



Truth or Trick? Understanding Students’ Perceptions of Digital Deception

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Abstract

Review Article

This study examined Senior High School students’ perceptions of digital deception in Santiago City, focusing on their awareness, experiences, attitudes, and behaviors, as well as how these vary by age, sex, grade level, academic strand, and social media use. A descriptive research design was employed, with data gathered from selected respondents through a structured Likert scale questionnaire using simple random sampling. The results revealed that students demonstrated a high level of awareness and frequent experiences with digital deception, including exposure to fake news, manipulated media, and AI-generated content. They also exhibited positive attitudes and responsible behaviors, such as verifying information, checking sources, comparing multiple references, and reading full content before sharing. The findings further showed significant differences in awareness and experiences when grouped according to age, grade level, academic strand, and social media exposure. Attitudes significantly differed based on grade level, academic strand, and social media use, while behaviors significantly differed based on age and grade level. However, sex did not show any significant differences across all variables, indicating that male and female students have similar levels of perception and response toward digital deception. Overall, the study concludes that students’ understanding of and responses to digital deception are influenced more by developmental and academic factors than by gender. Despite high awareness, continued exposure to misleading information highlights the need to strengthen digital literacy education. The study recommends integrating media and information literacy programs across all grade levels to enhance critical thinking, fact-checking skills, and responsible online behavior, thereby equipping students to effectively navigate the challenges of the digital information environment.

Keywords: Digital deception, media literacy, fake news, senior high school students, awareness, digital behavior.

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Introduction

Public discourse in the digital age is increasingly threatened by the rapid spread of misinformation facilitated by emerging technologies.

Digital deception—encompassing fake news, AI-generated videos, and manipulated media—has become more pervasive as technological tools grow more sophisticated. While digital platforms enhance communication and information access, they also



create opportunities for the production and dissemination of deceptive content, posing significant challenges to information integrity, particularly among students. Recent studies indicate that learners are frequently exposed to AI-generated misinformation and exhibit varying capacities to critically evaluate such content (Cea & Sánchez-Macías). Moreover, deception techniques have evolved into highly sophisticated, AI-driven forms, making detection more complex and less accessible to ordinary users (Singh & Dhumane; Shawky El Mokadem, 2023).

Adolescents, in particular, encounter cognitive and developmental challenges that limit their ability to detect misinformation effectively, especially when media literacy skills are insufficient (Oliveira et al.). Psychological dimensions further complicate this issue, as emotional responses and personal biases significantly influence how individuals interpret and accept online information (Adeeb & Mirhoseini). These factors highlight the need to examine how students process, evaluate, and respond to digital deception within an increasingly information-saturated environment. Supporting this concern, studies reveal that manipulated images and videos are now widespread and often require advanced forensic techniques for detection, suggesting that exposure to deceptive media is a common experience among users (Ferreira et al., 2021). Additionally, Senior High School students are frequent users of artificial intelligence tools, increasing both their opportunities for learning and their vulnerability to misleading or fabricated content (Brigola, 2025).

In response to these challenges, this study investigates the perception of digital deception among Senior High School students in Santiago City. It focuses on key demographic and behavioral variables, including age, sex, grade level, academic strand, and daily time spent on social media. The study specifically examines students’ awareness, experiences, attitudes, and behaviors in relation to misleading online content. In terms of awareness, it assesses how students identify and respond to fake news, misinformation, and AI-generated media such as videos and images. In terms of experience, it explores students’ encounters with deceptive or suspicious online content, including instances where initially credible information was later found to be false.

Methodology

A descriptive research design was utilized in this study. Selected Senior High School students from Santiago City participated in the research. To select the respondents, simple random sampling was employed. The instrument used in this study was a structured questionnaire, carefully designed to align with the research objectives. Likert scales were used, allowing the researcher to gather comprehensive information on the students’ knowledge, awareness, attitudes, and experiences relevant to the study. To uphold ethical standards, data collection was properly coordinated with school administrators. The questionnaire ensured the confidentiality of all responses and emphasized that participation was entirely voluntary.

Results and Discussions

Table 1. Demographic Profile of the Respondents.

