

Perceived Influence of Social Media Literacy on Detecting Deepfake Content on TikTok Among Mass Communication Undergraduates in Kwara State

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Abstract

This study examined the perceived influence of social media literacy on the detection of deepfake content among mass communication undergraduates in Kwara State, Nigeria. Social media literacy, a subset of media literacy, encompasses the technical, cognitive, and socio-emotional competencies necessary to navigate algorithm-driven digital environments, critically evaluate information, and identify manipulated media. With the influx of AI-enabled deepfakes on platforms such as TikTok, understanding how literacy skills mediate detection is imperative. The study adopted a quantitative survey design, and data were collected from 333 undergraduates across three universities using questionnaires to capture demographics, social media literacy levels, and ability to detect deepfakes. Results indicate that students possess a high level of social media literacy, demonstrating proficiency in evaluating and verifying content they encounter on TikTok. However, their ability to detect deepfakes was moderate, with challenges posed by sophisticated AI manipulation. The study further reveals that social media literacy significantly influences students' perceived competence in identifying deepfake videos and notes that education plays an important role in enhancing digital discernment. The findings underscore the importance of structured media literacy interventions, practical exposure, and algorithmic awareness to strengthen future media professionals' ability to navigate complex digital landscapes and mitigate the risks posed by synthetic media. The study concludes that media literacy is a vital tool for navigating complex media landscapes, yet ongoing training and practical exposure are necessary to strengthen students' competence in identifying emerging digital threats, such as deepfakes. The study recommends that universities integrate structured training, practical workshops, peer-led initiatives, ongoing research, and AI detection tools into mass communication programmes to strengthen students' digital content verification skills and their capacity to identify and mitigate deepfakes, misinformation, and other forms of AI-generated media.

Keywords: deepfakes, kwara, mass communication, media literacy, social media literacy, students,

Introduction

Media literacy has been for decades a critical interdisciplinary construct that span within communication studies, which basically encompasses the competencies that are required to access, analyze, evaluate, and create media messages across different platforms. As digital technologies become more diverse and complex, media literacy has grown beyond traditional print and broadcast contexts to also include complex digital environments that are characterized by interactivity, convergence and algorithmic mediation (Buckingham, 2007; Jenkins, 2009; Kellner & Share, 2007). Scholarly literature identifies different types of media literacy with each reflecting specific competencies and contexts of media engagement. These include digital literacy, which dwells on technical and cognitive skills required for navigating digital environments; information literacy that emphasises the ability to locate and critically evaluate information; visual literacy, that border around the interpretation of visual media texts (Aufderheide, 1993; Eshet-Alkalai, 2004; Livingstone, 2008).

Within this broader framework, social media literacy has also gained recognition as a specialised subset of media literacy that is

driven by the prevalence of different platforms such as Facebook, X (formerly Twitter), Instagram, and TikTok. Social media literacy are the skills required to critically engage with user-generated contents, understanding platform algorithms, manage digital identities and recognise misinformation and disinformation (Vanwynsberghe, Boudry & Verdegem, 2015; Tandoc, Lim & Ling, 2018; Guess, Nyhan & Reifler, 2020). The participatory nature that exists in the realm of social media further necessitates the need to have competency skills in content creation and ethical engagement as users function both as producers and consumers within networked publics (Jenkins & Ito, 2015). Scholars argue that competencies such as source verification, algorithmic awareness, and critical thinking significantly reduce susceptibility to manipulated media, thereby enhancing users' resilience against misinformation and disinformation (Guess et al., 2020; Vraga & Tully, 2021; Tandoc et al., 2018). Also, research demonstrates that individuals with higher levels of social media literacy are better equipped to identify fake news and resist manipulative content, thereby enhancing democratic participation and informed decision-making (Vraga & Tully,

2021; Nyhan & Reifler, 2010). Furthermore, social media literacy contributes to digital resilience by aiding users to navigate privacy risks, cyberbullying and the psychological impacts that come with online engagement (Livingstone, Mascheroni & Staksrud, 2017; Helsper & Eynon, 2013; Livingstone, 2014).

Deepfake technology, which is enabled by various advances in Artificial Intelligence (AI) and deep learning architectures such as generative adversarial networks (GANs) has become a critical subject of inquiry in modern media and communication scholarship. Scholars globally conceptualise deepfakes as a double-edged innovation that simultaneously offering creative and industrial opportunities while posing profound risks to epistemic trust, media credibility, and the integrity of digital information ecosystems (Vaccari & Chadwick, 2020; Paris & Donovan, 2019; Waisbord, 2018). Global empirical and theoretical studies have shown divergent perspectives on the implications of deepfakes in the digital world. On one hand, research has reflected that deepfakes help to amplify misinformation by producing persuasive false content that are capable of influencing public opinion, electoral processes and journalistic credibility (Chesney & Citron,

2019; Vaccari & Chadwick, 2020; Tandoc et al., 2018).

