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Exploring News Authentication Processes and Challenges of Social Media Users in Pakistan

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Abstract

The proliferation of disinformation and fake news on social media platforms have emerged as a major challenge, accentuating the role of social media users in news verification. The current study aimed to examine the cognitive processes of media-literate social media users in Pakistan during verification and sharing of news on Facebook and X (formerly Twitter). It also explored the challenges faced by social media users in authenticating news. Tandoc's Audiences Act of Authentication (AAA) model was applied as conceptual framework to analyze news verification behavior. Therefore, purposive sampling technique was employed to recruit 12 post graduate university students in Lahore. This sampling method was chosen to ensure inclusion of participants with active social media engagement and digital media literacy skills. The study revealed that the AAA model was employed in Pakistani context, adding another extra tier for source verification on Facebook and X. Participants are active social media users who deliberately cross-check news from various sources. They are more involved in intentional and interpersonal steps for news verification rather than waiting for incidental news posts to appear on their timeline. Major challenge in news authentication includes politically-driven news posts in the form of disinformation, lack of credible sources for instant verification, and time constraint in verifying against rapid proliferation of fake news. This research elucidated news verification practices, in a localized context of Lahore from the perspective of AAA model, calling key stakeholders to focus on specialized digital media literacy strategies in order to curb dissemination of misinformation and fake news.

***Keywords*:** disinformation, Facebook, fake news, news authentication, social media, X

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Introduction

The era of digital and social media has proliferated unverified information and news drastically on social media platforms, making it a point of concern. The ease of content creation from text to images, videos and recently, Artificial Intelligence (AI)-led posts have given access to social media users to spread the content without any check (Visentin et al., 2019). This phenomenon is favorable for freedom of expression and those practicing citizen journalism, but along with this bliss, the dark side of social media, dissemination of disinformation, and fake news cannot be ignored (Aondover et al., 2025; Baron & Ish-Shalom, 2024; Mahdi et al.,2022). This is a very serious issue and has become a global challenge and threat for peace, democracies, economies, governments, as well as all other segments of societies (Talwar et al., 2019). Several scholars have studied social media users' motives of news and information sharing on digital and social media platforms as entertainment, gratification or time pass (Apuke, 2021; Giomelakis et al., 2023; Sampat & Raj, 2022; Wei et al., 2024). However, Cherry (2024) views these platforms to be shaping new information landscape during conflicts and wars. Information disorder on digital and social media makes these platforms a new front of warzones. As the youngsters and audiences have switched from traditional news media outlets to digital and social media platforms for news consumption (Gottfried & Shearer, 2016), the issue of fake news has drawn more attention. Fake news spreads so fast (Ajina et al., 2024) that real or correct news do not get space and impression on social media platforms as compared to fake information. In addition to this, another challenge associated to the phenomenon is that such news may take on any form of misinformation and disinformation to meet its target audience. Consequently, the damage caused by disinformation or unverified information is often the most severe. The Global Risks Report by the World Economic Forum (2025) highlighted the potential risk of disinformation as a top threat for both developed and developing countries.

For developing countries, including Pakistan, information disorder has become a pressing issue. Pakistan, as a nation, is not only facing the socio-political impact of information disorder but also going through constant economic implications which are huge in nature and intensity. Prevalence of deceptive content on social media has exacerbated political instability as well as dying economic and societal polarization. Moreover, pernicious

effect of disinformation or fake news has put national security under threat. In an unfortunate incident, Sri Lankan Factory Manager was lynched (Sadiq, 2021) over false allegation of blasphemy. The incident, when investigated, was found to be only a WhatsApp/social media viral post hence, the allegation found was totally false yet claimed a life.

A lot has already been conversed regarding Pak-India propaganda and disinformation tactics (Saud & Kazim, 2022) while both countries have witnessed widespread disinformation posts on social media platforms during the recent Pak-India conflict in May 2025. Various social media posts attempted to spread false information in wake of conflict and war that the Government of Pakistan had to establish a control room (Dilshad, 2025) in order to debunk fake news. Moody, International credit rating organization had downgraded rating of Pakistan in 2022, quoting political volatility and disinformation as main cause. The economic repercussions reveal that Pakistan lost billion dollars investment due to prevailing disinformation in the country. Moreover, Foreign Direct Investment (FDI) was also negatively affected. "Pakistan received approximately $2.1 billion in FDI inflows. However, by 2022, this figure dropped by 37.6% to $1.34 billion, and in 2023, it declined further to $1.1 billion" (Lloyds Bank Trade, 2023).