Profile	Particulars	Frequency	Percent
Sex	Male	107	33.23
	Female	215	66.77
Age	16 years old	78	24.23
	17 years old	169	52.48

	18 years old or older	75	23.29
Grade Level	Grade 11	135	41.93
	Grade 12	187	58.07
Academic Strand	ABM	56	17.39
	STEM or TVL	45	13.98
	HUMMS	221	68.63
Average Time of Daily Social Media Use	2 hours or less	52	16.15
	3 - 4 hours	88	27.33
	5 - 6 hours	75	23.29
	More than 6 hours	107	33.23

n = 322

Table 1 presents the demographic profile of the 322 respondents, revealing patterns that are significant to understanding adolescent learning and behavior. Female students comprise the majority (66.77%) compared to males (33.23%), reflecting gendered participation trends commonly observed in educational contexts. The respondents are predominantly 17 years old (52.48%) and enrolled in Grade 12 (58.07%), indicating that the sample largely represents mid- to late adolescents approaching critical academic transitions. Additionally, the dominance of the HUMSS strand (68.63%) suggests a strong orientation toward the social sciences and humanities.

Social media engagement among respondents is notably high, with 33.23% reporting usage exceeding six hours per day. This finding aligns with existing research highlighting increased digital exposure and engagement among adolescents (Twenge & Campbell, 2018; Anderson & Jiang, 2018). Furthermore, demographic variables, particularly gender, have been shown to influence

patterns of online behavior and interaction with digital content (Kirwan, 2024).

These findings underscore the need for targeted instructional strategies that account for demographic differences, strand orientation, and the pervasive role of social media in students' lives. Integrating digital literacy and self-regulation skills into the curriculum is essential to promote balanced media consumption and strengthen academic engagement. This is supported by studies emphasizing the critical role of media and visual literacy in navigating digital environments where misinformation is prevalent (Ramos Ruiz, 2023). Moreover, differentiated instructional approaches are necessary to enhance students' critical evaluation skills and capacity to identify misleading information (Almenar et al., 2021). Consistent with this, prior research highlights that detecting manipulated images and videos requires careful analysis and verification techniques, reinforcing the importance of equipping students with advanced evaluative competencies (Imaging, 2021; Ferreira et al., 2021).

Table 2. Mean Perception of Respondents' Awareness and Experience Toward Digital Deception.

Awareness Toward Digital Deception	Mean	Description
1. I am aware that misinformation and fake news exist online.	3.66	Strongly Agree
2. I know that images, videos, and audio can be digitally manipulated.	3.50	Strongly Agree
3. I know that AI can generate fake articles, images, and videos.	3.61	Strongly Agree

4. I am aware of signs that indicate misleading or deceptive posts.	3.41	Strongly Agree
Experience Toward Digital Deception		
1. I encountered posts online that seem misleading or suspicious.	3.36	Strongly Agree
2. I have seen news that turned out to be false.	3.41	Strongly Agree
3. My friends or classmates share questionable or misleading information.	3.14	Strongly Agree
4. I have come across AI-generated images, videos, or posts.	3.38	Strongly Agree
Grand Mean	3.43	Strongly Agree

Table 2 indicates that respondents demonstrate a high level of awareness and experience regarding digital deception, as reflected in the overall grand mean of 3.43 (Strongly Agree). Students exhibit strong recognition of the prevalence of misinformation (M = 3.66) and the capacity of digital and AI technologies to manipulate content (M = 3.50–3.61). They also show awareness of common indicators of deceptive posts (M = 3.41), suggesting a foundational understanding of how misinformation manifests in online environments.

In terms of experience, respondents report frequent exposure to misleading content (M = 3.36–3.41), including encounters with AI-generated materials (M = 3.38), as well as observing peers sharing questionable information (M = 3.14). These findings align with studies indicating that students—particularly active social media users—are regularly exposed to fake news and consequently develop

varying levels of trust in online information (Duong & Tran, 2024). Moreover, the widespread nature of misinformation in the digital age has contributed to increased public awareness of fake news, although exposure remains persistent (Hylkema, 2021).

