



Media frames and cybercrime: Understanding Malaysian online news coverage

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ABSTRACT

The rise of cybercrime, encompassing fraud, harassment, and the dissemination of false information has become a significant national concern in Malaysia. While cybersecurity has been extensively studied, limited attention has been given to the media's role in reporting cybercrime and shaping public perceptions. This study addresses this gap by examining how the Malaysian mainstream online newspapers like *The Star*, *China Press*, and *Harian Metro* frame cybercrime. Guided by the framing theory and employing content analysis as the methodology, the research analysed 254 articles published between 2022 and 2023. It investigated the types of news, sources of information, attribution of responsibility, and utilisation of framing techniques in cybercrime reporting. Findings reveal a predominance of thematic framing, with most articles focusing on prevention and intervention. Government sources dominated the coverage, highlighting a reliance on official narratives but potentially marginalising diverse perspectives. Variations in framing practices among the three newspapers reflect linguistic and cultural influences, with *The Star* emphasising diverse sourcing, *Harian Metro* aligning closely with governmental narratives, and *China Press* focusing on community-centric issues through episodic framing. This research contributes to the understanding of media frames in shaping public awareness and policy discourse on cybercrime in Malaysia. By identifying dominant frames and biases, it offers insights into improving media coverage to foster a more informed and vigilant public. The findings hold practical implications for media practitioners and policymakers aiming to enhance cybersecurity communication strategies.

Keywords: **Cybercrime, media frames, framing theory, content analysis, online news coverage**

INTRODUCTION

Cybercrime has become a critical and growing issue in Malaysia. Statistics from 2021 reveal over 20,000 reported cases, encompassing offences such as online scams, hacking, and identity theft (Muharram et al., 2022). These crimes pose a multifaceted threat, impacting individuals, businesses, and government institutions. The consequences include significant financial losses, exposure of sensitive personal information, and damage to reputation. Addressing this issue requires concerted efforts from both public and private sectors, alongside heightened public vigilance (Khan et al., 2020; Mohamed, 2013; Singh et al., 2021).

The media plays a pivotal role in raising public awareness of cybercrime. Responsible reporting and analysis can help elucidate the complexities of cybercrime, shape public perceptions, and garner support for mitigation initiatives (Hasan et al., 2015; Tan & Abdullah, 2020). In Malaysia, online media continues to serve as a credible and authoritative source of information, adhering to rigorous editorial standards and gatekeeping practices (Henke et al., 2020). By framing cybercrime as a prevalent and pressing issue, media coverage has the potential to influence public attitudes and expectations, as well as inform policy responses (Abdullah & Tan, 2023; Abubakari & Blaszczyk, 2023).

By focusing on Malaysian online newspapers, this study situates its analysis within the unique sociocultural and linguistic context of Malaysia. This approach enables a comprehensive understanding of how factors influence the framing of cybercrime (Tham & Zanuddin, 2012). The study's findings are particularly relevant for Malaysia, where digital connectivity is rapidly increasing, and the risks associated with cybercrime continue to escalate.

This study contributes to the field of communication and media studies by applying the framing theory to examine how Malaysian online newspapers report on cybercrime. The findings provide insights into the role of media in shaping public perceptions of cybercrime, highlighting the biases and limitations of current reporting practices. Practically, this research offers recommendations for media practitioners to enhance their coverage of cybercrime, fostering a more informed and vigilant public. Policymakers can also leverage these findings to design effective communication strategies aimed at mitigating cybercrime.

Despite the critical role of media in this context, existing research has primarily focused on the management and prevention of cybercrime (e.g., Bossler et al., 2019; Leukfeldt et al., 2019). Studies on the way media frames cybercrime in Malaysia presents a critical gap and its implications for public awareness and action. Understanding how Malaysian mainstream online newspapers frame cybercrime is essential for addressing misconceptions, enhancing public awareness, and informing effective media practices (Piper & Connolly, 2022). In particular, by analysing the media coverage of cybercrime, this research aims to uncover the framing techniques employed and their impact on public perceptions and policy discourse. In this context, the following research questions were developed:

RQ1: What are the major frames used by Malaysian online newspapers in their reporting of cybercrime?

RQ2: What are the differences in the cybercrime frames used across different Malaysian online newspapers?

RQ3: What is the potential impact of media framing on public perceptions of cybercrimes?

