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The Era of Fake News: Students' Exposure, Media Literacy, and Responses

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RESEARCH ARTICLE

Abstract

With the rise of technology, fake news, misinformation, and disinformation have had a significant impact on global society. This is largely due to the widespread use of advanced digital technology and social media platforms, which are particularly attractive to young users. This study examines how Senior High School students in the Humanities and Social Sciences (HUMSS) at Mangaldan National High School develop media literacy and critical thinking in relation to their exposure to disinformation. Findings reveal substantial gaps in the readiness of HUMSS students to critically assess and counter false information, despite the inclusion of media literacy in the national curriculum. This study also outlines differences between fake news, misinformation, and disinformation, while highlighting the role of AI-driven algorithms and influencers in shaping public discourse. Results underscore the urgent need to strengthen media literacy education and critical thinking skills among students, with implications for quality education (SDG 4) and the development of strong institutions (SDG 16).

Keywords: Disinformation; Fake News; Malinformation; Media Literacy; Misinformation

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1 INTRODUCTION

Technology has already transformed social interactions and governance. There is no doubt that it has been beneficial and instrumental in achieving development goals. But it has not only brought benefits. It has also given rise to problems such as the proliferation of fake news and disinformation (Barrett, 2020). With the rise of the popularity of social media platforms such as Facebook, X (formerly Twitter), Instagram, and TikTok, Fake news has become a major problem not only in the Philippines but around the globe (Ong & Cabañes, 2018). Fake news is often used as a tool of disinformation, both for profit and for spreading particular ideologies (Allcott & Gentzkow, 2017). Recent studies from the Ipsos survey have revealed that fake news is a global problem, with its effects spreading, as 86% of online citizens, or four in five, in over 25,000 interviews, believe that fake news has been exposed and can affect them (Simpson, 2019).

Disinformation is not a new phenomenon, but digital technologies have expanded its scope and impact. Social media platforms, search engines, and online news sites have become a breeding ground for the rapid spreading of false information, in which the AI-algorithms favor interaction over credibility (Vosoughi et al., 2018) For the youth who frequently consume digital content, the conduct of the results by Simpson (2019) suggested that misinformation has been woven deep within the cloth of social media, most notably on Facebook gaining two-thirds or 67% of them reporting encountering fake news, while the other common sources of fake news are social media

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platforms like YouTube and television. The majority of them believe that fake news is far more prevalent on the internet and also significantly impacts the political discourse in their country (Simpson, 2019).

According to David (2019), a professor from the University of the Philippines, fake news is categorized into two types: misinformation and disinformation. Misinformation is false information that unintentionally spreads on social media platforms, whereas disinformation is intentionally designed to convince users to believe based on an individual's online perspective. However, misinformation, according to Wardle and Derakhshan (2017), is a piece of genuine information that is shared based on reality with the intent of causing harm to a person, organization, or country. Presented in a way that it invades privacy, risk exposures, or is used to manipulate or damage the reputation of a person or institution, which shows there is a risk of spreading information to the public. According to Arao (2019), one possible reason for this is that the journalist may not have properly gathered all the necessary information from the various sources. He also suggested that journalists must have a good understanding of the issue being reported, drawing on other resources; otherwise, they risk providing incorrect information to the public in an environment that presents an extremely challenging landscape, where separating truth from untruth necessitates strong critical thinking abilities and media literacy.

However, journalist plays a critical role as defenders of the truth and credibility of media, they are trained to verify what is the truth, investigate thoroughly, and adhere to ethics professionally to ensure that the content released from the news is accurate, balanced, and trustworthy in the eyes of the public (Craft et al., 2017) but the journalist themselves had been increasingly becoming targets of online harassment, public distrust, and disinformation campaign, as the rise of influential online figures like bloggers, vloggers, and YouTubers often carried lack of accountability and some content creators shows unintentionally contributes the spread of fake news by sharing verified clams, and shows malinformation for the sake of sensations, clicks or political influences (Tandoc Jr et al., 2018). The Humanities and Social Sciences Strand of Mangaldan National High School aspires to create such competencies, putting its students in a unique position to address these societal issues.

Despite the growing body of literature on fake news and disinformation, some crucial gaps remain that this research aims to address. One of those crucial gaps is the lack of focus on senior high school students, particularly those in the HUMSS strand. Although numerous studies have focused on how disinformation affects the general populace and students at the tertiary level, studies on HUMSS students, particularly, are scarce. HUMSS students are responsible for developing critical thinking and media literacy skills; their ability to spot, analyze, and counter fake news is understudied (Tandoc Jr et al., 2018).

Additionally, there is a lack of empirical data on the effectiveness of media literacy programs in the Philippines, especially in Senior High Schools. Although media literacy has been introduced into the curriculum, there is limited research on whether these initiatives successfully equip the strands with the necessary skills to critically evaluate information. The study aims to analyze existing media literacy efforts and provide evidence-based improvements to enhance their ability to fact-check and critically engage with online content (UNESCO, 2011).