Overall, the results suggest that while learners possess a high level of awareness of digital deception, their continued exposure highlights the limitations of awareness alone in mitigating susceptibility. This underscores the need to strengthen digital and media literacy education by integrating critical evaluation skills and promoting responsible information-sharing practices. Prior research supports this direction, emphasizing that awareness does not necessarily translate into resistance to misinformation without the support of analytical and reflective competencies (Guess et al., 2020; Pennycook & Rand, 2019).

Table 3. Mean Perception of Respondents’ Attitude and Behavior toward Digital Deception

Attitude Toward Digital Deception	Mean	Description
1. Digital deception is a serious issue affecting students today.	3.51	Strongly Agree
2. Fake news can strongly influence beliefs and decisions.	3.54	Strongly Agree
3. AI-generated fake content is becoming harder to detect.	3.42	Strongly Agree
4. Schools should teach media and information literacy to prevent misinformation.	3.57	Strongly Agree
Behavior Toward Digital Deception		

1. I verify information before sharing it.	3.63	Strongly Agree
2. I check the source of online content before believing it.	3.60	Strongly Agree
3. I compare information from multiple sources.	3.46	Strongly Agree
4. I read full articles instead of reacting only to headlines.	3.43	Strongly Agree
Grand Mean	3.52	Strongly Agree

Table 3 shows that respondents exhibit highly positive attitudes and responsible behaviors toward digital deception, as indicated by the grand mean of 3.52 (Strongly Agree). Students strongly acknowledge digital deception as a serious concern (M = 3.51) and recognize the significant influence of fake news on beliefs and decision-making processes (M = 3.54). They also agree that AI-generated content is increasingly difficult to detect (M = 3.42) and emphasize the importance of integrating media and information literacy into the school curriculum (M = 3.57), reflecting a heightened level of critical awareness.

These findings are supported by existing literature, which demonstrates that misinformation significantly shapes individuals' beliefs, attitudes, and decision-making, particularly within social media environments (Lin & Chen, 2024). The widespread dissemination of fake news on platforms such as Facebook increases users' exposure to misleading information, thereby heightening the likelihood of acceptance and its subsequent impact on judgment and decision-making (Guess et al., 2020).

In terms of behavior, respondents report actively engaging in critical evaluation practices, including verifying information (M = 3.63), checking sources (M = 3.60), comparing multiple sources (M = 3.46), and reading beyond headlines (M = 3.43). These results suggest that students are not only aware of digital deception but are also applying practical strategies to mitigate its effects. Such behaviors indicate the development of essential evaluative competencies associated with digital literacy.

However, despite these positive attitudes and practices, sustained and structured reinforcement remains necessary. Continuous integration of critical thinking and digital literacy instruction is vital to ensure that these competencies are maintained and further developed in response to the evolving nature of online misinformation (Pennycook & Rand, 2019; Guess et al., 2020). In this context, Media and Information Literacy (MIL) plays a crucial role by equipping learners with the skills needed to critically access, analyze, evaluate, and utilize information from diverse digital sources (Thapa, 2024).

Table 4. Significant Difference in the Mean Perception of Respondents' Awareness toward Digital Deception when they are grouped by Profile.

Components	Profile Variables	t	P-value	Decision
Awareness toward digital deception	Age	5.585 ^{ac}	.005*	Reject Ho
	Sex	0.121	.904	Fail to reject Ho
	Grade level	-4.217	< .001*	Reject Ho
	Academic strand	11.061 ^{acbc}	< .001*	Reject Ho
	Exposure to social media	8.588 ^{acbd}	< .001*	Reject Ho
	Age	3.235 ^{ac}	.042*	Reject Ho

