



2026

設計 × Ai 應用 × USR

新通識教育

國際學術研討會

Design × AI Applications × USR × New General
Education International Conference

論文集

Conference Proceedings

2026年4月29日-30日(週三至週四)

April 29-30, 2026 (Wed. – Thur.)

E-Book

指導單位



教育部

主辦單位



大葉大學

共同主辦單位



越南順化科學大學 |



國立虎尾科技大學 |



國立臺灣海洋大學

合作單位



日本東京學藝大學 |



韓國清州教育大學 |



泰國清邁皇家大學

教育部通識教育跨校資源整合及流通計畫

CONSUMPTION BEHAVIORS OF GENERATION ALPHA.....	1253
90.Ho Dung, Ho Thi Dieu Trang / ARTIFICIAL INTELLIGENCE IN JOURNALISTIC PRACTICE: USAGE PATTERNS AND ETHICAL CONSIDERATIONS AMONG YOUNG JOURNALISTS IN CENTRAL VIETNAM.....	1267
91.Lê Mai Hương Trà, Lê Xuân Mạnh / POSITIONING STRATEGIES FOR TELEVISION GAME SHOWS IN VIETNAM’S DIGITAL ENVIRONMENT TOWARD REACHING GENERATION ALPHA	1281
92. Võ Anh Vũ / Algorithmic Governance, Content Personalization, and the Paradox of Algorithmic Autonomy in Generation Alpha’s Media Use	1297
93. Trần Thị Phương Nhung, Hoàng Trần Tú Phương / AI-Generated Visual Misinformation in Disaster Information Crises: The Role of Journalism in Strengthening Generation Z’s Detection Capacity (Evidence from Journalism Students in Hue, Vietnam)	1309
94. Le Thai Phuong, Vo Huu Hoa, Le Phuoc Hoai Bao, Nguyen Tran Thuy An / FOMO AND CONCERNS: HOW DUAL PSYCHOLOGY SHAPES PARENTAL ACCEPTANCE OF AI FOR ELEMENTARY STUDENTS.....	1328
95.Do Thi Hong Hanh / FROM ONLINE BEHAVIOR TO CLINICAL RISK: THE LINK BETWEEN DIGITAL DEVICE USE INTENSITY AND MENTAL AND PHYSICAL HEALTH IN ALPHA CHILDREN.....	1349
96.Nguyen Mai Phuong, Tran Minh Duc / REKINDLING PASSION FOR THU DAU MOT LACQUER ART AMONG GENERATION ALPHA IN HO CHI MINH CITY: FROM TRADITIONAL HERITAGE TO THE DIGITAL MINDSET.....	1364
編輯委員等資訊 (Editorial Board and Related Information)	1369
主辦單位、共同主辦單位及合作單位 (Organizer, Co-organizers, and Collaborating Organizations)	1370

AI-Generated Visual Misinformation in Disaster Information Crises: The Role of Journalism in Strengthening Generation Z's Detection Capacity (Evidence from Journalism Students in Hue, Vietnam)

Trần Thị Phương Nhung¹, Hoàng Trần Tú Phương²

Abstract

In Vietnam, typhoons, floods, and other extreme weather events frequently generate not only environmental emergencies but also intense information flows. During such periods, misinformation and disinformation can circulate rapidly and shape public perceptions. Recent advances in artificial intelligence have increased the realism of misleading visual content, such as fabricated images, edited videos, and deepfakes. These developments complicate audiences' ability to distinguish verified information from manipulated or misleading material. The flood-related events in Vietnam in 2025 illustrated the growing complexity of this information environment.

In this context, Generation Z increasingly encounters news through digital platforms, where algorithmic recommendation systems and emotionally engaging content may amplify misleading information. This study examines the role of journalism in supporting audiences' capacity to recognize and evaluate misinformation during disaster-related information crises.

To address this issue, the research employs a two-phase design. First, a framing analysis identifies dominant patterns in journalistic coverage addressing AI-related misinformation in disaster contexts. Second, a survey of Journalism and Communication students in Hue City investigates media exposure, trust in journalistic sources, and self-reported verification practices associated with misinformation detection. The findings provide empirical evidence on how journalistic content can contribute to strengthening misinformation detection capacity among Generation Z in digital media environments.

Keywords: AI-generated misinformation, deepfakes, disaster information crisis, fact-checking, digital news literacy, Generation Z, journalism

¹ Vice Dean, Faculty of Journalism and Communication, Hue University of Sciences, Vietnam.

² Lecturer, Faculty of Communication Technology, FPT University, Vietnam.