Allcott and Gentzkow (2017) and Fletcher et al. (2018) stated that a restricted definition could consist of merely verifiably incorrect information. Fact-checking capability has the potential to reveal inaccurate news headlines and ascertain their resources, as research on fake news corresponds to the definition, which necessitates a well-defined context as a collection of misleading news and sources to assess the influence of misinformation. One of the challenges in today's society is the rapid spread of incomplete or misleading news, especially on social media. In most cases, early reports are not confirmed, which leads to public anger before the full context is revealed. A recent case in the Philippines highlights this issue. Reports initially claimed that a security guard maltreated an elementary school student selling Sampaguita outside an SM mall. This sparked widespread criticism online, with netizens sympathizing with the vendor. However, upon further investigation, it was discovered that the individual was a 22-year-old woman wearing a school uniform, which significantly altered the public's perception of the incident. This case

highlights the risks of misinformation and the importance of critical thinking when consuming news.

Mendoza (2023) noted that social media has been leveraged by social influencers to construct an electoral brand or create division in pursuit of political interests. For instance, during election campaigns, certain influencers or content creators align themselves with political figures, amplifying social media with partisan narratives to sway public opinion. The 2022 Philippine elections show that social media personalities actively promote specific candidates, using viral content, memes, and misleading information to influence voter perception. Some influencers employ disinformation tactics, such as spreading misleading claims about their opponents or exaggerating the success of candidates they have endorsed politically. The use of digital influence in these strategies underscores the growing impact of social media on shaping political landscapes and voter behavior. The research of Martens et al. (2018) shows that fake news spreads more quickly and widely because Algorithm-driven news distribution platforms have reduced the market entry cost and widened the market for news organizations. The latter becomes algorithm-driven as a result of maximizing its traffic and revenue from advertising.

While the spread of disinformation is well-documented, there is a need for empirical studies on effective strategies to counteract the conditioning effects of extreme exposure to fake news. Understanding how to retrain individuals from different fake news remains a critical area for further research. In June 2024, the UN issued the Global Principles for Information Integrity, emphasizing the need to counter misleading information in order to make progress toward the SDGs (**?**). Since this study aims to unravel the relationship between disinformation and the educational experiences of the HUMSS students of Mangaldan National High School, it is expected that it will contribute to the UN's direction of countering misleading information. Specifically, this study contributes to SDG 4: Quality Education by promoting media and information literacy, which enables students to critically evaluate and verify information before sharing it (UNESCO, 2011). Moreover, it also supports SDG 16: Peace, Justice, and Strong Institutions by investigating how disinformation affects public confidence, democratic institutions, and social cohesion. Relative to this, the study aimed to determine the level of students' exposure to fake news and disinformation, their media literacy skills, and their responsiveness to misleading information. It also aimed to identify which methods students most frequently use to address fake news and disinformation.

This study focuses on the relationship between disinformation and critical thinking skills. It makes it clear that students' views and actions are significantly influenced by their exposure to disinformation and fake news, and presents the relevant theories and concepts that support this study.

Fake news refers to false or misleading information presented as legitimate news, often for political, financial, or entertainment purposes (Tandoc Jr et al., 2018). It mimics real news with manipulated headlines and clickbait (Allcott & Gentzkow, 2017). Disinformation is a more deliberate and strategic form of false information, produced and disseminated to fool or control audiences for political, financial, or ideological purposes (Wardle & Derakhshan, 2017). Unlike fake news, disinformation is deliberately created to disseminate propaganda that aims to alter perceptions, instill anxiety, or foster uncertainty (Lazer et al., 2018). Governments, political groups, and interest organizations frequently use it to influence elections, sow mistrust in institutions, or propagate conspiracies. Similarly, vaccines have been linked to microchips for government tracking, which fuels opposition to vaccination campaigns by instilling fear (Pennycook & Rand, 2019).

Additionally, fake news and disinformation differ mostly in intent and impact. Whereas disinformation is strategic, long-term, and more difficult to refute, fake news may arise from sensationalist journalism or a drive for virality (Farkas & Schou, 2018). Social media algorithms exacerbate this problem further, as platforms sometimes prioritize engagement over credibility, facilitating the rapid spread of disinformation and fake news (Zuckerberg, 2018). Understanding these distinctions is crucial as fake news can be corrected through fact-checking. While disinformation manipulates reality. Combating both requires media literacy and source verification (Vosoughi et al., 2018).

Misinformation, on the other hand, is inaccurate content shared without malicious intent, such as outdated statistics or unfounded health tips (Wardle & Derakhshan, 2017; Southwell et al., 2022), which significantly impacts public trust and societal trust when it is circulated on social media (Loomba et al., 2021). Malinformation, however, uses truthful content to cause harm — the release of confidential data, doxxing, and context stripping of facts to provide fear (Wardle & Derakhshan, 2017; Nemer, 2023). While the information provided in malinformation is accurate, its use for harmful content distinguishes it from other forms of misleading content, both of which require technical solutions and stronger media ethics from influencers and journalists (Tandoc Jr et al., 2018; Craft et al., 2017).