During the recent general elections in Pakistan (2023-24), numerous instances were reported regarding propaganda campaigns (Awan et al., 2025; Butt et al., 2023; Tahir et al., 2025). Deep fake videos of political and military leadership were generated causing inflated protests. Moreover, videos were circulated on social media to encourage the public to boycott general elections. These posts involved leading political leaders of Pakistan, including Nawaz Sharif, Imran Khan, Raja Basharat, and many other political leaders. Such campaign was launched to erode public trust in general elections. Another instance of disinformation shows that online false information was posted showing publication of extra ballot papers. Many other examples also depict that false propaganda during the general elections harmed the process of creating a democratic government.

These potential threats indicate that fake news and disinformation have pervasive effects with a power to erode socio-economic progress even deterring foreign investments. Hence, the threat posed by disinformation and fake news may stretch beyond political instability to wreak havoc in the country impacting global landscape.

Statement of Problem

The rapid proliferation of disinformation, misinformation, and false news on social media platforms has increased the potential risk for the governments and societies on a global level. Researchers have been explaining the structure and designs of social media platforms regarding the spread of targeted propaganda. Pakistan, like many developing democracies, is also facing rapid spread of disinformation and fake news crisis, resulting in polarization, threat to peace, economy and democracy. Therefore, in this context, role of social media users in curbing the amplification and distribution of disinformation or fake news becomes significant.

Studies have investigated factors of news sharing and verification phenomenon from various psychological and social perspectives including uses and gratification theory lens and journalists' investigative perspective. However, the media-literate social media users' perspective regarding news verification is underexplored in current literature. The current study sought to address this gap by exploring the cognitive processes of media-literate students of Lahore, Pakistan from Tandoc's Audiences Act of Authentication (AAA) framework in order to understand their news verification and sharing strategies on social media platforms, that is, Facebook and X (Formally twitter). Moreover, this study also investigated the challenges that media-literate social media users face while verifying news on social media. The exploration of these approaches is crucial to combat disinformation and fake news in order to understand and develop better strategies for media-literate or illiterate social media users.

Research Objectives

The current study aimed to address the following research objectives:

- To explore the cognitive strategies employed by media-literate social media users in Pakistan for news verification.
- To analyze the challenges faced by social media users during news verification process on social media platforms.

Significance

The study sought to understand the psycho-socio perspective of social media users to authenticate news information on Facebook and X before sharing. Furthermore, the study addressed this critical issue in context of

Pakistan's emerging digital and social media landscape where misinformation and disinformation threaten each pillar from political stability to social cohesion, economic implications, and national security. By investigating the behavior of media-literate social media users, this research found emerging practices and challenges pertaining to news verification by university students in Lahore.

Through the research framework developed by Tandoc et al. (2018), the current study expanded the two-step AAA model in Pakistani context.

Moreover, it revealed the specific socio-cultural and technological challenges that social media users encounter while authentication. This research enabled the academicians to develop specialized and targeted media literacy programs. Correspondingly, its implication for policymakers (Higher education and information ministries) is to urge them for actionable reforms on a state level. By incorporating media literacy programs from school education to higher studies, the digital media literacy gap may be bridged thus, verification of the false or manipulated content may be curbed.

Literature Review

This section discusses dis-misinformation, fake news in digital era, and its implication, followed by studies explaining news verification practices in view of AAA model. Lastly, it deals with the literacy skills required for the detection of fake news and disinformation on online social media platforms.

Defining Dis/Misinformation in Digital Era

The ubiquitous nature of digital and social media platforms has empowered social media users to participate in digital discourse allowing citizens to perform as citizen journalists and social activists (Gottfried & Shearer, 2016). However, this is not without potential risks of ignoring ethics and avoiding the journalistic rules, responsibilities, obligations. Moreover, it worsens the phenomenon of sharing unverified news on social media platforms that may take on various forms, for instance, fake news, disinformation, and misinformation (Barthel et al., 2016). Furthermore, the speed of disinformation on digital and social media platforms is so fast that it may be considered as equal to the speed of light travel (Mustafaraj & Metaxas, 2017). Joint statement of Galvin (2021) emphasizes the risk in these words “misinformation is worse than an epidemic: It spreads at the speed of light throughout the globe and can prove deadly when it reinforces

misplaced personal bias against all trustworthy evidence". Thus, the implications and threats of false and disinformation spread are far reaching.

This adds another layer of threat when social media consumers remain powerless in distinguishing the true news from the fake because usually fake news mimics the real style of news formats. Kumar et al. (2018) analyzed the fake news as "although unvetted, fake news, has a credible and professional appearance, ensuring that people cannot always distinguish it from true news" (p.22). This phenomenon of dissemination of fake news, disinformation, and misinformation has become such a plague that governments and societies are collectively facing it as a major threat (Aïmeur et al., 2023; Sharma et al., 2019). Various studies have examined fake news, disinformation, and misinformation on online social media platforms with their profound impact from audiences' perspective. Likewise, studies are growing on fake news, dis/misinformation on social media platforms in several disciplines. These include journalism, digital media, communication studies, political science, computer and data as well as science and psychology.