LITERATURE REVIEW

Cybercrime in Malaysia

Cybercrime represents a rapidly evolving phenomenon that encompasses a diverse array of illegal activities facilitated by networked devices. It has become a pervasive cybersecurity issue worldwide, affecting individuals, businesses, and governments (Wall, 2007). This study conceptualises cybercrime as the malicious use of digital technologies, encompassing activities such as deception, harassment, and the dissemination of false information. Examples include phishing scams, online bullying, fake news campaigns, cryptojacking, deep forgery, and ransomware attacks, which exploit vulnerabilities in emerging technologies (Eira, 2023).

The impacts of cybercrime are far-reaching. For individuals, it often results in financial loss, reputational damage, and psychological trauma. Businesses face data breaches, operational disruptions, and escalating cybersecurity costs, while governments grapple with protecting critical infrastructure and keeping pace with evolving threats (Borwell et al., 2021).

In Malaysia, the rapid pace of digitalisation has created fertile ground for cybercrime. With 92.7% of the population as active internet users, Malaysia boasts a vibrant digital community but also faces heightened cybersecurity risks (Malaysian Communications and Multimedia Commission [MCMC], 2023). The COVID-19 pandemic further accelerated digital transformation in every field, correlating with an increase in cybercrime and security concerns (Muharram et al., 2022).

The Malaysian government has responded to this national concern by allocating over RM73 million in the 2023 budget to strengthen cybersecurity initiatives (Malaysia Kini, 2022b). Measures include investing in advanced infrastructure, implementing Bank Negara Malaysia's (BNM) "kill-switch" policy, and conducting public awareness campaigns such as "Ingat 3 Saat OK" and #JanganKenaScam. These efforts underscore the urgency of addressing cybercrime and reflect a collaborative approach between the government and the tech industry to ensure a secure digital environment (Ismail, 2023).

Media framing and cybercrime reporting

Media framing is a process deliberately employed by the media to highlight particular aspects of an issue while downplaying others, ultimately shaping public perception (Nwakpu et al., 2020). In the context of cybercrime reporting, this process is critical because it determines how the public understands and responds to the complexities of cybercrime. Cybercrime encompasses a range of illegal activities in the digital realm and has evolved in contemporary times to include hacking, online fraud, cyberbullying, and other malicious behaviours that exploit digital vulnerabilities (Phillips et al., 2022). By selecting particular narratives, visuals, and language, the media influences how individuals, organisations, and policymakers perceive and respond to cyber threats (Susánszky et al.,

2022). Consequently, this shaping of perceptions can greatly influence how individuals, organisations and policymakers react to cyber threats, thus influencing preventive measures, responses and policy initiatives.

Online newspapers, such as *The Star*, *China Press*, and *Harian Metro*, are prominent sources of information in the contemporary digital era (Nge et al., 2021). Their reliability is often attributed to strict adherence to editorial standards and meticulous gatekeeping procedures. This review will delve into the editorial practices of online newspapers to understand how these practices contribute to the credibility and authoritative standing of the media in reporting on cybercrime. Understanding the editorial decisions and standards employed by online newspapers is integral to comprehending the nuances of news framing. For instance, the influence of valence framing, where the presentation of information carries a positive or negative tone, has been highlighted in research exploring its impact on the perceived truth in statistics (Lindgren et al., 2022). Hence, people tend to believe in the authenticity of statistical data and reinforce their perception of news. By delving into the editorial practices of online newspapers, this review seeks to elucidate how such framing techniques may be employed in the context of cybercrime reporting, thereby contributing to an enhanced understanding of the broader influence of media on public perception in this critical domain (Vestergaard, 2020).

Theoretical framework: Framing theory

The framing of cybercrimes in the media can significantly impact the public's understanding of these issues and may shape perceptions, attitudes, and responses (Piper & Connolly, 2022). By analysing the frames employed by media outlets, the study seeks to uncover the nuances of media representation and understand how different frames contribute to public perceptions of cybercrime. It also examines how media framing may influence individual behaviour, organisational strategies, and governmental policies related to cyber threats.

The framing theory, a seminal concept in media studies, offers a robust lens through which to understand the construction of news and its influence on shaping public perception (Vreese, 2005). At its core, the framing theory delves into the process by which media outlets select, emphasise, and present information, ultimately shaping the way audiences interpret complex issues like cybercrime. Erving Goffman's groundwork in framing theory highlights the role of "frame" as a cognitive structure that guides individuals in interpreting and organising information. This concept extends to the media, where news content is selectively structured to provide meaning and context to events (Goffman, 1974). Robert Entman defined framing as the "selection of certain aspects of a perceived reality" that subsequently shapes individuals' interpretations and evaluations of that reality (Entman, 1993). This influential definition underscores how media outlets present specific facets of a story while omitting others, influencing audience perceptions.