Within the African context, scholarly engagement with deepfake technology is still emergent, but increasingly important, particularly in relation to political communication and digital vulnerability. Studies indicate that in the African media ecosystems that is characterised by uneven digital literacy levels and infrastructural disparities, people are particularly susceptible to the manipulative potential of deepfakes, especially during electoral cycles (Mare, Mutsvairo & Ragnedda, 2021; Mutsvairo & Bebawi, 2019; Wasserman & Madrid-Morales, 2019). Consequently, the African literature advocates for context-sensitive interventions that will help in including media literacy enhancement, regulatory development and regional collaboration, which would help to mitigate the risks that are associated with deepfake proliferation in the continent's evolving digital landscape (Wasserman & Madrid-Morales, 2019; Mare et al., 2021; Gorwa, Binns & Katzenbach, 2020).

The nexus that exists between social media literacy and deepfake technology has become an increasingly significant area of inquiry within mass communication scholarship,

particularly in the context of digitally mediated learning environments. Among mass communication students who are both consumers and producers of media content in training, the intersection of these constructs is especially critical, as their professional training puts them at the frontline of information verification and dissemination in the digital age (Potter, 2013; Jenkins et al., 2016; Kellner & Share, 2007). These skills are not merely cognitive assets but professional imperatives, as their future roles in journalism, advertising, and public relations demand a high level of epistemic vigilance in distinguishing authentic content from synthetic fabrications (Hobbs, 2010; Potter, 2013; Vaccari & Chadwick, 2020). While high levels of literacy can enhance students' ability to detect, interpret, and ethically respond to deepfake content, any deficiency in these competencies can increase their vulnerability to manipulation and misinformation.

Statement of the Problem

The proliferation of deepfake technology in modern digital ecosystems has raised serious concerns about misinformation, media manipulation and the erosion of epistemic trust. This is as a result of high visual and algorithm-driven platforms such as TikTok.

Deepfakes are now increasingly embedded in social media environments where users come across, interpret, and redistribute content with little or no verification, which increases the risks of deception, misinformation and disinformation (Chesney & Citron, 2019; Kietzmann, Lee, McCarthy & Kietzmann, 2020; Vaccari & Chadwick, 2020). Although social media literacy has been widely recognised as a critical competence for going through such environments, its actual influence on users' ability to detect deepfakes remain theorised and empirically examined within specific educational contexts (Hobbs, 2010; Livingstone, 2014; Vanwynsberghe et al., 2015). In Nigeria, the quick diffusion of social media has gotten a growing scholarly attention to misinformation, fake news and digital literacy. Emerging studies have been able to explore the implications of deepfakes for political communication, cybersecurity, and information disorder, which emphasises the susceptibility of the Nigerian media ecosystem to manipulated content (Apuke & Omar, 2021; Sule, Zennaro, & Thomas, 2021; Ibrahim & Adamu, 2022). However, despite this expanding body of literature, existing research remains largely generalised by focusing on broader populations such as social media users and voters, while neglecting specialised groups such as

students, whose academic training is directly oriented toward media analysis and content verification. It is based on this premise that the lack of empirical evidence on the perceived influence of social media literacy on the detection of deepfake content among mass communication undergraduates is going to be explored in this study which would focused on examining their perceptions towards the level of influence social media literacy has in detecting deepfakes. Addressing this gap is important for interrogating assumptions about media literacy competencies, it would help in enhancing curriculum design in mass communication education and informing policy and pedagogical interventions aimed at strengthening resistance to digital misinformation in Nigeria's evolving media landscape.

Objectives of the Study

Generally, the study aims to investigate if mass communication in Kwara State perceived influence of social media literacy has on their ability to detect deepfake content on TikTok social media. Specifically, the study aims to:

1. Assess the level of social media literacy skills among Mass

Communication undergraduates students in Kwara State.

2. Evaluate Kwara State Mass Communication undergraduates' ability to detect deepfakes videos on TikTok.
3. Investigate the perceived level of influence social media literacy has in detecting deepfake videos on TikTok among Kwara Undergraduates.

Literature Review

Social media literacy has become a critical extension of media literacy within our global digitally networked environments, emphasizing users' abilities to access, analyze, evaluate, and create content on interactive platforms. Globally, scholars conceptualise social media literacy as a multidimensional construct that involves cognitive, technical, and socio-emotional competencies that are necessary for navigating algorithm-driven media ecosystems (Livingstone, 2014; Hobbs, 2010; Vanwynsberghe et al., 2015). Empirical studies have been able to show that individuals with higher levels of social media literacy are more capable of evaluating online information critically, identify misinformation and engaging responsibly in digital communication spaces (Vraga &