Fake News Typologies

Allcott and Gentzkow (2017) define fake news as "intentionally and verifiably false and could mislead readers" (p.213). Aïmeur et al. (2023) analyzed numerous perspectives of evolution on fake news studies and found these typologies as "intent-based fake news including clickbait, hoax, rumor, satire, propaganda, conspiracy theories, framing as well as content-based fake, news including text and multimedia-based fake news, and in the latter, we can tackle deepfake videos and GAN-generated fake images" (p.25). These are the well-researched types with scholarly contributions. Fake news often takes support both from disinformation and misinformation to spread its intended news information (Sampat & Raj, 2022).

Ajina et al. (2024) discussed that misinformation and disinformation are linked together and thus, can be seen in spreading unverified news information, especially on social media platforms. Pennycook and Rand (2021) characterized mis-disinformation and drew a line between the two. According to them, "misinformation is an incorrect information spread by misinformed or misguided persons. On the other hand, disinformation is a fabricated or a misleading story disseminated to mislead individuals and is

propagated via social media platforms which is collectively referred to as fake news" (p.389). Tsang (2024) proposed a misinformation typology framework to identify misinformation on online social media platforms. These include four main categories as: "fabrication, manipulation, misinterpretation, and providing incomplete information" (p.22).

Disinformation includes all forms of false, inaccurate, or misleading information designed, presented, and promoted to intentionally cause public harm or profit. Propagation of disinformation is not "primarily a technology-driven phenomenon. It is driven by unclear socio-psychological factors" (Kapantai et al., 2021, p.4). Literature on disinformation is systematically studied to develop disinformation taxonomy. Kapantai et al. (2021) further developed disinformation taxonomy, categorizing them with as motivation (financial, ideological, psychological and unclear), facticity (mostly true, mostly false, false), and verifiability (yes/no).

News Authentication on Social Media

Amid the chaos posed by disinformation and fake news on digital and social media platforms, the role and responsibility of social media users in verifying the news becomes more significant. Brandtzaeg et al. (2018) outlined news verification process as "a critical part of the newsgathering and information dissemination process" (p.325). Media studies scholarship has contributed considerable research (Godler & Reich, 2013; Himma-Kadakas & Ojamets, 2022), aiming to explain news authentication process and motivations by social media users, including journalists. Journalists' news verification on social media is a challenging task to perform, making the jobs of journalists harder than before. Therefore, journalists' task gains more importance as their constant job is to give verified news. Thus, they keep juggling with the unverified and verified news on digital and social media platforms.

Tandoc et al. (2018) elucidated news authentication on social media as two steps of authentication by audiences, that is, internal and external acts of authentication. If social media consumers happen to come across any doubtful news, their cognitive process activates with personal knowledge, and skills help them verify the news content. In case the user remains failed to analyze the first step, he/she moves on to the next step in order to verify it from external sources, including media outlets and friends. Young adults from Denmark are confident to avoid and ignore any kind of misinformation

that they do not often have to complete the two-step news authentication mechanism (Gehrke et al., 2024).

Zhu et al. (2025) deliberated upon the external authentication process, criticizing that internal authentication process may have cognitive bias. Although it depends on the person's motivation and capability (Edgerly et al., 2020), social media users including journalists both apply social media news verification tools and opt for fact checking services often (Brandtzaeg et al., 2018). Between interpersonal and institutional authentication, Chang (2021) maintains that individuals tend to verify news from both of the external news verification sources. However, scholars view it as depending on the "group dynamics" and "collective settings" (Kyriakidou et al., 2023). Hence, structural contexts and individual traits have an impact on news authentication practices. Extending the AAA model, Chen and Tao (2025) found that "people tend to rely on self-based news authentication, followed by social-based news authentication, and finally fact-checking news authentication" (p.1). News verification behavior is affected by several socio-psychological factors, and 'contextual role of media systems' (Chan et al., 2024) in any country as those with higher journalistic professionalism have more tendency of news verification. Scholars (Fitzgerald et al., 2024; Mahl et al., 2024; Saldaña et al., 2024) while exploring the news authentication practices across western and non-western countries, underscore various contexts, including state-driven disinformation campaigns, platform types, regulatory frameworks, and political ideologies.

