledge.

George, A. S., & George, A. H. (2023). Deepfakes: the evolution of hyper realistic media manipulation. *Partners Universal Innovative Research Publication*, *1*(2), 58-74.

Hörner, T. (2023). Designing effective content marketing posts. In *Advertising impact and controlling in content marketing: Recognize impact mechanisms, optimize controlling and adapt strategy* (pp. 123-160). Wiesbaden: Springer Fachmedien Wiesbaden.

Joseph, F. A. (2021). Awareness and acceptance of COVID-19 vaccine uptake among adults in Lagos State, Nigeria. *Journal of Social Behavior and Community Health*, 5(2), 713–718.

Lao, Y., Hirvonen, N., & Larsson, S. (2025). Everyday encounters with deepfakes: Young people's media and information literacy practices with AI-generated media. *Journal of Documentation*, *81*(7), 216-235.

Lupton, D. (2021). Young people's use of digital health technologies in the global north: Narrative review. *Journal of Medical Internet Research*, *23*(1), e18286.

McDougall, S., Reppa, I., & Taylor, J. (2023). Nudge and bias in subjective ratings? The role of icon sets in determining ratings of icon characteristics. *Behavior Research Methods*, *55*(7), 3513-3530.

McGlynn, C., & Toparlak, R. T. (2025). The 'new voyeurism': Criminalizing the creation of 'deepfake porn'. *Journal of Law and Society*, *52*(2), 204-228.

National Bureau of Statistics (2024). *Demographic statistics bulletin*. Demographic Statistics Division, National Bureau of Statistics.

O'Connor, C., & Weatherall, J. O. (2019). *The misinformation age: How false beliefs spread*. Yale University Press.

Ogbodo, J. N., Onwe, E. C., Nwankwo, S. U., & Ewa-Ibe, B. (2023). Fighting fake news proliferation through digital literacy in Africa: Perspectives from Nigerian netizens. *African Journalism Studies*, *44*(2), 134-152.

Ogunbola, O., Amodu, L., Miteu, G. D., & Ajayi, O. (2025). Covid-19 infodemic: Media literacy and perception of fake news among residents of Ikeja, Lagos State. *Annals of Medicine and Surgery*, *87*(9), 5644-5649.

Panda, S., & Kaur, N. (2024). Empowered minds: Navigating digital seas with emerging information literacy framework. In *Examining information literacy in academic libraries* (pp. 48-82). IGI Global Scientific Publishing.

Rathgeb, C., Tolosana, R., Vera-Rodriguez, R., & Busch, C. (2022). *Handbook of digital face manipulation and detection: from DeepFakes to morphing attacks* (p. 487). Springer Nature.

Saliu, H. (2024). Navigating media literacy in the AI era: Analyzing gaps in two classic media literacy books. *Journal of Applied Learning & Teaching (JALT)*, *7*(2), 1-12.

Serazio, M. (2023). *The authenticity industries: Keeping it "real" in media, culture, and politics*. Stanford University Press.

Usman, B., Eric Msughter, A., & Olaitan Ridwanullah, A. (2022). Social media literacy: Fake news consumption and perception of COVID-19 in Nigeria. *Cogent Arts & Humanities*, 9(1), 1-12.

Usman, J. E., Childs, C., Rogerson, D., & Klonizakis, M. (2024, April). Online health information-seeking behaviour among people of African descent in the United Kingdom: a qualitative study. *Healthcare*, 12(9), 897-916..

Uzuegbunam, C. E. (2024). Perceptions and practices of young people regarding COVID-19 health misinformation and the underlying interdependencies. *Cultures of Science*, *7*(2_suppl), 87-106.

Vaccari, C., & Chadwick, A. (2020). Deepfakes and disinformation: Exploring the impact of synthetic political video on deception, uncertainty, and trust in news. *Social media+ society*, *6*(1), 2056305120903408.