1. Introduction

In Vietnam, natural disasters often generate not only environmental emergencies but also surges of information across digital media. As physical risks increase, the demand for timely updates rises, while public anxiety and the rapid circulation of content on digital networks create favorable conditions for the spread of misinformation and disinformation. Such information can distort public understanding and may reduce the effectiveness of disaster response efforts. The situation became more complex in 2025 as advances in generative AI enabled the production of highly realistic visual content, including fabricated images, deepfakes, and manipulated video clips. These materials blur the boundary between authentic and misleading information. The flood and storm events in Vietnam in 2025 illustrate how visually persuasive false content can emerge during disaster-related information crises.

However, few studies have examined how journalistic coverage can support audiences in recognizing AI-generated misinformation during disaster-related information crises.

Generation Z is a particularly relevant group in this context. This generation increasingly consumes news through digital platforms and is therefore exposed to algorithmically curated information environments. In such environments, emotionally engaging or sensational content can be amplified, especially during moments of crisis. In this study, journalism is approached as a social institution that shapes public information standards and supports the development of verification skills during disaster-related information crises.

To address these issues, the study adopts a two-phase research design. The first phase examines journalistic coverage of AI-related misinformation in disaster contexts through framing analysis. The second phase surveys Journalism and Communication students in Hue, focusing on four dimensions of reception: exposure, trust, comprehension, and application in relation to the ability to recognize false information.

The study aims to identify dominant frames in journalistic coverage and examine how exposure to such content relates to the capacity to detect AI-related misinformation. The research questions focus on three issues: which frames are emphasized in journalistic reporting, how students receive and interpret these messages, and which factors are most strongly associated with misinformation detection capacity. The study is expected to contribute empirical evidence on the role of journalism in addressing information crises and to suggest communication practices that may strengthen verification skills among Generation Z.

2. Theoretical Background and Research Model

2.1 Conceptual Framework and Theoretical Foundations

In this study, a disaster information crisis is understood as a situation in which information pollution emerges alongside a natural disaster. In such circumstances, unverified information and misleading content circulate rapidly on digital platforms, potentially distorting public understanding and influencing collective decision-making. Drawing on the concept of information disorder, the study distinguishes three forms of problematic information: misinformation, which refers to false information shared without intent to cause harm; disinformation, which refers to false information deliberately created or distributed to cause harm; and malinformation, which refers to genuine information presented out of context or used in ways that may cause harm. This framework allows for a more precise description of information risks than the broad and often ambiguous label of “fake news” (Wardle & Derakhshan, 2017, p. 5).

The current media environment has increased the complexity of such crises due to the rapid development of AI-generated synthetic media, including fabricated images, deepfakes, and manipulated video clips. Because these materials often appear highly realistic, audiences may find it difficult to distinguish authentic information from manipulated content through ordinary visual judgment. In situations of urgency, such content may also trigger emotionally driven sharing and accelerate the spread of misleading information (Chesney & Citron, 2019).

Building on this conceptual foundation, the study draws on three related strands of theory.

First, framing theory helps explain how journalistic coverage highlights particular aspects of AI-related misinformation in disaster contexts. Through this approach, frames such as risk warnings, source standardization, explanations of AI technologies, and guidance for verification can be identified and coded (Entman, 1993).

Second, research on news media literacy and verification practices provides a basis for conceptualizing misinformation detection capacity as a multidimensional ability. It includes knowledge of visual or contextual indicators, a sense of control in evaluating information, verification behaviors, and, when feasible, the capacity to distinguish authentic from misleading content in practical situations (Maksl et al., 2015).

Third, scholarship on algorithmic distribution and emotion-driven diffusion helps explain the vulnerability of Generation Z within platform-based news environments. Algorithms shape

which information is presented to users as relevant, while emotionally engaging content is more likely to be amplified and widely circulated. During disaster situations, these dynamics can increase exposure to misleading information (Gillespie, 2014; Bakshy et al., 2015; Brady et al., 2017).

These perspectives link journalistic framing in Phase 1 to audience reception and detection capacity in Phase 2. They also help clarify the practical implications for journalism when responding to disaster-related information crises involving AI-generated content.

The theoretical framework is summarized through a conceptual map that illustrates three groups of factors that contribute to disaster-related information crises in digital environments. These include information disorder in the form of mis-, dis-, and mal-information; AI-generated synthetic content characterized by its visual realism; and the vulnerability of platform environments shaped by algorithmic distribution and emotion-driven interaction dynamics. Within this framework, journalism is understood to perform four key roles: warning about potential risks, standardizing information through authoritative sources, explaining the mechanisms and implications of AI-generated content, and providing guidance on verification practices (Wardle & Derakhshan, 2017, p. 5; Gillespie, 2014, p. 167; Brady et al., 2017, pp. 7313-7318).