Digital Media Literacy Skills

Scholars have investigated the role of news and media literacies to curb the dissemination of disinformation and fake news on digital and social media platforms (Chan et al., 2024). Studies have shown that news and media literacy skills are linked with discerning online dis-misinformation and fake news (Paisana et al., 2020). Examining the Tandoc Authentication model, Chan (2024) found that news literacy skills activate internal acts of authentication thus, lowering the risk of spreading fake news or disinformation on online social and digital media platforms. However, Fowler-Watt and McDougall (2019) viewed the role of critical thinking as another ability in curbing the plague of fake news stating, "media literacy education is not providing the critical thinking skills that we need to verify, and fact check for ourselves" (p.14). Moreover, social media platform structures and big data also need attention towards "the critical exploration

of social media, algorithms, and big data form crucial aspects of the curriculum, accompanied by applied practical learning in the uses of them for social justice" (p.15). Media literacy alone is not sufficient to address the scorching issue (Rusbridger, 2018). A combination of news media, digital media (Fleming & Kajimoto, 2016), information media literacy (Livingstone et al., 2008), and transmedia literacy (Scolari et al., 2018) combined are helpful in alleviation of the issue.

Aufderheide (1993) defines media literacy as "the ability of a citizen to access, analyze, and produce information for specific outcomes. Media has commercial, ideological, and political motivations and implications that form and content are related to these" (p. 6). Advancing the theoretical underpinnings of media literacy and news literacy (Malik et al., 2013), scholars emphasized "understanding news, the ability to find/identify/recognize news, the ability to critically evaluate and analyze news, and the ability to produce news" (p.5). Besides other literacies including media literacy, information literacy is also required. This is because media literacy "sees media as a lens or window that helps view the world and express oneself, while information literacy sees information as a tool with which to act upon the world" (p. 106). Keeping in mind the significance of information literacy, Jones-Jang et al. (2021) elucidate it as "the intellectual framework to understand, find, evaluate, and use information". Digital media literacy skills are considered as "the ability to access and evaluate digital information to solve problems actively as integral aspects of competent technology use" (Hobbs, 2017; p.5). The International Society for Technology in Education characterized digital media literacy skills as capability "to locate and evaluate information, to synthesize, create, and communicate information, and to understand the human and technological complexities" (Zhang et al., 2024, p.5).

Scholars have investigated news verification and sharing behavior on digital and social media platforms from fake news identification to finding factors of disinformation sharing on Facebook and X. However, limited research has been conducted from Pakistan's localized context.

While several studies have explored news information authentication practices to curb disinformation phenomenon on digital spaces, there is a significant gap to understand cognitive practices within Pakistan's localized digital media context. Similarly, the application of digital media literacy skills and its influence on internal and external authentication processes are

underexplored in current literature. To address this gap, the current study investigated news verification strategies and the challenges digital media literate users encounter while discerning and fighting false information on digital media platforms. Therefore, this study theoretically addressed the gap by contributing to the AAA model through its application in a localized Pakistani context. Moreover, it laid the groundwork to develop digital media literacy programs by exploring various challenges of prosumers aimed at combating disinformation.

Research Questions

The current study formulated following research questions to understand social media users' news verifying and sharing techniques and practices:

RQ1. To what extent do social media users in Pakistan perceive Facebook and X as credible sources for news?

RQ2. How social media users verify the authenticity of any news on Facebook and X in Pakistan?

RQ3. What are the challenges that social media users face while verifying news on social media platforms: Facebook and X?

Methodology

The current study employed qualitative methodology to investigate social media users' news verification and sharing behavior. In-depth interviews were conducted through purposive sampling technique. University students from the capital of Punjab province were taken as unit of study who were active social media users on Facebook or X. Most of the universities are situated in Lahore as compared to the entire Punjab as well as the capital city is also accessible. Therefore, participants from various public and private universities of Punjab were taken as study subjects. Post graduate students who studied media and communication studies at the University of the Punjab and National University of Modern Languages, Lahore, were chosen for this study. Twelve participants were interviewed face to face through a semi structured questionnaire. Media-literate students were selected as they can provide enriched data due to their academic qualification complimented with social media consumption. Their digital media literacy skills and real-world challenges of information verification surfaced deeper reflections on the subject. Moreover, learned prosumers

were able to reflect on their literacy skills, assisting or discerning online false information. Scholars (Braun & Clarke, 2006; O'Connor & Joffe; 2020) have suggested that in order to achieve inter-coder reliability, at least two independent coders are required. Therefore, the study employed two independent coders, belonging to media studies, followed by iterative discussions to emit any possible inconsistencies in themes. The saturation standard was employed regarding in-depth interviews. Hennink et al. (2017) discussed two types of saturations as "code saturation may indicate when researchers have "heard it all," but meaning saturation is needed to "understand it all" (p.1). The interview process remained continued until both code and meaning saturation were achieved.