Furthermore, Maslow's theory establishes five human needs: physiological, safety, belonging, esteem, and self-actualization (Maslow, 1943). Disinformation jeopardizes safety and a sense of belonging, impairing critical thinking. Addressing these requirements cultivates hope and media literacy (Kenrick et al., 2010; Tay & Diener, 2011. Teachers play a crucial role in helping students recognize their skills in analyzing information critically and feel empowered in the digital age (Schultz et al., 2015). Disinformation isolates: Media literacy can offset this, increasing cooperation in the fight against disinformation (Diener et al., 1985). HUMSS students' self-actualization can be reached by applying their media literacy and critical thinking to combat information and to help others.

According to Petty and Cacioppo (1986), people process persuasive messages in two ways: centrally and peripherally. Students may interact with misleading information through critical analysis or surface-level cues, such as dramatic headlines. Elaboration may be relatively objective or biased, depending on personal investments, which are part of the factors. However, some standards need to be followed to correct attitudes by determining which standards people use to judge what is right or wrong, given the differences among people surrounding a certain issue (Kohlberg, 1963). Educators can promote central processing through debates, critical thinking tasks, and fact-checking activities to build cognitive defenses against misinformation.

Thus, disinformation poses threats to trust, democracy, and education. A study by Nicolas and Donguiz (2024) found that youth were emotionally influenced by social media during local elections in Sta. Barbara, Pangasinan. For students, the stakes are exceptionally high. As digital natives, they rely extensively on online platforms for information and social contact, making them both targets and carriers of misinformation. Disinformation may block the analytical process by presenting misleading articles as realistic alternatives (Lopez & Torralba, 2018). The best ways to resolve this issue include establishing media and information literacy (MIL) programs. For instance, a UNESCO MIL curriculum teaches students to critically evaluate online content and creates partnerships with organizations that fact-check the media (e.g., Rappler). Simulations and social media role-play help students learn how misinformation spreads.

2 METHODOLOGY

This research utilizes a quantitative research method with a descriptive research design to systematically quantify and examine students' perceptions and reactions to fake news and disinformation. Quantitative research is suitable since it enables the collection of numerical data that can be statistically analyzed, ensuring accuracy and objectivity in identifying trends and relationships. The descriptive research design is particularly suitable for capturing a detailed picture of the participants' experiences without manipulating variables.

The design enables the study to explain the level of exposure of students to fake news, their media literacy competence, and their reactions to misinformation. Since the research does not seek to establish cause-and-effect but to document and analyze what already exists, a descriptive approach ensures that what is discovered are real-to-life experiences and perceptions. This research was conducted at Mangaldan National High School in Mangaldan, Pangasinan, as it is a typical venue for understanding students' perceptions and reactions to disinformation and fake news. Being a public secondary school, it can tap into diverse student populations and is exposed to numerous sources of information, whether through traditional forms or digital technologies.

The academic setting is realistic in terms of the information issues that students are exposed to, thereby making it a suitable location for conducting this study.

Table 1 presents the demographic profile of the respondents, including sex, age, and number. The study population consists of senior high school students in the Grade 12 HUMSS strand, aged 18 and above. A total enumeration sampling technique was employed to ensure fair representation across the sections. This research employed a quantitative descriptive design to measure students' exposure to fake news, their media literacy skills, and their responses to disinformation. Conducted at Mangaldan National High School in Pangasinan, the study involved 25 Grade 12 HUMSS students aged 18 and above. This ensured compliance with Republic of the Philippines No. 6809, which grants individuals of legal age the capacity to consent independently. This law grants individuals the full capacity to make decisions, including participation in academic research, without requiring parental or guardian approval. This criterion ensures all respondents had the legal and ethical capacity to give informed consent following research ethics guidelines set by the National Ethical Guidelines for Health and Health Related Research (National Ethical Guidelines for Health and Health-Related Research (NEGHHR), 2017) and aligned with DepEd Order No. 31, s.2022, which emphasizes the protection of minors in school-based research the study avoided potential ethical issues related to consent, privacy, and data protection, thereby upholding the principle of autonomy and voluntary participation.

Table 1. Demographic Profile of the Respondents

Profile	Frequency	Percentage	Rank
Sex			
Male	10	40	2
Female	12	48	1
LGBTQIA+	3	12	3
Age			
18 years old	18	64	1
19 years old	7	28	2
Above 20 years old	2	8	3

The study utilized a self-structured survey questionnaire. The Likert scale presented in Table 2 was used for statements 1 to 3. Then, rankings from one to fifteen (1-15) were utilized for problem number four. To verify the instrument's credibility and precision, the questionnaire underwent pilot testing to assess both reliability and validity before actual data collection commenced. The pilot test was conducted among ten Grade 12 HUMSS students from a different selection within the same school who were not included in the actual study sample.