Tully, 2021; Guess et al., 2020; Tandoc et al., 2018). Within the African context, social media literacy is increasingly framed as a necessary response to the infiltration of misinformation and digital inequality across the continent. Scholars argue that structural challenges like limited access to quality education, uneven digital infrastructure and low verification culture exacerbate users' vulnerability to misinformation (Wasserman & Madrid-Morales, 2019; Mare et al., 2021; Mutsvairo & Ragnedda, 2019). Furthermore, Recent studies further highlight the role of digital literacy initiatives in mitigating misinformation, emphasizing that enhancing users' evaluative skills significantly reduces the spread of false information in African digital spaces (Ogbodo et al., 2024; Wasserman, 2020; Mare et al., 2021). In Nigeria, social media literacy has been extensively examined in relation to fake news consumption and information credibility. Empirical evidence indicates that low levels of social media literacy are strongly associated with increased susceptibility to misinformation, particularly among young users who rely heavily on social media for news and information (Usman et al., 2022; Apuke & Omar, 2021; Ogbodo et al., 2024). Specifically, studies reveal that social media users without adequate literacy skills are

more likely to accept and share false information, thereby reinforcing the need for structured media education interventions within the Nigerian context.

Deepfake technology, driven by artificial intelligence techniques such as generative adversarial networks, represents one of the most disruptive developments in contemporary digital communication. Globally, research identifies deepfakes as a significant threat to information integrity, as they enable the creation of highly realistic but fabricated audio-visual content capable of misleading audiences and undermining trust in media systems (Chesney & Citron, 2019; Westerlund, 2019; Kietzmann et al., 2020). Studies further indicate that deepfakes contribute to broader disinformation ecosystems by facilitating political manipulation, identity fraud, and reputational damage in digital environments (Vaccari & Chadwick, 2020; Paris & Donovan, 2019; Waisbord, 2018). In Africa, scholarly attention to deepfakes is growing, with particular emphasis on their implications for political communication, governance, and social stability. Research suggests that the continent's relatively low levels of media literacy and limited technological safeguards increase susceptibility to deepfake-driven misinformation, especially during electoral

processes (Mare et al., 2021; Wasserman, 2020; Mutsvairo & Bebawi, 2019). Additionally, emerging evidence indicates that deepfakes are increasingly used as tools of digital manipulation and harassment, with significant implications for gender, identity, and public discourse within African societies (Moyo, 2026). In Nigeria, deepfake research is still in its formative stage but has gained momentum in recent years due to the rising prevalence of digital misinformation. Studies highlight the role of deepfakes in amplifying fake news, undermining political processes, and complicating cybersecurity efforts within the Nigerian information ecosystem (Sule et al., 2021; Ibrahim & Adamu, 2022; Balogun et al., 2025). Furthermore, recent Nigerian-focused research emphasizes that deepfakes contribute to a fragile information environment by eroding trust in media content and increasing the difficulty of distinguishing between authentic and manipulated information (Fagbayimu, Desmond & Terhile, 2025).

The intersection between social media literacy and deepfakes has become a focal point in contemporary communication research, particularly in understanding how users navigate synthetic media environments. Globally, studies demonstrate that social media literacy plays a crucial role in

enhancing users' ability to detect deepfakes and resist manipulated content. Experimental research shows that targeted digital literacy interventions can significantly improve individuals' capacity to identify deepfake media, thereby reducing susceptibility to deception and misinformation (Geissler, Robertson & Feuerriegel, 2025). These findings suggest that literacy-based approaches are essential complements to technological detection systems in addressing the challenges posed by deepfakes. In the African context, the relationship between social media literacy and deepfake detection is shaped by structural and contextual factors, including access to education, digital skills, and awareness of emerging technologies. Scholars argue that limited exposure to media literacy training constrains users' ability to critically evaluate synthetic media, thereby increasing the potential impact of deepfakes on public opinion and social stability (Mare et al., 2021; Wasserman & Madrid-Morales, 2019; Mutsvairo & Ragnedda, 2019). Consequently, recent initiatives such as AI literacy programmes aimed at improving users' ability to identify manipulated media, highlight the growing recognition of literacy as a key strategy for mitigating deepfake risks in Africa. In Nigeria, although direct studies

linking social media literacy and deepfake detection remain limited, related research on fake news provides important insights into this nexus. Empirical evidence indicates that social media literacy significantly moderates the relationship between exposure to misinformation and users' sharing behaviour, suggesting that higher literacy levels reduce the likelihood of engaging with false content (Wei, Gong, Xu, Abidin & Apuke, 2023). By extension, scholars infer that similar mechanisms may apply to deepfake detection, given the shared characteristics of misinformation and synthetic media in digital environments (Apuke & Omar, 2021; Usman et al., 2022; Sule et al., 2021).