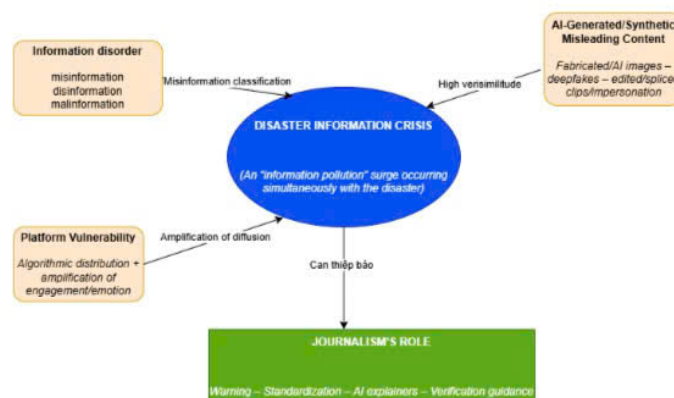


Figure 1. Conceptual map of disaster information crises in the context of AI-generated images and videos on digital platforms.

Based on this conceptual framework and theoretical background, the next section presents the research model. The study adopts a two-phase mixed-method design that links journalistic framing of AI-generated images and videos in disaster coverage with patterns of reception,

verification practices, and misinformation detection capacity among Generation Z in platform-based media environments.

2.2 Research Model

The research design follows a two-phase sequential mixed-method approach to connect journalistic content framing in the first phase with audience reception, verification practices, and misinformation detection capacity among Generation Z in the second phase. In the first phase, a framing analysis is conducted to identify the prominent elements in journalistic coverage of AI-generated images and videos in disaster contexts. This phase also develops a content-based indicator that reflects the extent to which journalistic reporting supports the public in verifying information, for example through forms of verification-oriented guidance.

The second phase consists of a survey of Journalism and Communication students in Hue. The survey examines how respondents encounter and interpret the framing characteristics identified in the first phase and assesses their ability to recognize misleading information through a sequence that can be summarized as understanding, checking, and selecting information. The overall model is situated within the information disorder framework, which distinguishes among misinformation, disinformation, and malinformation rather than relying on the broader label of fake news (Wardle & Derakhshan, 2017).

2.2.1 Key Variables in the Model

Independent Variables: Reception of Journalistic Frames

Based on the findings from the first phase, the model focuses on two types of frame reception to be tested in the survey phase.

- (1) Reception of verification-evidence frames, referring to the extent to which respondents encounter journalistic content that emphasizes verification, authoritative sources, contextual evidence, and practical guidance for checking information.
- (2) Reception of warning-emotion frames, referring to the extent to which respondents encounter content that highlights urgency, risk, and emotional tension, often accompanied by vivid details that trigger emotional responses but provide limited guidance for verification.

Dependent Variable: Detection Capacity

The capacity to recognize misleading disaster-related information involving AI is conceptualized as a multidimensional ability. It includes knowledge of visual or contextual indicators, perceived confidence or control in evaluating information, verification behavior, and, where possible, performance in distinguishing authentic from misleading content through short assessment tasks (Maksl et al., 2015).

Contextual Variables: Platform Conditions

The model also includes two contextual factors that may increase vulnerability in platform-based news environments. The first is algorithm awareness or reliance on algorithmic distribution. The second is a tendency toward emotion-driven sharing. Both factors can shape the type of information users encounter and influence the speed at which content spreads through digital networks (Gillespie, 2014; Bakshy et al., 2015; Brady et al., 2017).

2.2.2 Expected Relationships

The model assumes that greater exposure to verification-evidence frames is positively associated with knowledge and verification practices, which in turn are expected to strengthen the ability to detect misleading information. In contrast, exposure to warning-emotion frames may increase the likelihood of emotion-driven sharing and weaken the tendency to pause and verify information during moments of urgency.

At the same time, algorithm awareness and emotion-driven sharing are treated as contextual conditions that may strengthen or weaken these relationships. These factors influence both the patterns of exposure to information and the mechanisms through which information circulates during disaster situations.

3. Research Methods

The research design follows a sequential mixed-method approach consisting of two phases.