This ensured contextual consistency while avoiding data contamination or ethical conflict. 4 - Highly Exposed / Highly Skilled / Highly Responsive I am constantly exposed to fake news and disinformation (7 or more times per week). I am confident in detecting, analyzing, and verifying fake news. I actively and consistently take measures to counter fake news. Reliability tests measure the consistency and reliability of responses, typically using methods such as Cronbach's Alpha to assess internal consistency or test-retest reliability, which evaluates the consistency of the Likert scale. The computed Cronbach's Coefficient was 0.89, indicating high reliability, as values above 0.7 are generally acceptable for social science research (Creswell, 2014).

This means the instrument produced consistent responses across related items, especially in measuring exposure, media literacy, and responses. In terms of validity, the questionnaire was reviewed by three matter experts: one educator specializing in media and information literacy, one educator specializing in public administration, and one thesis adviser with expertise in public administration and quantitative research. Suggestions were made to reword ambiguous questions, simplify technical terms, and organize items by theme for better clarity and logical flow to which

the researcher has carried out. The results of the pilot test confirmed that the instruments were both reliable and valid for use with the target population.

Table 2. Likert Scale with Detailed Descriptions

Scale	Exposure to Fake News & Disinformation (How often do you encounter fake news?)	Media Literacy Skills (How well can you detect and analyze fake news?)	Response to Fake News (How often do you take action against fake news?)
1 - Not at all Exposed / Not at all Skilled / Not at all Responsive	I rarely or never encounter fake news (0–1 time per week).	I have little to no ability to recognize or analyze fake news.	I do not take any action when I encounter fake news.
2 - Slightly Exposed / Slightly Skilled / Slightly Responsive	I occasionally come across fake news (2–3 times per week).	I have some awareness of fake news but struggle to analyze or verify it.	I sometimes take action, but I am not consistent in responding to fake news.
3 - Moderately Exposed / Moderately Skilled / Moderately Responsive	I often encounter fake news across different media platforms (4–6 times per week).	I can identify and analyze fake news in some cases, but I may still be unsure at times.	I frequently take action against fake news but may not always be confident in my response.
4 - Highly Exposed / Highly Skilled / Highly Responsive	I am constantly exposed to fake news and disinformation (7 or more times per week).	I am confident in detecting, analyzing, and verifying fake news.	I actively and consistently take measures to counter fake news.

The participation in the study was entirely voluntary, and the respondents had the right to withdraw at any stage without any consequences. These measures ensure that the research is conducted with integrity, transparency, and respect for all participants. For the first three research questions, concerning the evaluation of students' perception of exposure, literacy, and reacting to fake news and disinformation, the research applied the mean to ascertain the average extent of agreement by the respondents. The mean provided insight into the extent of students' exposure to disinformation, media literacy skills, and responses to fake news, which can be easily interpreted from their perceptions. To determine and measure the responses on the level of students' exposure to fake news and disinformation, the four-point Likert scale was used as shown in Table 3.

Table 3. Likert Scale for The Level of Students' Exposure to Fake News and Disinformation

Numerical Value	Statistical Limit	Descriptive Equivalent	Symbol
4	3.26-4.00	Highly Exposed	HE
3	2.51-3.25	Moderately Exposed	ME
2	1.76-2.50	Slightly Exposed	SE
1	1.00-1.75	Not at all Exposed	NAE

In addition, four-point Likert scale as shown in Table 4 was also utilized in measuring the media

literacy skills of students using descriptions as “not at all skilled, slightly skilled, moderately skilled, and highly skilled”. Lastly, the level of responsiveness of students to fake news and disinformation uses a four-point Likert scale with descriptions as “not at all exposed, slightly exposed, moderately exposed, and highly exposed”, as shown in Table 5.

Table 4. Likert Scale for The Level of Media Literacy Skills of Students

Numerical Value	Statistical Limit	Descriptive Equivalent	Symbol
4	3.26-4.00	Highly Skilled	HS
3	2.51-3.25	Moderately Skilled	MS
2	1.76-2.50	Slightly Skilled	SS
1	1.00-1.75	Not at all Skilled	NAS

The resulting mean scores were then ranked from highest to lowest to determine which strategies were most and least frequently used. In cases where two or more methods received the same mean, they were assigned tied ranks. This descriptive approach provided a clearer, more accessible understanding of students’ strategies than a complex non-parametric test.