The influence of social media literacy on deepfake detection is increasingly conceptualized as both a cognitive and behavioural process. Globally, research indicates that individuals with higher literacy levels are more likely to employ analytical processing strategies—such as source verification and content scrutiny when encountering suspicious media, thereby improving detection accuracy (Guess et al., 2020; Vraga & Tully, 2021; Hameleers et al., 2024). Furthermore, studies suggest that social media literacy fosters skepticism toward sensational or emotionally charged content, reducing the persuasive impact of

deepfakes and enhancing resilience against misinformation (Vaccari & Chadwick, 2020; Chesney & Citron, 2019; Tandoc et al., 2018). Within African contexts, the influence of social media literacy on deepfake detection is mediated by broader socio-technical conditions, including digital access, education systems, and regulatory frameworks. Scholars emphasize that improving media literacy can significantly enhance users' ability to discern manipulated media, thereby strengthening democratic processes and public trust in information systems (Wasserman, 2020; Mare et al., 2021; Ogbodo et al., 2024). However, the effectiveness of such interventions depends on their contextual relevance and accessibility, particularly in regions with limited technological infrastructure and educational resources. In Nigeria, the influence of social media literacy on detecting deepfakes remains underexplored, particularly among specialized populations such as mass communication students. While existing studies confirm that literacy skills reduce susceptibility to fake news and misinformation, there is limited empirical evidence examining how these competencies translate into the detection of AI-generated media (Usman et al., 2022; Apuke & Omar, 2021; Sule et al., 2021). This gap underscores

the need for focused research that investigates whether formal media education equips students with the practical skills required to identify deepfakes in real-world digital environments.

Theoretical Framework

This study is anchored in Media Ecology Theory, which emphasises the interplay between media, technology, and human perception, arguing that media act as environments that shape how people understand, interpret, and interact with information (Postman, 1970; McLuhan, 1964). Media ecology posits that the characteristics of a medium influence not only the content it delivers but also the cognitive and social behaviours of its users. In the context of this study, TikTok as a social media platform represents a distinct media environment where the affordances of the platform, short-form video, algorithmic curation, and interactive features affect how undergraduates perceive, evaluate, and engage with digital content, including deepfakes. The theory is particularly relevant because it provides a lens for understanding the relationship between social media literacy and the detection of deepfake videos. Social media literacy equips students with the ability to navigate and interpret complex

digital media environments critically. Media Ecology explains why exposure to specific media environments, like TikTok, can influence cognitive patterns, including the ability to identify manipulated content, question authenticity, and make informed judgments about media credibility (Chaffee & Metzger, 2001; Strate, 2014). By applying this theoretical lens, the study underscores that developing social media literacy is not merely about acquiring technical skills but also about adapting to and critically engaging with evolving media ecosystems where deepfake technology increasingly challenges perception and judgment. In essence, Media Ecology provides a conceptual foundation for examining how the social and technological environment of TikTok shapes undergraduates' engagement with content, and how literacy skills mediate their ability to detect deepfakes, thereby linking the study's focus on media literacy with the emerging challenges of AI-mediated media manipulation.

Research Methodology

This study adopted a quantitative research design using the survey method to examine the perceived influence of social media literacy on detecting deepfake content among mass communication undergraduates. The

survey approach is appropriate for this study because it enables the collection of standardized data from a relatively large population, facilitates statistical analysis, and allows for generalization of findings across similar populations. The population of the study comprised mass communication undergraduates from three universities in Kwara State: University of Ilorin (690 students), Kwara State University (1,107 students), and Al-Hikmah University (180 students), giving a total population of 1,977 students for the 2024/2025 academic session. A sample size of 333 respondents was determined using standard sample size determination procedures for finite populations, ensuring adequate representation and statistical reliability. A multi-stage sampling technique was employed to select respondents for the study. Data for the study were collected using a structured questionnaire, which allowed for uniformity in responses and ease of quantitative analysis. The questionnaire was designed to capture respondents' demographic characteristics, levels of social media literacy, exposure to deepfake content,

and perceived ability to detect such content. Data analysis was conducted using descriptive statistical tools, including frequency distribution, percentages, mean, and standard deviation. These statistical measures were employed to summarize and interpret the data, identify patterns, and provide insights into the relationship between social media literacy and deepfake detection among the respondents.

Data Analysis

Demographic Analysis

The demographic characteristics of the respondents, as presented in Table 1, include age, gender, university, level of study, religion, frequency of digital media usage and familiarity with TikTok. Variables such as age, institution, gender, level of study and religion are significant in highlighting the profile of undergraduates from the University of Ilorin, Al-Hikmah University and Kwara State University. These demographic indicators are commonly featured in research grounded in the cultivation theory paradigm, which serves as the theoretical foundation of this study.