Participants were briefed about the purpose of this research. They were informed that their personal information would be kept anonymous and they could quit the interview at any point in time. However, none of the participants withdrew during the interviews. Each interview lasted 45 minutes to 1 hour. All the interviews were conducted in an informal and friendly environment so that interviewees could share their experiences without any hesitation. Notes were taken during the interviews. The interviews were also recorded on mobile phones with their consent and later transcribed for analysis.

The semi-structured questionnaire was kept flexible and was modified according to the requirement. Edwards and Holland (2013) suggested that modification in questions helped dig significant themes other than the main topic. The questionnaire comprised the following sections: short brief of this research, ethical considerations, background questions about Facebook and X consumption for news purposes, main questions related to techniques of news verification and sharing, and challenges.

Table 1

Profile Information of Participants

Sr No.	Participants Code	Experience in Years	SM Consumption
1	S1	15	4-5 hours/ Daily
2	S2	12	8 hours/ Daily
3	S3	16	7 hours/ Daily
4	S4	6–7	4-5 hours/ Daily
5	S5	6-7	5 hours/ Daily
6	S6	10	4 hours/ Daily

Sr No.	Participants Code	Experience in Years	SM Consumption
7	S7	5	7-8 hours/ Daily
8	S8	10	4 hours/ Daily
9	S9	5-6	5 hours/ Daily
10	S10	9	7-8 hours/ Daily
11	S11	8	4 hours/ Daily
12	S12	7-8	10 hours/ Daily

After data collection, thematic analysis was applied to find meaningful findings from the transcribed data. Thematic analysis is a significant method to identify and analyze meaningful patterns of data under investigation (Braun & Clarke, 2006). Thematic analysis helps in explaining "constellations include affective, cognitive, and symbolic dimensions of the subject" (Joffee, 2011, p. 209). It is employed to derive codes from the transcribed interview data into meaningful categories. Firstly, codes are defined followed by putting similar codes under each theme keeping in view the unifying features of codes. Joffee (2011) made distinction between themes as: theoretically-driven and raw data. The current study applied theoretically-driven themes as it "allows researchers to replicate, extend, and refute existing studies" (p.210).

Reflexivity and Positionality

As a media and communication scholar, I have engaged in reflexivity to examine how my academic, socio-economic background and social media presence might inform and reflect in interpretation of intensive interviews of participants. For maintaining positionality, I acknowledged my position as a researcher and digital media prosumer, so during the interpretation of media literate university students, I deliberately bracketed personal experiences and noted my experiences through reflexive memos. It is also to note that my position as a learned digital media prosumer assisted me in enhancing my comprehension of various perspectives of fact checking and its challenges during the data collection.

Results and Discussion

The findings of in-depth interviews were grouped in four themes. These included news consumption and social media reliance, news verification strategies, motivations to share news, and challenges in fact checking.

News Consumption and Reliance on Social Media

Participants stated that they rely on social media platforms: Facebook and X for news consumption and taking updates on various national and international political and social issues.

"I am primarily engaging in political news sharing, discussions on current affairs, and public awareness campaigns. My long-term experience has given me a deep understanding of how political information flows and evolves on these platforms" (S1). Moreover, these platforms are also a way to keep people aware of the personal and professional updates, as S12 shared "I use these platforms for both personal and professional purposes, including staying updated on current events, sharing my research and academic work, and engaging with my students and colleagues". All the selected interviewees reported that they are using Facebook and X for getting news updates, however, only one participant (S4) noted that he was using Instagram during the time X was banned in Pakistan which shows platform change due to inaccessibility of the X. Misinformation is a huge challenge and because of this, a participant reported that he is trying to minimize consumption of both the platforms.

> I have used both Facebook and Twitter excessively but due to addiction and excessive misinformation now I am trying to control my time and hardly use both platforms for 3 to 5 hours mostly because of fear of wasting time by scrolling on these platforms. (S5)

Social media platforms are not only a source of getting news information passively, however, participants actively engage on Facebook and X regarding news verification through these platforms. Findings show that participants spend considerable amount of time on social media platforms for news purposes. However, they also investigate the authenticity of the information and cross-check it through various methods including traditional media outlets. "I spend around 4 to 5 hours daily on social media, mostly on Facebook and Twitter. A significant portion of this time is dedicated to reading, analyzing, and verifying political news and engaging in discussions related to current affairs" (S1). Another participant expresses as "In today's era of intensive social media consumption, I do rely on social media for news sometimes, but I try to cross-check the news if it is important" (S7). In addition to it, Facebook reels, as reported by S6, provide news information about the current situation of the country.

Out of 12 participants, 7 shared that they rely on X as a reliable and updated platform for news information. However, other scholars (Johnson & Kaye; 2015; Roslan et al., 2022) have studied the reliance of X (formally Twitter) for news purposes and that social media users tend to rely more on X than Facebook.