Table 5. Likert scale for the level of responsiveness of students to fake news and disinformation

Numerical Value	Statistical Limit	Descriptive Equivalent	Symbol
4	3.26-4.00	Highly Exposed	HE
3	2.51-3.25	Moderately Exposed	ME
2	1.76-2.50	Slightly Exposed	SE
1	1.00-1.75	Not at all Exposed	NAE

3 RESULTS AND DISCUSSIONS

3.1 The Level of Students’ Exposure to Fake News and Disinformation

Table 6 presents the findings about the level of students’ exposure to fake news and disinformation. Among the different indicators, the highest-ranked items were “I encounter fake news on social media” and “I see misleading headlines designed to get clicks, and Twitter or X. which aligned with Ong and Cabañes (2018) who found algorithm- driven content duration in these platforms amplifies the exposure to disinformation, got 3.47, implying that the students are Highly Exposed when they encounter fake news on social media.

The lowest-ranked response was “I encounter clickbait articles that exaggerate or distort information,” with a score of 2.42, implying that they are slightly exposed when encountering clickbait articles on social media. With an overall result of 2.99. The study reveals that the level of students’ exposure to fake news and disinformation is “Moderately Exposed.” These findings suggest that students are frequently exposed to fake news, particularly on social media and messaging apps. As their overall exposure level remains moderate, which aligns with Simpson (2019) study, the dominant medium through which youth are exposed to misinformation is social media, where algorithms prioritize engagement over credibility.

The prevalence of misleading headlines suggests that the students are regularly exposed to manipulated information, which can easily change their views and beliefs. This is consistent with the Elaboration Likelihood Model (Petty & Cacioppo, 1986), where students are most likely to engage with this knowledge via the peripheral route, concentrating on emotional triggers such as dramatic headlines instead of engaging in deep analysis. This indicates that there is a pressing need for educational institutions to incorporate activities and interventions that improve students’

capabilities, such as fact-checking drills, news analysis, and news deconstruction exercises, to help students differentiate credible content from misinformation.

Table 6. The level of students' exposure to fake news and disinformation

Indicators	Weighted Mean	De	Rank
I encounter fake news on social media.	3.47	HE	1.5
I see misleading headlines designed to get clicks	3.47	HE	1.5
I have been exposed to fake news about health, politics, or current events.	3.31	HE	4
I have seen manipulated images or videos used as fake news.	3.10	ME	6
I have received false information through messaging apps like Facebook Messenger or WhatsApp.	3.42	HE	3
I have seen content from fake accounts pretending to be real journalists.	2.84	ME	9.5
I have seen content from fake accounts pretending to be those of real public figures.	2.89	ME	8
I have come across fake news websites designed to look like real news sites.	3.21	ME	5
I have encountered conspiracy theories presented as real news.	2.94	ME	7
I have noticed political propaganda disguised as real news.	2.78	ME	12
I have seen fake news spreading during elections or significant events.	2.84	ME	9.5
I have been exposed to fake celebrity news or hoaxes.	2.68	ME	13
I have seen disinformation targeted at specific groups, such as students or young voters.	2.84	ME	9.5
I have seen AI-generated or deepfake content being shared as real news.	2.63	ME	14
I encounter clickbait articles that exaggerate or distort information.	2.42	SE	15
General Weighted Average	2.99	ME	

3.2 The Level of Media Literacy Skills of Students

Table 7 presents students' media literacy skills, with a General Weighted Mean of 2.84, indicating a level of Moderately Skilled. The highest-rated ability was "I check the source of a news report before believing or passing it on" (mean = 3.04). This supports Isakov (2024), who stressed that competencies in accessing, analyzing, and evaluating media are essential in today's information environment. Other skills rated highly included identifying fake news, distinguishing between credible and non-credible sources, and detecting bias (mean = 3.00). This reflects Bordac (2009)'s argument that media literacy is essential for navigating complex ecosystems. The lowest-rated skill was "I know how to evaluate the credibility of a journalist or writer" (mean = 2.48, Slightly Skilled). This contrasts with Hidayat (2021), who emphasized the importance of critical evaluation skills following the COVID-19 pandemic.

This is not in line with the research of Hidayat (2021), who emphasized that following the COVID-19 pandemic, the need for intense critical thinking and information verification skills among students had greatly increased, and it may be that more intensive media literacy interventions are required. The application of Maslow (1943) explains these findings. Maslow outlined that individuals need to satisfy needs from survival through self-actualization. The Elaboration

Likelihood Model (Petty & Cacioppo, 1986) helps explain that students manage basic skills but struggle with more advanced ones, such as evaluating the credibility of journalistic sources. Disinformation prevents unfulfilled needs of safety and belonging from interfering with critical thinking. This is according to the findings of Kenrick et al. (2010), who determined that high-quality information is paramount in providing healthy and safe choices, and disinformation undermines this ability.