Table 1 reflects the result from the demographic profile

Table 1: Respondents' Demographic profile

Respondents' Demographic profile	Frequency	Percentage
Age		
16-20	100	30.9
21-25	221	68.2
26-31	3	0.9
Total (Mean= 1.71, SD= .474, Min=1, Max=3)	324	100
Gender		
Male	114	36.1
Female	201	64.9
Total	315	100
Institutions		
University of Ilorin	110	33.6
Kwara State University	186	56.9
Al-Hikmah University	31	9.5
Total	327	100
Academic Level		
100level	105	33.1
200level	78	24.6
300level	58	18.3
400level	76	24
Total	317	100
Religion		
Christianity	142	44
Islam	173	53.5
Others	8	2.5
Total	323	100

Researcher’s Field Work, 2025

The demographic profile of respondents indicates that the majority of students were within the 21–25 age bracket (68.2%), followed by those aged 16–20 (30.9%), while only a small proportion (0.9%) fell within the 26–31 category, which suggests that they are a predominantly young undergraduate population (Mean = 1.71, SD = 0.474). In terms of gender distribution, female respondents constituted a larger proportion (64.9%) compared to males (36.1%), indicating a female-dominated sample. Institutional distribution shows that most respondents were drawn from Kwara State University (56.9%), followed by University

of Ilorin (33.6%) and Al-Hikmah University (9.5%), reflecting proportional representation across the selected institutions. Regarding academic level, respondents were fairly distributed across levels, with 100-level students slightly dominating (33.1%), while 200-level (24.6%), 300-level (18.3%), and 400-level (24.0%) students were also adequately represented. Finally, the religious composition reveals that Islam (53.5%) and Christianity (44.0%) were the predominant affiliations among respondents, with a very small proportion (2.5%) identifying with other religions, indicating a relatively balanced religious representation with a slight dominance of Muslim respondents.

Research Objective One: Level of Social Media Literacy skills among Kwara Undergraduate students.

Table 2: Level of Media Literacy among Kwara Mass Communication Undergraduates

Level of SM Literacy skills	Level of Agreement*(%)						Overall	
	1	2	3	4	5	M	SD	%
I can identify misleading or manipulated media content without assistance.	3.9	2.6	3.22	22.1	39.2	3.90	1.08	78.0
I have the skills to verify information from multiple media sources before believing it	4.9	4.2	18.7	41.6	30.6	3.89	1.05	77.8

I regularly encounter both accurate and inaccurate information in the media	3.4	10.1	13.2	33.5	39.7	3.96	1.11	79.2
I often reflect on the reliability of the media content I consume.	1.3	3.6	35.9	22.1	37.1	3.90	.99	78.0
I can distinguish between credible and false information in the media.	6.8	2.9	13.8	19.7	56.9	4.17	1.18	83.5
I often share media content without checking its accuracy.	0	5.2	24.2	27.0	43.6	4.09	0.94	81.8
Total						3.99	1.06	80.47

Researcher's Field Work, 2025

Note: 3 is the cut-off point between disagreement and agreement on this table: Mean, SD: Standard Deviation, 1: Strongly Disagree (1%-20%), 2: Disagree (21%-40%), 3: Neutral (41%-60%) 4: Agree (61%-80), 5: Strongly Agree (81%-100%).

Overall, the results in Table 2 reflect that respondent agree there is a high level of media literacy (M=3.99, SD=1.06). Specifically, undergraduate students in Kwara State can distinguish between credible and false information in the media (M=4.17, SD= 1.18); share media content without checking its accuracy. (MD= 4.09, SD= .94); verify information from multiple media sources before believing (M=3.89, SD= 1.05); reflect on the reliability of the media content they consume. (M=3.90, SD=.99). The results suggest that although media literacy skills are relatively high, there is still room to improve student's verification practices and promote more responsible content dissemination.

Research Objective 2: To Determine Mass Communication undergraduates' ability to detect deepfakes videos on TikTok?

Table 3: The level of student's ability to detect deepfakes videos on Tik Tok

level of student’s ability to detect deepfakes videos on Tik Tok	*Level of Agreement					Overall		
	1	2	3	4	5	M	SD	%
I often come across videos on TikTok that appear digitally altered or manipulated.	24.9	45.2	2.6	15.8	11.4	2.44	1.32	48.8
I sometimes question the authenticity of videos I watch on TikTok.	20.0	32.2	15.1	14.5	18.2	2.79	1.40	55.8
I can identify when a TikTok video has been digitally altered using AI or deepfake technology.	31.9	34.5	8.3	20.5	4.7	2.31	1.24	46.2
I know the visual and audio cues that indicate a TikTok video may be a deepfake.	27.8	28.1	7.0	17.1	20.0	2.74	1.52	54.8
I often mistake real TikTok videos for deepfakes.	21.6	29.4	17.9	12.7	18.4	2.77	1.40	55.4
I usually believe TikTok videos without checking for possible manipulation.	17.7	27.8	24.4	21.8	8.3	2.75	1.22	55.0
Total						2.63	1.38	52.62

Researcher's Field Work,2025

Note: 3 is the cut-off point between disagreement and agreement in this table, M: Mean, SD: standard Deviation, 1: Strongly Disagree (1%-20%), 2: Disagree (21%-40%), 3: Neutral (41%-60%) 4: Agree (61%-80%), 5: Strongly agree (81%-100%).