The first phase involves a framing analysis of journalistic content addressing AI-generated images and videos in disaster contexts. This phase identifies dominant frames and assesses the extent to which journalistic coverage incorporates elements that support verification practices. The sample for this phase includes 26 content units published during the peak period from 21 November to 7 December 2025. These materials were drawn from two Vietnamese news outlets: *Tuổi Trẻ Online* (13 items) and *VTV.vn* (13 items, including both articles and video

pages). Frames were coded using a binary scheme (0 or 1) based on a predefined codebook. In addition, an index labeled VerEdu_4 was constructed to reflect the degree to which journalistic content incorporates verification-oriented guidance. The index is calculated as $\text{VerEdu}_4 = \text{VERIFEDU} (0 - 2) + \text{F_STDINFO} (0 \text{ or } 1) + \text{F_ACTION} (0 \text{ or } 1)$, producing a scale ranging from 0 to 4.

The second phase consists of a survey of 238 students majoring in Journalism and Communication in Hue City. The survey examines patterns of reception and the ability to recognize misleading information in platform-based media environments. The questionnaire includes several scales measuring exposure to relevant content, trust in journalistic sources, comprehension, application of verification practices, algorithm awareness, emotion-driven sharing, and perceived newsroom support. The internal consistency of these scales was assessed using Cronbach's alpha.

To avoid overlap with items measuring verification behavior, the study uses an index labeled Det_Know as a knowledge-based indicator of detection capacity. This index is calculated as the average of two items: awareness of indicators that may signal manipulated images or videos, and knowledge of where or how to verify information through official sources. Factors associated with Det_Know are examined using ordinary least squares regression. The model includes four main predictors: Exposure, Trust, Algorithm awareness, and Emotion-sharing. Control variables include year of study, prior experience with disasters, and the primary source of news consumption. The latter variable is coded using dummy variables, with online news outlets serving as the reference category.

4. Research Findings

4.1 Results of Phase 1: Framing analysis

The first phase analyzed 26 content units published during the peak period from 21 November to 7 December 2025 (*Tuổi Trẻ Online* n = 13; *VTV.vn* n = 13, including articles and video pages). The analysis indicates that the most frequent frames were warning-risk (23/26; 88.5%) and responsibility-sanction (20/26; 76.9%). These were followed by source standardization or reference to official sources (18/26; 69.2%) and debunking or correction (16/26; 61.5%). Frames associated with practical verification guidance, such as calls for action (reporting or notifying relevant authorities) and explanations of AI or deepfake technologies,

appeared in 11 out of 26 cases (42.3%). This suggests that elements supporting verification practices are present but not consistently integrated across journalistic outputs.

To quantify the level of verification-oriented guidance, the study uses the VerEdu_4 index (0 – 4), calculated as $\text{VerEdu}_4 = \text{VERIFEDU} (0 - 2) + \text{F_STDINFO} (0 \text{ or } 1) + \text{F_ACTION} (0 \text{ or } 1)$. Across the entire sample, the mean VerEdu_4 score is 1.99 out of 4. Only 30.8% of the units (8/26) reached a score of $\text{VerEdu}_4 \geq 3$, indicating that verification-oriented guidance has not yet become a consistent feature of disaster-related reporting.

A comparison by outlet and format suggests that *VTV* tends to incorporate more explicit verification guidance than *Tuổi Trẻ*. For *VTV* articles, the mean score is 2.18, with 36.4% (4/11) reaching $\text{VerEdu}_4 \geq 3$. In contrast, *Tuổi Trẻ* articles show a mean score of 1.77, with 23.1% (3/13) reaching this threshold. The group of *VTV* video pages records a mean score of 2.00, with 50.0% (1/2) reaching $\text{VerEdu}_4 \geq 3$, although the number of items in this category is small. These differences suggest that *VTV* coverage more frequently provides references to authoritative sources or practical guidance for verification, whereas *Tuổi Trẻ* tends to emphasize the risks associated with emotion-driven dissemination and the broader social or legal consequences of misinformation.

Three case studies from the same period illustrate the contrast between warning-oriented coverage and verification-oriented guidance.

Tuổi Trẻ Online (23 November 2025), the article “Why AI-generated flood misinformation easily bypasses social media control mechanisms?” highlights the interaction between AI-generated content and platform labeling systems. The article points to the limitations of warning labels and the visual realism of AI-generated content. However, the section providing practical guidance for verification could be more concise and structured in order to support readers’ verification skills.

VTV.vn (23 November 2025), the article “Fake news during disaster season: Do not let misinformation intensify the storm” frames misinformation as a form of “double disaster”. The article also introduces several reference points that readers can use to verify information, reflecting a stronger combination of warning and practical guidance.