Additionally, trust in sources of information brings about security, whereas disinformation instills fear and uncertainty. This finding is consistent with that of Tay and Diener (2011), who noted that trust can be restored through media literacy programs, in addition to equipping people with the capability to critically analyze media messages. Enhancing students' capability to critically analyze news reports can also promote self-esteem, a crucial aspect of digital empowerment. This is evidenced by the findings of Schultz et al. (2015), which highlighted the essential role of teachers in instilling confidence and critical media competencies among students. Disinformation is likely to isolate individuals by distorting the common reality, undermining social cohesion. This finding is corroborated by Diener et al. (1985), who postulated that promoting collaboration and collective strength is essential in resisting disinformation. Students with sound media literacy competencies and resilient optimism are more likely to fulfill their psychological needs, critically engage with media spaces, and achieve self-actualization, as postulated by Maslow's theory.

In applying the Elaboration Likelihood Model of Persuasion (Petty & Cacioppo, 1986), the findings reveal gaps in students' ability to evaluate the authenticity, authority, or credibility of information based on the journalist or author. The results indicate that while the students exhibit competence in basic literacy skills, such as identifying and verifying information, they also show that they are weaker in performing more advanced skills, such as author credibility and language analysis, as they struggle with deep analytical task to identify journalist credibility or identify opinion-based writing such as factual reporting which shows risk of indicating malinformation and emotionally yet fake information. The students must be equipped with higher-order thinking skills to detect bias and manipulation. These findings may suggest a need for instructions or programs that focus on the dimensions of media literacy.

Table 7. The level of media literacy skills of students

Indicators	Weighted Mean	Description	Rank
I can recognize fake news when I see it.	3	MS	2.5
I can identify a misleading or exaggerated headline.	2.96	MS	5.5
I can distinguish between credible and non-credible news sources.	3	MS	2.5
I can detect bias in news reporting.	3	MS	2.5
I verify the source of a news article before believing or sharing it.	3.04	MS	1
I know how to fact-check information using reliable sources.	2.96	MS	5.5
I can spot an edited or manipulated image in a news story.	2.88	MS	8.5
I can recognize deepfake videos or AI-generated fake content.	2.84	MS	10
I know how to assess the credibility of a journalist or author.	2.48	SS	15
I am aware of how social media algorithms influence the news I see.	2.88	MS	8.5
I understand common strategies used to spread fake news, such as clickbait and misinformation bots.	2.76	MS	12
I can differentiate between satire and real news.	2.80	MS	11
I cross-check news stories with multiple sources before accepting them as true.	2.92	MS	7

I can analyze the language of an article to determine if it is opinion-based rather than factual.	2.56	MS	13
I can determine if a website intentionally spreads false or misleading information.	2.52	MS	14
General Weighted Mean	2.84	MS	

3.3 The Level of Responsiveness of Students to Fake News and Disinformation

Table 8 shows an overall mean of 2.65 (Moderately Responsive). The highest item was "I fact-check information before sharing it" (mean = 3.24). This aligns with the HUMSS strand of Media and Information Literacy (MIL), which emphasizes the responsible use of information and media. Students also moderately discuss news with peers and encourage verification (mean = 2.92). These findings suggest that students are establishing a culture of responsibility and awareness at the personal level.

This aligns with Isakov (2024) research, which highlights that media literacy—encompassing the skills to access, analyze, evaluate, and create media content—is essential for students to navigate the digital world today. It is also in line with DepEd Order No. 35, series of 2017, which supports the integration of media literacy in basic education. The lowest item was "I participate in online or offline debates on media literacy" (mean = 2.16, Slightly Responsive). This finding aligns with Hidayat (2021), who found that even during the pandemic, students hesitated to join debates due to fear of judgment or bullying. These results align with Maslow's Hierarchy of Needs, suggesting that students' reluctance to participate in open debates may stem from unfulfilled safety needs. This suggests the need for safer and supportive environments, as also noted by Buckingham (2019), to encourage collective resilience. Students will shy away from contributing to wider debates on media literacy to avoid risks in their virtual world.

This aligns with Kenrick et al. (2010), who posited that a sense of safety must be established before higher-order social interactions can occur. Student reluctance highlights a critical need to create safer, more supportive online environments where they can confront disinformation freely without fear of intimidation. The need for programmatic activities, such as classroom debate forums, cyber clubs, and collaboration with honorific media outlets, increases all the more. This echoes Buckingham (2019), who asserted that resilience education, such as cyber capacity workshops and community fact-checking campaigns, can indeed significantly support students' confidence and morale in engaging with the struggle against disinformation. Promoting a culture of shared, rather than individual, responsibility to combat false information is an extremely important step towards the construction of well-educated and empowered digital citizens.

The overall literature mainly suggests that media literacy is a key counter-balance to the emerging threats of fake news and disinformation. Following Potter (2018), who believed that critical thinking about information, determining source credibility, and avoiding fake news are basic skills acquired through media literacy. Koltay (2011) also shares this stance, asserting that media literacy education fosters resistance and critical thinking, particularly for students pursuing courses such as Humanities and Social Sciences (HUMSS), where the management of accurate information is crucial. Community-based fact-checking and integral media literacy efforts enable students to participate actively in fact-checking and debunking misinformation. This is also consistent with Buckingham (2019), who emphasized the importance of collaborative media literacy activities in fostering a wiser and more resilient generation well-equipped to navigate the increasingly complex information environment. Resilience training, as well as digital literacy workshops, not only teach technical competencies but also enable students to build critical habits of mind necessary for sustained informed decision-making. Education is well-positioned to equip students with the skills to handle such challenges. This resonates with Lopez and Torralba (2018), who noted that integrating media and information literacy into the curriculum allows learners to analyze sources, recognize bias, and distinguish between valid information and misinformation.