Likewise, another participant stated that he partially relies on both platforms, while four students confirmed their reliance on both Facebook and X to get news updates. "I primarily trust and depend on Twitter, as I consider it slightly more authentic compared to other social media sites. I find that Twitter often provides real-time updates" (S8). Participant S10 also agreed that X is a reliable source because users have better understanding of political scenario and news senses. X is a more authentic and credible source as compared to Facebook. The Facebook consumers are mostly non-serious and illiterate people they do not have any political sense and most of the news on Facebook are fake" (S10).

News Verification Strategies

Participants engage in internal and external news authentication processes (Tandoc et al., 2018) as they move for news verification mechanisms. Findings show that participants cross-check the news information present on social media platforms. Interviewee (S9) believes that the structure of news itself can tell whether it is authentic, real or fake. Users rely on checking search engines, such as Google, news websites, official sources, and political personalities social media accounts for news verification. Participant (S1) narrates his experience of news validation on social media platforms as checking "Google and trusted news websites like Dawn, Geo News, and BBC Urdu. I also look at official social media accounts of political parties, leaders, or government institutions. If I still have doubts, I refer to fact-checking platforms like Soch Fact Check for confirmation".

Other participants reported that if they (S4, S5, S8, S11) find any news information suspicious, they recheck it on websites, traditional media outlets, and fact checking platforms. Another way to cross-check news information is to verify by speaking with friends, relevant people or departments (S2, S9). This shows the application of external steps of news verification including interpersonal, intentional, and institutional authentication phases (Tandoc et al., 2018). Participant (S6) narrated his

method for news verification through applying his own news authenticating skills on social media platforms but if failed, he turned towards news channels, trusted websites and lastly, friends and fellows to confirm the story. X hashtags, trends, and comments were also found to authenticate news from X. As narrated,

> If I find news on Facebook then firstly, I will check Twitter trends, then I will google it, and check the news channels and their headlines to verify the news and to get more detailed information. Sometimes I contact my other fellows and friends who would have more detailed information. (S6)

Likewise, another interview subject (S10) noted that "I rely on X for news, not Facebook, and verify authenticity by checking trending hashtags and multiple credible accounts posting the same update" and through "reading comments if others are discussing its authenticity" (S7). Another student commented about his way of news authentication as "my strategy for verifying news involves cross-checking the information with reputable news sources, evaluating the credibility of the source, and looking for corroboration from other sources. I also use fact-checking websites and tools for verification" (S12). None of the participants shared using any online tool for news verification on Facebook and X which is surprising. This may call attention towards urgent need of equipping social media users with more technological and advanced methods of news validation through extensive courses or programs.

Trust and credibility of sources are important factors while participants do news verification. Who is sharing the news and from which platform (verified or unverified account) it is being shared, remains a significant factor to believe in news as real or fake. Findings showed that interviewees rely heavily on source and its credibility while they share news on social media platforms. Interviewees reported that even if the source is trusted and verified, they still prefer to double-check the credibility of verified source. This is called "added layer" of verification. Studies have emphasized that journalists and influencers, or opinion-makers are at the key position to share news as reliable source of information. "The power elite on social media continue to yield significant influence in the spread of information" (Wu, 2024, p.802). If the source is credible and reliable, social media users would tend to trust that source more (Swire et al., 2017). However, the current study determined that media-literate social media users not only

trust credible sources as it is, rather cross-check and verify their news information along with the track record on timelines against sharing fake news. An interviewee endorsed that "I check whether the account is authentic—like a verified journalist, reputable media outlet, or official political organization. I also consider the credibility of the sources, past political reporting, and whether they have a history of unbiased reporting" (S1). Likewise, S2 describes that the characteristics of source should be "trustworthy and credible". Additionally, it should be observed that if the source himself is a reliable journalist (S5, S6), then to his track record of not sharing fake news on his timeline should be examined (S9, S10). Users are aware of trusting and relying on reliable sources of news information on social media platforms. This is because only those sources which possess credibility and share authentic news on social media platforms are consulted and believed by consumers. Another participant (S8) affirmed the stance as,

> For random posts, I typically do not look up the source, but when it comes to news and important updates, I always make sure to recheck the source of the information. I prefer to rely on authentic accounts and credible sources. On Twitter, for instance, I do not trust random accounts. I only believe, consume, and reflect on news that come from well-known and established sources with a reputation for accuracy and reliability.