Tuổi Trẻ Online (2 December 2025), the article “Fake images and emotional traps during flood season” emphasizes the emotional traps created when images or videos are presented out

of context. Such content can trigger rapid sharing, suggesting that emotional responses may reduce the pause normally associated with verification.

These cases suggest that journalistic coverage tends to emphasize warning and source standardization. At the same time, verification-oriented guidance appears to be most effective when presented as concise, actionable instructions accompanied by clear reference points for cross-checking information. This approach is particularly important in the case of visually convincing AI-generated content that can be amplified through interaction and emotional engagement on digital platforms.

Table 1. VerEdu_4 index by outlet and format (N = 26)

Outlet	Format	n	VerEdu_4 (Mean)	VerEdu_4 ≥ 3, n (%)
Tuổi Trẻ Online	Article	13	1.77	3 (23.1)
VTV.vn	Article	11	2.18	4 (36.4)
VTV.vn	Clip/video page	2	2.00	1 (50.0)
Total		26	1.99	8 (30.8)

Note. VerEdu_4 is calculated according to the formula described above. Higher scores indicate that the content combines explanations or guidance related to verification with references to authoritative sources and/or calls for action such as reporting suspicious content. These elements may help readers move from awareness to verification behavior.

4.2 Results of Phase 2: Survey of Journalism and Communication Students in Hue City (N = 238)

4.2.1 Sample Characteristics and Information Environment

The survey yielded 238 valid responses. Female respondents accounted for 65.1% (155/238) and male respondents 34.9% (83/238). The distribution by year of study was as follows: first year 37.8% (90/238), second year 25.6% (61/238), third year 21.0% (50/238), and

fourth year 15.5% (37/238). A total of 64.7% (154/238) reported that their families had previously been affected by floods or storms.

Regarding the main source of news consumption (single choice), short video platforms accounted for 47.9% (114/238), followed by online news outlets at 25.2% (60/238), news fan pages at 18.5% (44/238), and other sources at 8.4% (20/238). These results indicate that the information environment of the respondents is strongly platform based, particularly in relation to short video formats.

Table 2. Sample characteristics and main sources of information (N = 238)

Variable	Category	n	%
Gender	Female	155	65.1
	Male	83	34.9
Year of study	Year 1	90	37.8
	Year 2	61	25.6
	Year 3	50	21.0
	Year 4	37	15.5
Disaster experience	Family affected by floods or storms (Yes)	154	64.7
Main source of news	Short video platforms	114	47.9
	Online news outlets	60	25.2
	News fan pages	44	18.5
	Other	20	8.4

4.2.2 Exposure, Trust, and Verification Behavior: Key Indicators

Responses to individual survey items indicate high levels of exposure to disaster-related information and strong trust in the role of journalism. At the same time, the results reveal a

noticeable gap related to emotion-driven sharing. Specifically, 95.4% of respondents agreed or strongly agreed that they follow news more closely during disasters, and 93.3% reported that they often encounter disaster-related images or videos on social media before seeing information from official sources.

Indicators related to trust in journalism are also consistently high. A total of 92.9% reported trusting mainstream journalism more than personal sources, 93.7% viewed journalism as a channel that standardizes information, and 94.1% stated that they would revise their judgments when journalists publish corrections.

Awareness of algorithmic distribution and emotional diffusion is similarly prominent. About 92.4% indicated that they understand that feeds and recommendations are shaped by algorithms, while 95.0% believed that shocking or emotionally charged content spreads more rapidly during disasters.

In terms of behavior, 84.0% reported checking at least two sources before sharing information. A total of 77.7% indicated that they know how to check the origin of images. In addition, 90.8% reported having stopped sharing content when they suspected it might be false, and 78.2% had reported suspicious content.

However, emotion-driven sharing appears strongly polarized. Half of the respondents (50.0%) acknowledged that they had shared content because of emotional reactions before verifying it, while 46.6% disagreed or strongly disagreed with this statement.

Table 3. Key indicators of exposure, trust, and verification (N = 238)

Indicator	Percentage agreeing or strongly agreeing (%)
Follow news more during disasters	95.4
Encounter disaster images or videos on social media before official sources	93.3
Trust mainstream journalism more than personal sources	92.9
View journalism as a channel that standardizes information	93.7

Willing to revise judgments when journalists issue corrections	94.1
Understand that feeds and recommendations are shaped by algorithms	92.4
Believe shocking or emotional content spreads faster during disasters	95.0
Check at least two sources before sharing	84.0
Know how to check the origin of images	77.7
Have stopped sharing content suspected to be false	90.8
Have reported suspicious or misleading content	78.2
Have shared content due to emotions before verification	50.0
Disagree with sharing content due to emotions before verification	46.6

4.2.3 Reliability and Descriptive Statistics of Measurement Scales

The scales were calculated as the mean of their items using a five point Likert scale and assessed using Cronbach's alpha. Some scales show moderate reliability because they contain a small number of items and because of possible ceiling effects, where average scores approach the upper end of the scale. These issues should be considered when interpreting the results.