Experience towards digital deception	Sex	1.180	.239	Fail to reject Ho
	Grade level	-3.195	.002*	Reject Ho
	Academic strand	10.483 ^{abbc}	< .001*	Reject Ho
	Exposure to social media	5.712 ^{ad}	< .001*	Reject Ho
Attitude towards digital deception	Age	2.777	.066	Fail to reject Ho
	Sex	-0.867	.387	Fail to reject Ho
	Grade level	-2.875	.004*	Reject Ho
	Academic strand	4.644 ^{bc}	.012*	Reject Ho
	Exposure to social media	4.955 ^{ad}	.003*	Reject Ho
Behavior towards digital deception	Age	5.898 ^{ab}	.003*	Reject Ho
	Sex	-1.424	.156	Fail to reject Ho
	Grade level	-2.910	.004*	Reject Ho
	Academic strand	1.889	.157	Fail to reject Ho
	Exposure to social media	2.408	.069	Fail to reject Ho

Table 4 presents the significant differences in respondents’ perceptions of digital deception when grouped according to selected profile variables.

For awareness, significant differences are observed across age ($p = .005$), grade level ($p < .001$), academic strand ($p < .001$), and exposure to social media ($p < .001$). These findings indicate that students’ understanding of digital deception is shaped by their developmental stage, academic orientation, and level of digital engagement. Variations in exposure to AI tools and online content contribute to differences in awareness, as students’ familiarity with digital environments influences their capacity to recognize deceptive information (Brigola, 2025). In contrast, sex ($p = .904$) shows no significant difference, suggesting that awareness is relatively consistent across genders. This supports prior research indicating that perceptions of fake news vary more across age groups and generational contexts than by gender (Trninić et al., 2022).

In terms of experience, age ($p = .042$), grade level ($p = .002$), academic strand ($p < .001$), and exposure to social media ($p < .001$) also yield significant differences. This implies that students’ encounters with misleading or deceptive content

vary depending on their academic background and level of digital exposure. Learners with greater engagement in digital platforms or specialized academic training are more likely to encounter and recognize AI-generated or manipulated content (Shu et al., 2021). Again, sex ($p = .239$) does not significantly influence experience. These findings align with studies emphasizing that individual differences—such as prior exposure and cognitive engagement—affect the frequency and nature of encounters with misinformation (Lutzke et al., 2019), as well as the role of social media usage patterns in shaping digital experiences (Raganta et al., 2021).

For attitude, only grade level ($p = .004$), academic strand ($p = .012$), and exposure to social media ($p = .003$) show significant differences, while age and sex remain non-significant. This suggests that students’ perspectives toward digital deception are influenced more by their academic environment and media exposure than by inherent demographic characteristics. This finding is consistent with literature indicating that attitudes toward digital information are shaped by educational background,

prior knowledge, and exposure to digital technologies (Ng et al., 2021).

Regarding behavior, significant differences are found in age ($p = .003$) and grade level ($p = .004$), indicating that maturity and educational level influence how students respond to digital deception. However, sex, academic strand, and exposure to social media do not significantly affect behavior. This suggests that behavioral responses are more closely linked to cognitive development and analytical capacity rather than contextual or demographic variables. Supporting this, prior research highlights that responses to misinformation are strongly influenced by analytical thinking and attention to accuracy (Pennycook & Rand, 2021).

Overall, these findings underscore the importance of contextualized and differentiated media literacy interventions. Students' perceptions and responses to digital deception are shaped by a combination of developmental, academic, and digital exposure factors, while gender appears to have minimal influence. Although Senior High School students demonstrate high levels of awareness, experience, positive attitudes, and responsible behaviors, their continued exposure to misleading content indicates that awareness alone is insufficient to mitigate the risks of digital deception.

Thus, strengthening Media and Information Literacy (MIL) remains essential to bridge the gap between awareness and consistent critical practice. Effective MIL education equips learners with the skills necessary to critically evaluate information and navigate complex digital environments (Goodman & Ord, 2024).

Future research may expand this study by including larger and more diverse samples across different regions to enhance generalizability. Longitudinal studies are also recommended to examine how students' perceptions of digital deception evolve over time. Additionally, future investigations may focus on the effectiveness of specific media literacy interventions in improving critical thinking and evaluative skills. Incorporating qualitative approaches, such as interviews or focus group discussions, can provide deeper insights into

students' lived experiences and decision-making processes. Finally, examining the roles of teachers, parents, and institutional policies may further enrich understanding of the factors shaping students' digital behaviors.

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