The overall Table 3 suggests that there is an average level of student's ability to detect deepfakes videos on Tik Tok (M=2.63, SD=1.38). Specifically, respondents sometimes question the authenticity of videos they watch on TikTok. (M=2.79, SD=1.40); often mistake real TikTok videos for deepfakes. (M=2.77, SD=1.40); can identify when a TikTok video has been digitally

altered using AI or deepfake technology. (M=2.31, SD=1.24); and often come across videos on TikTok that appear digitally altered or manipulated. (M=2.44, SD=1.32) The data suggests that undergraduate students in Kwara State are increasingly trying their best in their ability to detect deepfakes video on Tik Tok.

Research Objective 3: Perceived influence of social media literacy on Kwara undergraduates' in identifying Tiktok deepfakes.

Table 4.4: Perceived influence of media literacy education on students in identifying deepfakes content

Level of media literacy education in identifying deepfake content among students	*Level of Agreement					Overall			
	1	2	3	4	5	M	SD	%	
My level of social media literacy helps me identify manipulated or deepfake videos on TikTok.	15.6	3.6	22.3	33.2	25.2	3.49	1.33	69.8	
I am able to critically evaluate the authenticity of videos on TikTok due to my understanding of how social media works.	3.4	6.2	23.4	29.1	37.9	3.92	1.08	78.4	

Knowledge of how algorithms and content editing tools function on TikTok improves my ability to detect deepfake content	2.3	6.5	15.1	36.4	39.7	4.05	1.01	81.0
My training in media or communication-related skills influences my confidence in identifying fake or altered videos on TikTok.	1.0	7.3	37.4	39.0	15.3	3.60	.87	72.0
I rely on my social media literacy skills to distinguish real videos from deepfakes on TikTok.	7.8	10.9	9.6	16.9	54.8	4.00	1.34	80.0
Total						3.81	1.11	76.5

Researchers' Field Work, 2025

Note: 3 is the cut-off point between disagreement and agreement in this table, M: Mean, SD: standard Deviation, 1: Strongly Disagree (1%-20%), 2: Disagree (21%-40%), 3: Neutral (41%-60%) 4: Agree (61%-80%), 5: Strongly agree (81%-100%).

The overall Table 4 show that Undergraduate students in Kwara state agree that social media literacy education influences their ability to identify deepfake contents (M=3.83, SD=1.11). Specifically, their knowledge of how algorithms and content editing tools function on TikTok improves their ability to detect deepfake content on TikTok (M=4.05, SD=1.01); rely on my social media literacy skills to distinguish real videos from deepfakes on TikTok. (M=4.00, SD=1.34; their training

in media or communication-related skills influences their confidence in identifying deepfake videos on TikTok (M=3.60, SD=.87); and identify manipulated or deepfake videos on TikTok (M= 3.49, SD=1.33). These results suggest that students are well-equipped to navigate intricate media landscapes.

Discussion of Findings

The analysis of social media literacy among mass communication undergraduates in Kwara State reveals that students generally possess a high level of skills in evaluating, verifying, and interpreting media content. Respondents reported confidence in distinguishing credible information from false or misleading content, reflecting an ability to critically engage with the complex media environment. This aligns with previous studies which assert that media literacy equips users with cognitive and technical competencies to navigate digital content responsibly (Livingstone, 2014; Hobbs, 2010; Potter, 2013). These findings suggest that mass communication students, as future media professionals, are developing essential evaluative skills that are foundational for responsible content dissemination, though there remains potential for strengthening verification practices further. Regarding the ability to detect deepfakes on TikTok, the findings suggest that students exhibit moderate proficiency. While they sometimes question the authenticity of videos and are aware of manipulated content, they still occasionally mistake real videos for deepfakes or accept content without verification. This resonates with global research indicating that even

digitally literate individuals often struggle to detect AI-generated synthetic media, largely due to the sophistication of deepfake technology and the subtlety of visual and auditory cues (Chesney & Citron, 2019; Westerlund, 2019; Vaccari & Chadwick, 2020). From a personal perspective, this finding highlights a critical gap: although students are generally media-literate, deepfake detection requires a higher-order skill set that combines critical thinking, algorithmic understanding, and practical experience with manipulated content. The study further demonstrates a positive perceived influence of social media literacy on students' ability to identify deepfake content. Students indicated that knowledge of platform algorithms, content editing tools, and media production skills enhances their confidence and capability in distinguishing authentic from manipulated videos. This finding is consistent with existing literature emphasizing that digital literacy, including understanding the mechanics of social media platforms is crucial for improving resilience against misinformation and synthetic media (Vraga & Tully, 2021; Guess et al., 2020; Ogbodo et al., 2024). This underscores the importance of integrating structured media literacy training into mass communication

curricula, not only to enhance critical evaluation but also to empower students to act as informed digital citizens capable of mitigating misinformation. Overall, the findings suggest that while Kwara undergraduates demonstrate strong foundational social media literacy, their ability to detect deepfakes is still developing. The interplay between literacy skills and deepfake identification illustrates that media education can significantly enhance digital discernment, yet continuous exposure and hands-on experience with AI-manipulated content remain necessary. The findings indicate that Mass Communication students have foundational media literacy skills. However, effectively addressing evolving digital threats such as deepfakes requires greater emphasis on applied media analysis, technological awareness, and critical verification practices within media education.