Besides imparting technical skills, education is optimistic because it renews the learning spaces

where learners see and imagine a better world and strive to achieve it. Wardle and Derakhshan (2017) supports such an argument as they show through their findings that good learning cultures, such as enabling argumentation, beginning group projects, and encouraging active participation, engage students' capabilities for critical thought and civic action. The finding that pupils are not engaging in active discussion around media literacy rebuts the view that personal critical thinking automatically amounts to communal civic activity. This implies that education must extend beyond the development of individual skills and focus on fostering community and shared digital responsibility. As Isakov (2024) argued, the development of individual and collective capacity for critical and ethical judgment of media is central to cultivating a robust, informed citizenry that will be resistant to the impact of fake news and disinformation lobbying. Thus, while the findings indicate positive trends towards individual media literacy among students, they also indicate troubling gaps in collective action and shared participation. Such gaps will need to be bridged with safer online spaces.

Table 8. Level of responsiveness of students to fake news and disinformation

Indicators	Weighted Mean	Description	Rank
I fact-check information before sharing it.	3.24	MR	1
I ignore or avoid engaging with suspicious news content.	2.84	MR	4
I inform my friends or family when they share fake news.	2.72	MR	6.5
I report fake news posts on social media.	2.36	SR	13
I discuss the news with others to verify its authenticity.	2.92	MR	2.5
I unfollow or block sources that frequently share fake news.	2.72	MR	6.5
I use fact-checking tools or websites when I suspect misinformation.	2.48	SR	10.5
I share verified sources to correct misinformation.	2.48	SR	10.5
I help educate others about how to spot fake news.	2.68	MR	8
I adjust my social media settings to limit exposure to misinformation.	2.56	MR	9
I confidently explain to others why a news article is fake or misleading.	2.60	MR	8.5
I participate in online or offline discussions about media literacy.	2.16	SR	15
I question the credibility of news before forming an opinion.	2.80	MR	5
I encourage others to verify news before sharing it.	2.92	MR	2.5
I actively engage in campaigns or initiatives that promote digital literacy and fight misinformation.	2.32	SR	14
General Weighted Mean	2.65	MR	

3.4 Frequently Used Methods by Students in Addressing Fake News and Disinformation

Figure 1 shows the most frequently used methods: fact-checking before sharing, cross-referencing sources, and educating others. These reflect verification and peer learning, consistent with Nicolas

and Donguiz (2024), who observed the local elections in Sta. Barbara, Pangasinan, the students actively engaged in verifying posts before sharing and discussing them with peers to avoid spreading misleading content. Less common were skepticism toward viral content and recognizing bias, which suggests weaker vigilance. This is concerning, as Dowse and Bachmann (2022) argue that resisting disinformation requires the early identification of manipulative content, not just post-exposure correction.