Table 4. Reliability (Cronbach's alpha) and descriptive statistics of scales (N = 238)

Scale	Number of items	α	M	SD
Exposure (EXP)	2	0.23	4.74	0.61
Trust (TRU)	3	0.60	4.73	0.60

Comprehension (COM)	3	0.53	4.57	0.75
Application (APP)	4	0.64	4.35	0.91
Algorithm awareness (ALG)	2	0.41	4.72	0.65
Emotion-sharing (EMS)	1	—	3.07	1.88
Newsroom support (SUP)	4	0.76	4.79	0.51

Note. Five-point Likert scale; M = mean; SD = standard deviation.

4.2.4 Factors associated with knowledge-based detection capacity (Det_Know)

To avoid overlap with items measuring verification behavior, the study uses an index labeled Det_Know as an indicator of knowledge-based detection capacity. This index is calculated as the average of two items: awareness of signs that may indicate manipulated images or videos, and knowledge of where or how to verify information through official sources.

An ordinary least squares regression analysis was conducted while controlling for year of study, disaster experience, and the main source of news consumption coded as dummy variables with online news outlets as the reference category. The regression results indicate that Exposure ($b = 0.321$; $p = 0.002$) and Algorithm awareness ($b = 0.292$; $p = 0.002$) are positively associated with Det_Know. Trust shows a positive tendency but does not reach the 0.05 significance threshold ($b = 0.174$; $p = 0.097$). Emotion-sharing is not significant in the model ($p = 0.438$).

For the variable representing the main source of news consumption, only the category “Other” shows a significantly lower value compared with online news outlets ($b = -0.440$; $p = 0.047$). The model explains $R^2 = 0.219$ of the variance in Det_Know.

Table 5. Regression predicting Det_Know (N = 238)

Predictor	b	SE	p
Exposure	0.321	0.102	0.002
Trust	0.174	0.105	0.097

Algorithm awareness	0.292	0.094	0.002
Emotion-sharing	-0.023	0.030	0.438
Year of study	-0.100	0.052	0.056
Disaster experience (yes)	0.101	0.117	0.385
News fan page (vs. online news)	-0.181	0.175	0.299
Other (vs. online news)	-0.440	0.220	0.047
Short video platforms (vs. online news)	-0.129	0.135	0.342

Note. The variable “main source of news” is coded using dummy variables with online news outlets as the reference category. b represents unstandardized coefficients and SE indicates the standard error. $R^2 = 0.219$.

Overall, the results of Phase 2 indicate three main points. First, respondents report very high levels of exposure to disaster-related information and strong trust in the role of journalism as a source of information standardization. Second, awareness of algorithmic distribution emerges as a significant predictor of knowledge-based detection capacity. Third, emotion-driven sharing appears polarized, suggesting a gap between awareness and behavior during moments of urgency. These findings will be considered alongside the results of Phase 1, particularly the distribution of frames and the VerEdu_4 index, in order to clarify the implications for strengthening verification-oriented guidance in journalistic content. This issue is particularly important in platform environments where algorithms and emotional engagement can amplify misleading information.

5. Discussion

5.1 Linking Phase 1 and Phase 2: Warning and Standardization Dominate, While Verification Guidance Has Not Yet Become a Routine Element

The results of Phase 1 indicate that during the disaster information peak in 2025, journalistic coverage was dominated by warning-risk frames and responsibility-sanction frames. In contrast, the incorporation of verification-oriented guidance remained limited. The VerEdu_4 index shows a mean value of 1.99 out of 4, and only 30.8% of the analyzed items

reached a score of $\text{VerEdu}_4 \geq 3$. These findings indicate that journalism remains effective in signaling risks and reinforcing the authority of official information sources. However, the practical components that translate warnings into concrete verification procedures, such as checklists, tools, or reference hubs, are not consistently integrated into reporting, especially in short formats or rapidly updated news items.