Furthermore, another participant views (S12) that certain factors should be reflected upon while verifying news that include author's expertise on the subject and news publication date and reputation of the source page/profile where news is published. The findings corroborate with the study (Prakash et al., 2019), describing that social media users authenticate news on two levels, internal and external. Kuchmaner and Wiggins (2021) highlighted the significance of "external audiences for self-authentication process", emphasizing that the feedback from external audiences can reinforce or correct the information. The participants of this study verified news in two steps, internal and external steps. At first, skills should be applied, the credibility of source should be known, and the message structure should be looked at. However, if these are found suspicious, then turn towards external authentication phase and apply interpersonal and institutional steps. Since the participants of the study were media-literate students, they authenticated news on social media through both the authentication mechanisms. Chan (2024) also confirmed that higher levels

of news literacy activate internal act of authentication and develop the ability to identify fake news.

Challenges in Fact-checking

While discussing the news verification mechanisms, participants of the study also shared their personal experiences in the form of challenges they faced during the news verification process. Participants termed the biggest challenge in authenticating news information as propaganda or politically-driven news posts which omit the line between news and opinion. It is observed that "politically-motivated fake news spread quickly and distinguishing between authentic and biased sources can be difficult. "Additionally, the pressure to respond to political developments in real-time often makes thorough verification challenging" (S1). Also, the competition of media organizations is questioned in a manner that they are in a hurry to break the news, which is unverified, aiding in spreading misinformation or unverified news. (S2). Another challenge in verification is the availability of very limited or no online data for social media consumers.

Time is a constant challenge while social media users verify news. This is because fake news and disinformation spread so quickly that, by the time they are fact-checked, the damage has already been done. Gross (2018) revealed that fake news spread 10 times faster than the real news. This is not only due to the bots of algorithms but the role of social media users is also highly critical in sharing fake news on social media platforms.

Another observation surfaced as "we lack credible sources for instant verification" (S7). Interviewees (S3, S4, S11) confirmed that news authentication is a race against time, making the news verification task quite complicated. Interviewee (S12) emphasized on the challenge he faced as "lack of transparency and accountability, and the difficulty of verifying sources and credibility in real-time".

The interviewees being inclined towards investigative journalism reported that media regulation or banning social media platforms are framed as curbing freedom of expression. Social media regulation (S6) in Pakistan and recent PECA act are considered as major challenges in sharing the correct information and expressing openly on Facebook and X. "We cannot share any information about any political party and establishment. Recently updated PECA Act of the government is a tactic to control" (S9).

Motivation to Share News

Since the social media users actively engage in fact-checking the news posts, they also share the news on Facebook and X. Findings also revealed that participants' news sharing practices are not similar in pattern as their motivations to share news information on social media platforms linked with political happenings in the country.

The subjects of this study explained their different motivations to share news information on digital media platforms. Most of the participants agreed that they share the news on social media platforms to inform people about the latest political happenings and government policies (S1, S7, S10, S11, S12). "I share news to inform others, but only after verifying its accuracy typically a couple of times a day" (S4). "Similarly, maintaining their social media circle, followers, and "staying relevant" is another motivation behind sharing news on social media" (S3). Engagement with other social media users is the intention as interviewee (S5) expressed "the basic purpose of posting on social media is to engage with people, listening to their opinions, and giving ours as well". However, some of the participants differed from others, stating that they just observe and take news information from social media platforms rather than sharing posts (S2, S10). For them, consuming news information on social media platforms is just for passing time "I usually do not share news on Twitter and Facebook". Sun and Xie (2024) found that "passing time motivation had the strongest positive relationship with misinformation sharing and trust in information and the socialization motivation had a significant positive effect on misinformation sharing" (p.3). Another subject of the study noted as "Instead, I primarily use these platforms to pass time and stay updated with the latest news and events happening around the world. I prefer to consume information rather than actively contribute to the content" (S8). These findings show that users' motives to consume information on digital media platforms are to gratify their needs". Consuming information present on social media is though, goal oriented (to take information and keeping oneself updated), and passing time (escapism) reflects fulfilling socio-psychological needs (Apuke & Omar, 2021; Sampat & Raj, 2022).

The participants expounded episodic news sharing on digital media platforms rather than generic routine sharing. News sharing on social media increases depending on the situation which may be political in nature, for instance, certain protests or sudden happenings in the country. Interviewee

S6 confirmed that "sharing of posts depends on the situation related to political party, for example if everything is normal then I do not post anything but if something happens like protest of Pakistan Tehreek e Insaaf etc then, I engage actively and post many tweets in a single day" (S6). This shows that online news sharing is influenced by political ideologies and inclinations. It is aligned with the scholars expounding ideological inclination and news sharing factors. Chadwick et al. (2025) argued that "people on the ideological right are more likely than those in the center and on the left to share exaggerated or false news" (p.125). Valenzuela et al. (2019) found that disinformation is amplified by politically-engaged users for a couple of reasons, such as "political goals, rebutting misinformation, deceiving opponents by sharing disinformation, and act like opinion leaders in their circle".