Conclusion

The findings of this study indicate that mass communication undergraduates in Kwara State possess a high level of social media literacy, which equips them with essential skills to critically engage with digital content and distinguish credible information from misinformation. However, their ability to

detect deepfake content on TikTok is moderate, suggesting that while foundational literacy skills exist, the sophistication of AI-manipulated media presents ongoing challenges. The study further demonstrates that social media literacy significantly influences students' perceived ability to identify deepfake videos, highlighting the critical role of media education in fostering digital discernment. Overall, the study underscores that media literacy serves as a vital tool for navigating complex media landscapes, yet continuous training and practical exposure are necessary to strengthen students' competencies in identifying emerging digital threats such as deepfakes.

Recommendations

1. Universities offering mass communication programmes should include structured modules on digital content verification and AI-generated media, focusing on both theoretical knowledge and hands-on detection techniques.
2. Institutions should organize workshops, seminars, and online campaigns to reinforce critical evaluation skills, especially regarding

social media content that may contain manipulated or misleading material.

3. Universities and student bodies should create peer-led initiatives or digital communities where students can collectively analyze, discuss, and verify suspicious digital content, enhancing experiential learning and confidence in detecting deepfakes.
4. Students and faculty should engage in ongoing research on deepfakes, misinformation, and AI-mediated media, fostering a proactive approach to understanding and mitigating the risks posed by synthetic content.
5. Students should be encouraged to adopt software and tools designed to detect AI-generated media, complementing literacy skills with technological support for accurate and timely verification.

References

- Apuke, O. D., & Omar, B. (2021). Fake news and COVID-19: Modelling the predictors of fake news sharing among social media users. *Telematics and Informatics*, 56, 101475.
- Aufderheide, P. (1993). *Media literacy: A report of the national leadership conference on media literacy*. Aspen Institute.
- Balogun, A. Y., Alao, A. I., & Olaniyi, O. O. (2025). Disinformation in the digital era: The role of deepfakes and artificial intelligence. *Computer Science & IT Research Journal*, 6(2), 28–48.
- Bosch, T. (2017). Twitter activism and youth in South Africa: The case of #RhodesMustFall. *Information, Communication & Society*, 20(2), 221–232.
- boyd, d. (2014). *It's complicated: The social lives of networked teens*. Yale University Press.
- Buckingham, D. (2007). Digital media literacies: Rethinking media education in the age of the internet. *Research in Comparative and International Education*, 2(1), 43–55.
- Chaffee, S. H., & Metzger, M. J. (2001). The end of mass communication? *Mass Communication & Society*, 4(4), 365–379.
- Chesney, R., & Citron, D. K. (2019). Deep fakes: A looming challenge for privacy, democracy, and national

- security. *California Law Review*, 107(6), 1753–1820.
- Couldry, N. (2012). *Media, society, world: Social theory and digital media practice*. Polity Press.
- Dobber, T., Metoui, N., Trilling, D., Helberger, N., & de Vreese, C. (2021). Do (microtargeted) deepfakes have real effects on political attitudes? *The International Journal of Press/Politics*, 26(1), 69–91.
- Echezona, G. O. (2024). Ethical implications of deepfake voices and AI-created performances in the Nigerian music industry. University of Nigeria Nsukka.
- Eshet-Alkalai, Y. (2004). Digital literacy: A conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93–106.
- Eze, C. (2023). Digital disinformation and democratic challenges in Nigeria. *Journal of African Media Studies*, 15(2), 145–160.
- Fagbayimu, S. A., Desmond, O. O., & Terhile, A. (2025). Exploring the societal implication of deepfake and fake news in Nigeria's fragile society. *Kwararafa Security Review*, 3(1), 249–261.
- Geissler, D., Robertson, C., & Feuerriegel, S. (2025). Designing effective digital literacy interventions for boosting deepfake discernment. *arXiv preprint arXiv:2507.23492*.
- Gorwa, R., Binns, R., & Katzenbach, C. (2020). Algorithmic content moderation: Technical and political challenges in the automation of platform governance. *Big Data & Society*, 7(1), 1–15.
- Guess, A. M., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 U.S. election. *Nature Human Behaviour*, 4(5), 472–480.
- Hameleers, M., van der Meer, T., & Dobber, T. (2024). Reasons to doubt: The impact of deepfakes on political trust. *European Journal of Communication*, 39(1), 3–20.
- Helsper, E. J., & Eynon, R. (2013). Distinct skill pathways to digital engagement. *European Journal of Communication*, 28(6), 696–713.
- Hobbs, R. (2010). *Digital and media literacy: A plan of action*. Aspen Institute.