The findings from Phase 2 reinforce this imbalance. Respondents reported very high expectations regarding journalism's role in supporting verification capacity, with the Newsroom support scale reaching a mean value of 4.79. In other words, respondents do not only expect journalism to provide accurate information; they also expect it to help them act correctly by offering practical guidance, quick verification cues, short checklists of three to five steps, and coordination with platform mechanisms. If warnings are not translated into simple and repeatable verification procedures with clear reference points, the development of detection capacity is unlikely to be sustained in platform-based information environments.

5.2 Algorithms as a Key Explanatory Factor: Algorithm Awareness and Knowledge-Based Detection Capacity

The regression results show that algorithm awareness is positively associated with Det_Know ($b = 0.292$; $p = 0.002$; $R^2 = 0.219$), even after controlling for year of study, disaster experience, and the main source of information. This finding suggests that algorithms should not be understood merely as contextual conditions but as mechanisms that shape information risks. When users understand that the News Feed or For You page is personalized and optimized for engagement, they may become more cautious about content that is algorithmically amplified during moments of urgency.

The findings indicate that journalism may need to incorporate elements of platform literacy when guiding audiences. This includes explaining why certain information appears in a user's feed, why particular content spreads rapidly, and what signals may indicate that information is being amplified through emotional or moralized framing. Such guidance may be particularly relevant for Generation Z, whose news consumption often takes place through short video platforms.

5.3 The “Emotional Gap”: High Awareness Does Not Necessarily Translate Into Behavior in Urgent Situations

Despite high levels of trust in journalism, strong awareness of algorithmic distribution, and high rates of self-reported verification practices, the indicator related to emotion-driven sharing shows a marked polarization. In the survey, 50.0% of respondents acknowledged that they had shared content because of emotional reactions before verifying it. This pattern suggests that during disasters, emotional responses may override established verification habits even among students trained in journalism and communication.

For this reason, general advice such as “verify before sharing” may not be sufficient when presented on its own. Instead, journalistic content may need to incorporate behavioral prompts directly within articles or video segments. These prompts may include short verification checklists consisting of three to five steps, clear reference points for cross-checking information, and reminders encouraging users to pause before sharing content. Such mechanisms may be especially important in short-form media formats, where emotional engagement often drives interaction.

5.4 Measurement Considerations: Ceiling Effects and Social Desirability Bias

Several scales in the survey show mean values close to the upper limit of the measurement range, particularly EXP, TRU, ALG, and SUP. This pattern suggests possible ceiling effects and, in some cases, social desirability bias in the self-reported responses of students majoring in journalism and communication. In addition, some scales include a limited number of items, resulting in Cronbach’s alpha values in the low to moderate range and reducing the capacity of the scales to differentiate between respondents.

Future research could strengthen the measurement design by incorporating more performance-based indicators. For example, scenario-based mini-tests using authentic and manipulated images or videos from disaster contexts could assess participants’ ability to detect misinformation in practice rather than relying solely on self-reported responses. Expanding the scales related to algorithm awareness and emotion-driven sharing to include at least three items may also improve measurement reliability.

6. Recommendations for Journalism in AI-Related Disaster Information Crises

Based on the findings from the two research phases, this study suggests that journalism should shift its focus from general warning and reminder messages toward more practical forms

of verification guidance. Such guidance should take the form of concise and repeatable modules that are adapted to platform-based information environments.

First, news organizations could standardize a short “rapid verification” segment as a regular component of disaster-related reporting. This segment may appear at the end of an article or in the final 10-15 seconds of a video clip. It could present a simple procedure consisting of three to five steps that audiences can easily remember and apply in practice. Examples include checking the original source, verifying the location and time of the content, comparing information with official channels, pausing before sharing, and reporting suspicious content to relevant authorities.

Second, explanations of AI-generated content should be accompanied by observable cues and quick comparison techniques. These may include tracing the origin of images, checking contextual information, and comparing the content with official announcements. Such guidance may help readers move beyond general awareness of risk and toward practical verification skills.

Third, in terms of format, content could be produced in paired forms. Short videos or infographics can be designed for distribution on short video platforms, while longer articles or frequently asked question sections can be published on online news sites. Linking these formats allows audiences to move from quick exposure to more detailed verification when necessary.

Finally, during periods of crisis, closer coordination between news organizations and digital platforms may be beneficial. Measures may include prioritizing the visibility of authoritative sources, increasing the prominence of corrections, attaching warning labels where appropriate, and reducing the algorithmic recommendation of questionable content. Such measures may help limit the amplification of misleading information driven by interaction and emotional engagement.