Scholars argued that news verification is a complex phenomenon to understand which involves validation from others for social media users' news verification and sharing. Interviewees confirmed verifying news on digital media platforms before trusting. However, a few participants exhibited distinct patterns of news sharing. Waruwu et al. (2021) confirmed news verification process as collective authentication process elaborating that "individual authentication and social validation are entangled in the context-dependent processing of social news" (p.1).

Conclusion and Recommendations

Proliferation of fake news on social media is a growing challenge (Jennings & Stroud, 2023; Hawkins & Campbell, 2025), exacerbating the issue when social media users were without capabilities (Geeng et al., 2020; Osmundsen et al., 2021) to deal with fake news conundrum. The current study put forth research questions related to news reliance on social media platforms, Facebook, and X, news verification strategies as well as challenges of media-literate post graduate students in Lahore, Pakistan.

The key findings indicated that social media users actively engage in verifying news posts from multiple sources to validate its authenticity. They rely on both the platforms, Facebook and X, for consuming news information. However, participants deemed X as more reliable due to its audience as they are more receptive for serious content.

As AAA model describes the cognitive process of news verification, students in Lahore applied the same mechanism to authenticate news posts

on Facebook and X. Although their digital media literacy skills assist them in news verification, they do not rely on one source or platform to trust the news information as real rather they cross-check and validate news from multiple sources. Firstly, they apply their critical and digital media literacy skills, examine the message structure, source, X trends, popularity, and users commenting on that news. Later, they turn to fellows (including seniors, journalist, teachers, peers), family, and legacy media websites, such as Dawn, Geo, ARY, and other media institutions to confirm the news. If they get a clue from any journalist, they do not stop but check minutely about the track record of source, his history of sharing real or fake news on timeline, and his reputation. Source credibility is not determined solely by the blue tick or verified account; however, a range of other factors are also examined to check the authenticity. Evidence shows that subjects of this study comprised active users and they consciously verified news to avoid disinformation and fake news. Therefore, incidental step of news verification does not work with understudy subjects. The results suggested that participants of this study employed two steps of verification, that is, internal and external steps, to evaluate any news on Facebook and X. Hence, the AAA model functions within the Pakistani context, incorporating an additional layer for rigorous source verification. Participants explained that they cross-check sources from different perspectives even if the source is trusted one. This is because participants possess digital media literacy capabilities and skills.

This study determined that post graduate media students in Lahore face multiple challenges in news verification process. These challenges included propaganda, politically-driven news posts in the form of disinformation, time constraints, and lack of reliable sources for online verification. Micich and Kross (2023) expounded fake news amplification as this is an issue which stems from the algorithmic structure of the social media platforms that incentivize sharing over truthfulness or accuracy. So, the challenge of verifying real news within a short span of time intensifies. The participants exhibited news authentication behavior, however, not all among them shared news on social media platforms. Some of them only observed over-sharing. Those who shared news on social media platforms shared to inform and stay relevant to their communities and followers.

The findings align with the previous research explaining fake news verification a complex phenomenon which involves different individual and

social factors (Aïmeur et al., 2023). There are different approaches to fake news identification (Sharma et al., 2019) named as content-based, social context-based, and hybrid. However, from the psychological perspective, studies have also discussed internal and external steps to discern fake news and disinformation (Edgerly et al., 2020; Gehrke et al., 2024; Tandoc et al., 2018; Zhu et al., 2025). From cognitive aspect of news verification, this research contributed to understand the news verification practices from localized Pakistani context. It also offered in-depth exploration of digital media literacy skills to curb propagation of disinformation and fake news on social media platforms, that is, Facebook and X.

This study examined practices and experiences of media-literate students in Lahore regarding the verification of news on social media platforms and their dynamics. Drawing from the discussion, the study revealed that though participants, active social media users, in Lahore recognize significance and authenticate news on Facebook and X actively, they often face various challenges of time pressures and limited resources for instant verification. Moreover, this calls for specialized and targeted digital and media literacies to equip users in order to combat disinformation and fake news.

Limitations

This research is not without limitations, since the focus was on small group of postgraduate media students in Lahore. The scope of this research limits the generalizability of findings to the wider Pakistani social media landscape. Besides, exploring the practices of social media users without digital media capabilities can also draw more depth into the understudy subject. Future research can incorporate experimental methods to examine real time news authentication behavior on a broader level. Platform-specific verification strategies may also be investigated separately for having holistic news authentication approaches on social media platforms.

Author Contributions

Hafsah Javed: conceptualization; methodology; data curation; formal analysis; validation; visualization; writing – original draft. **Bushrah H. Rahman:** conceptualization; methodology; supervision; writing – review & editing.

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

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