- Ibrahim, A., & Adamu, H. (2022). Social media, misinformation, and electoral integrity in Nigeria. *African Journalism Studies*, 43(3), 45–62.
- Jenkins, H. (2009). *Confronting the challenges of participatory culture: Media education for the 21st century*. MIT Press.
- Jenkins, H., & Ito, M. (2015). *Participatory culture in a networked era: A conversation on youth, learning, commerce, and politics*. John Wiley & Sons.
- Kellner, D., & Share, J. (2007). Critical media literacy is not an option. *Learning Inquiry*, 1(1), 59–69.
- Kietzmann, J., Lee, L. W., McCarthy, I. P., & Kietzmann, T. C. (2020). Deepfakes: Trick or treat? *Business Horizons*, 63(2), 135–146.
- Livingstone, S. (2004). Media literacy and the challenge of new information and communication technologies. *The Communication Review*, 7(1), 3–14.
- Livingstone, S. (2008). Engaging with media—A matter of literacy? *Communication, Culture & Critique*, 1(1), 51–62.
- Livingstone, S. (2014). Developing social media literacy: How children learn to interpret risky opportunities on social network sites. *Communications*, 39(3), 283–303.
- Livingstone, S., Mascheroni, G., & Staksrud, E. (2017). European research on children's internet use: Assessing the past and anticipating the future. *New Media & Society*, 20(3), 1103–1122.
- Mare, A., Mutsvairo, B., & Ragnedda, M. (2021). Fake news, disinformation and misinformation in Africa. *African Journalism Studies*, 42(1), 1–13.
- McLuhan, M. (1964). *Understanding media: The extensions of man*. McGraw-Hill, New York.
- Milan, S., Treré, E., & Masiero, S. (2021). COVID-19 from the margins: Pandemic invisibilities, policies and resistance in the datafied society. *International Journal of Communication*, 15, 1608–1627.
- Moyo, P. (2026, March 11). TikTok expands AI literacy funding to tackle deepfakes. ITWeb Africa. <https://itweb.africa/article/tiktok-expands-ai-literacy-funding-to-tackle-deepfakes/kLgB1MezPwLq59N4>
- Mutsvairo, B., & Bebawi, S. (2019). Journalism educators, regulatory

- realities, and the politics of media in Africa. *Journalism & Mass Communication Educator*, 74(1), 5–18.
- Mutsvairo, B., & Ragnedda, M. (2019). Mapping digital divides in Africa. *Telecommunications Policy*, 43(6), 1–12.
- Nyhan, B., & Reifler, J. (2010). When corrections fail: The persistence of political misperceptions. *Political Behaviour*, 32(2), 303–330.
- Ogbodo, J. N., Onwe, E. C., Nwankwo, S. U., & Ewa-Ibe, B. (2024). Fighting fake news proliferation through digital literacy in Africa. *African Journalism Studies*, 44(2), 134–152.
- Ojebuyi, B. R., & Salawu, A. (2020). Digital media and cultural production in Nigeria. *Journal of African Media Studies*, 12(3), 345–360.
- Okorie, N., Loto, M. A., & Omojola, O. (2023). Emerging technologies and media practice in Nigeria. *Media, Culture & Society*, 45(4), 789–805.
- Paris, B., & Donovan, J. (2019). Deepfakes and cheap fakes: The manipulation of audio and visual evidence. *Data & Society Research Institute*.
- Potter, W. J. (2013). *Media literacy* (5th ed.). SAGE Publications.
- Strate, L. (2014). *Media ecology: An approach to understanding the human condition*. Peter Lang.
- Sule, Z., Zennaro, M., & Thomas, J. (2021). Digital threats and misinformation in Nigeria. *Information Technology for Development*, 27(3), 567–585.
- Tandoc, E. C., Lim, Z. W., & Ling, R. (2018). Defining “fake news.” *Digital Journalism*, 6(2), 137–153.
- Vaccari, C., & Chadwick, A. (2020). Deepfakes and disinformation: Exploring the impact on citizens. *Social Media + Society*, 6(1), 1–13.
- Vanwynsberghe, H., Boudry, E., & Verdegem, P. (2015). Mapping social media literacy. *Journal of Media Literacy Education*, 7(1), 1–18.
- Vraga, E. K., & Tully, M. (2021). News literacy, social media behaviours, and skepticism toward information on social media. *Information, Communication & Society*, 24(2), 150–166.
- Waisbord, S. (2018). Truth is what happens to news: On journalism, fake news, and post-truth. *Journalism Studies*, 19(13), 1866–1878.
- Wasserman, H. (2020). Fake news from Africa: Panics, politics and paradigms. *Journalism*, 21(1), 3–16.

Wasserman, H., & Madrid-Morales, D.

(2019). How influential are African media? *African Journalism Studies*, 40(1), 1–7.

Westerlund, M. (2019). The emergence of deepfake technology: A review.

Technology Innovation Management Review, 9(11), 39–52.