7. Limitations

This study has several limitations. First, the survey sample is limited to Journalism and Communication students in Hue and relies on self-reported responses. Second, ceiling effects and the small number of items in some measurement scales may affect reliability and reduce the capacity to differentiate between respondents. Third, the framing analysis in Phase I focuses on only two news outlets, *Tuổi Trẻ Online* and *VTV.vn*, during the peak period in 2025. Fourth,

the study does not directly measure algorithmic distribution in real time or the influence of user interactions such as comments or content re-uploads.

8. Conclusion

In disaster-related information crises involving AI-generated images and videos, journalism currently performs a strong role in warning audiences and reinforcing the authority of official information sources. However, the integration of verification-oriented guidance, such as checklists, tools, or verification hubs, has not yet become a consistent feature of journalistic coverage, as indicated in Phase 1 of the study.

From the audience perspective, respondents report high levels of exposure to disaster-related information and strong trust in journalism. Notably, awareness of algorithmic distribution is positively associated with knowledge-based detection capacity, as shown in Phase 2. At the same time, the results reveal an emotional gap between awareness and behavior. This suggests that effective interventions should address the intersection of journalistic framing, algorithmic distribution, and the emotional dynamics of information diffusion. In this context, journalism can serve as a capacity-building institution by standardizing concise and repeatable verification modules that are adapted to platform-based media environments.

References

- Bakshy, E., Messing, S., & Adamic, L. A. (2015). Exposure to ideologically diverse news and opinion on Facebook. *Science*, 348(6239), 1130 – 1132.
<https://doi.org/10.1126/science.aaa1160>
- Brady, W. J., Wills, J. A., Jost, J. T., Tucker, J. A., & Van Bavel, J. J. (2017). Emotion shapes the diffusion of moralized content in social networks. *Proceedings of the National Academy of Sciences*, 114(28), 7313–7318. <https://doi.org/10.1073/pnas.1618923114>
- Chesney, B., & Citron, D. K. (2019). Deepfakes: A looming challenge for privacy, democracy, and national security. *California Law Review*, 107, 1753–1819.
<https://doi.org/10.15779/Z38RV0D15J>
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51–58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>

- Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. J. Boczkowski, & K. A. Foot (Eds.), *Media technologies: Essays on communication, materiality, and society* (pp. 167–193). MIT Press.
- Hilberts, S., Govers, M., Petelos, E., & Evers, S. (2025). The impact of misinformation on social media in the context of natural disasters: Narrative review. *JMIR Infodemiology*, 5, e70413. <https://doi.org/10.2196/70413>
- Maksl, A., Ashley, S., & Craft, S. (2015). Measuring news media literacy. *Journal of Media Literacy Education*, 6(3), 29–45. <https://doi.org/10.23860/jmle-6-3-3>
- Tuổi Trẻ. (2025, November 23). Vì sao tin giả về mùa lũ do AI tạo ra dễ dàng vượt qua sự kiểm soát của các trang mạng xã hội? <https://tuoitre.vn/vi-sao-tin-gia-ve-mua-lu-do-ai-tao-ra-de-dang-vuot-qua-su-kiem-soat-cua-cac-trang-mang-xa-hoi-20251123204152775.htm>
- Tuổi Trẻ. (2025, December 2). Hình ảnh giả và những bất cập mùa lũ. <https://tuoitre.vn/hinh-anh-gia-va-nhung-bay-cam-xuc-mua-lu-20251202075441981.htm>
- VTV.vn. (2025, November 23). Tin giả mùa thiên tai: Đừng để fake news thổi bùng thêm bão dữ. <https://vtv.vn/tin-gia-mua-thien-tai-dung-de-fake-news-thoi-bung-them-bao-du-100251123174107035.htm>
- Wardle, C., & Derakhshan, H. (2017). *Information disorder: Toward an interdisciplinary framework for research and policy making*. Council of Europe. <https://edoc.coe.int/en/media/7495-information-disorder-toward-an-interdisciplinary-framework-for-research-and-policy-making.html>
- World Health Organization. (n.d.). Infodemic. <https://www.who.int/health-topics/infodemic>



Guiding Organization



Ministry of Education (Taiwan)

Organizer



Da-Yeh University

Co-Organizers



University of Sciences, Hue University, Vietnam



National Taiwan Formosa University



National Taiwan Ocean University



大村共創：健康福祉設計融合USR計畫



安心葉興百業邁(賣)向全世界USR計畫



循跡里山—八卦台地聚落六級化產業共創USR計畫

Collaborating Institution



Tokyo Gakugei University, Japan



Cheongju National University of Education, Korea



Chiang Mai Rajabhat University, Thailand

E-Book
ISBN : 978-626-93015-1-5



9 786269 301515