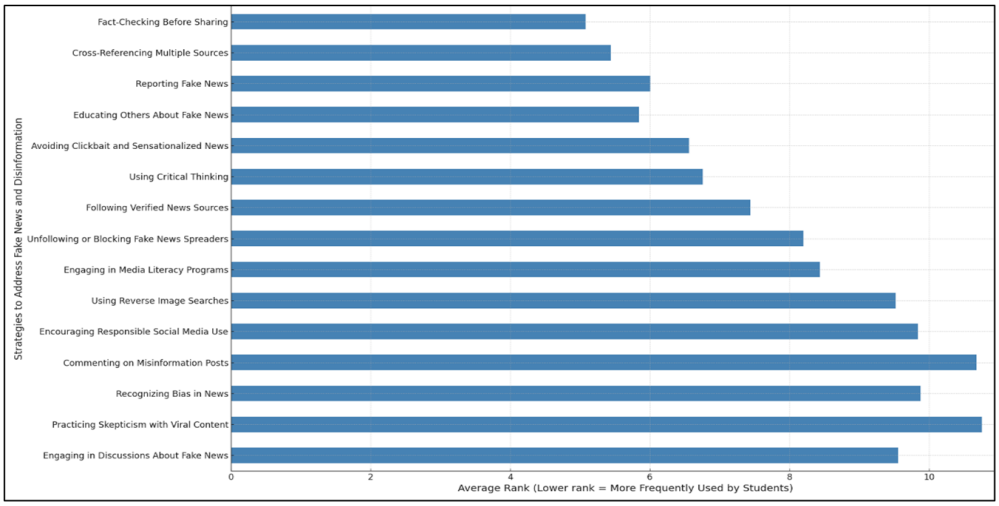

Figure 1. Strategies to Address Fake News and Disinformation

Their study confirms that youth in the Philippines, particularly in local communities, rely on validation and social collaboration to navigate disinformation, especially during sensitive periods like elections. Stray (2019) position emphasizes the importance of factual confrontation and aggressive correction, which aligns with the respondents' use of verification strategies. In addition, lower mean ranks in "Practicing Skepticism with Viral Content," "Commenting on Misinformation Posts," and "Recognizing Bias in Fake News" suggest that more vigilant, reflective, or passive habits are less prevalent. This was also supported by Butts et al. (2023), who speculated that mass-level interventions and grand education campaigns are just as essential as targeted operations. It echoes that even if fact-checking is imperative, there is still a deficiency in developing media literacy and community initiatives that foster greater resistance to manipulation.

The research also aligns with nationwide initiatives, such as GMA Network's "Panata Kontra-Fake News" campaign, which aims to combat the growing risk of disinformation through collaborative efforts with media outlets, academia, and the government. The campaign objectives reflect public recognition, as indicated by the Social Weather Stations (Social Weather Stations, 2021), which discovered that 67% of Filipinos view fake news as a serious problem. This is also echoed by Stray (2019), who emphasized that multi-level, community-level measures — education, platform adjustments, and social interventions — are needed, not single measures, to properly counter disinformation. Granted, the lower reliance on skepticism and acknowledgment of bias among participants withholds the complex countermeasures that Arce (2024) argued must be tailored to the context and specially designed to counter tactics like leaking, lying, seeding, and smearing.

Arce (2024) contends that different types of disinformation attacks exploit distinct vulnerabilities and require a more comprehensive and multifaceted defense than mere fact-checking and peer education. Additionally, the biased preferences identified in the study partially undermine the "kill chain" model proposed by Dowse and Bachmann (2022), suggesting that identification and strategic disruption of disinformation can occur at various points. If learners primarily value only post-exposure controls (fact-checking when they view a post) and overlook proactive skepticism or early bias detection, it suggests a failure of upstream disruption, as advocated by the kill chain strategy.

In addition, the focus on peer verification and education aligns with the overall academic view

that educational campaigns rank among the strongest countermeasures. Butts et al. (2023) found, similarly, that education-induced increases in public skepticism and changes in public opinion are key to making society more critical, educable, and less prone to disinformation.

Therefore, whereas preferred practices among students align with widely accepted best practices in skepticism and peer learning, the limited application of skepticism and bias detection reveals areas of critical weakness that must be addressed. To profoundly cultivate a resistant and informed public, even greater attention should be paid to critical media literacy, training in skepticism, and proactive strategies for engagement beyond fact-checking.

4 CONCLUSION

The following conclusions are drawn based on the study's results: The students were found to be moderately exposed to fake news, particularly through social media platforms and messaging apps. Despite most of them encountering disinformation frequently, certain kinds, such as deep fakes and AI-generated content, remain less recognizable. The students exhibited moderate proficiency in media literacy skills. While they demonstrated the ability to identify fake news and verify sources, they showed lesser abilities in judging author credibility and distinguishing between opinion and factual reporting. The students also demonstrated a typically proactive mindset in addressing disinformation, with fact-checking and validating news as common practices. However, engagement in media literacy campaigns or organized activities remained limited, indicating a gap in participatory responses to disinformation. The most often used strategies to address fake news were individual efforts, such as fact-checking before sharing, cross-referencing multiple sources, and educating friends, while collective or system-level responses, such as reporting fake news or adjusting social media settings, were less frequently adopted.

5 RECOMMENDATIONS

The Department of Education may integrate more comprehensive media and information literacy curricula, with a focus on advanced skills such as source verification, author legitimacy, and spotting skewed narratives. Practical activities, such as analyzing news articles and role-playing as fact-checkers, can be done. Schools may arrange regular campaigns, forums, and student-led projects to foster initiatives against fake news. Community awareness drives and partnerships with media groups can enable students to connect more meaningfully. Seminars and workshops may be conducted to teach students how to report fake news, modify privacy settings, and interact responsibly with viral content. Embedding digital ethics in courses helps promote safer online conduct. Training for educators and guardians may be provided to help them guide the development of critical thinking and responsible habits. It is strongly recommended that future researchers explore the long-term impact of media literacy training, explore the broader scope of information disorder by understanding the public's understanding not only of fake news but also of related phenomena such as media bias, misinformation, disinformation, and malinformation, each of which plays a critical role in shaping public perception and discourse as these concepts represent distinct yet interconnected aspects within each other. Further studies may investigate how students recognize, interpret, and respond to misinformation, disinformation, malinformation, and media bias, as this would contribute to a more comprehensive understanding of media literacy among students and could offer insights into the socio-cultural factors that affect vulnerability to and management of information disorder.

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