The framing theory explores how media frames impact audience perceptions, attitudes, and behaviours concerning cybercrime. It investigates the cognitive influence of frames on shaping public opinion and response to cyber-related issues (Iyengar, 1994). The theory encompasses an array of framing devices such as language, visuals, and narrative structures employed by media to convey messages. Additionally, the framing theory delves into the processes involved in framing, examining how journalists, editors, and media organisations select and present information (Tankard, 2001). Methods such

as content analysis and qualitative analysis are well suited to study the media framing of cybercrime in Malaysian online newspapers. These methods provide the necessary tools to explore the complexity of media framing and its implications.

METHODOLOGY

A content analysis was carried out to examine the media frames presented in cybercrime news coverage from January 1, 2022, to December 31, 2023. Content analysis was selected for its strength in systematically evaluating textual data as well as enabling the identification of patterns and themes in media reporting (Neuendorf, 2017).

Three online newspapers were chosen to represent Malaysia's multilingual media landscape, ensuring inclusivity across major language segments. This selection captures diverse linguistic, cultural, and demographic perspectives while addressing the potential biases inherent in single-language studies. It aims to encompass the diverse readerships and perspectives within the Malaysian media landscape. Based on the Reuters Institute Digital News Report 2020 by Newman et al. (2020), the overall weekly online readership of *Harian Metro* (25%) and *The Star* (30%) ranked highest in their respective language segments. Additionally, *China Press* was chosen as it is considered the most popular Chinese-language news portal with the highest rate of website traffic (Similarweb, 2024; FMT Reporters, 2022). However, the findings are limited by the exclusion of other language segments such as Tamil or indigenous-language newspapers, which restricts the generalisability to Malaysia's broader population.

This study assessed the intensity of coverage by quantifying the number and types of news items related to cybercrime, distinguishing between direct news, columns, and letters (Vreese et al., 2006). Additionally, the categories of news sources, including government sector, general public, experts and academicians, private sector, non-governmental organisations (NGOs), and activists, were also assessed.

News articles were selected using the keyword "cybercrime in Malaysia" in each newspaper's respective language via their online archives (Rajaratnam et al., 2020). The selected articles were filtered to exclude duplicates, advertisements, or unrelated content, yielding a final dataset of 254 articles for analysis.

The study examined media framing from two perspectives: framing genres and attribution of responsibility through framing to answer the first and second research question. The current study adapted and modified the codebook developed by Yang (2020) to suit its specific requirements, based on six types of framing genres as follows:

1. **Prevention and Intervention:** Reports encompass efforts undertaken by government bodies, private sectors, cybersecurity, or NGOs in combatting cybercrime.
2. **Prevalence of Cybercrime:** Offers statistics or discussions highlighting the severity and prevalence of cybercrime within society.
3. **Harmful Impact of Cybercrime:** Highlights reports regarding the adverse effects or suffering endured by victims of cybercrime.
4. **Risks of Internet Use:** Focuses on negative consequences stemming from dependency on and utilisation of the Internet.
5. **Laws and Regulations Related to Cybercrime:** Covers cybercrime-related court cases or the enactment of new laws aimed at preventing or penalising cybercrime across countries.

Responsibility attribution was assessed according to the plot or thematic framework (Iyengar, 1996). This study adapted the definitions of episodic and thematic frames as well as identified three liability attribution categories, which are episodic frames, thematic frames, and a combination of the two.

1. Episodic framing focuses on detailed descriptions of cybercrime events with specific attention to individuals, places, and times, attributes deficiencies to individuals, and proposes remedies involving modification of individual behaviour.
2. Thematic framing emphasises trends or societal themes surrounding cybercrime, highlighting the need for intervention at the societal level, involving government policies and societal forces.
3. Episodic and thematic framing narrates a cybercrime incident while contextualising it within a broader narrative that incorporates various factors or themes surrounding cybercrime.

The 254 valid news articles collected from *The Star*, *Harian Metro*, and *China Press* were analysed using a mixed-methods approach. Descriptive statistics, such as frequencies and percentages, was utilised to quantify the coverage intensity and categorise framing elements. Additionally, a qualitative analysis was conducted to interpret the thematic content and framing genres, allowing for a deeper understanding of how cybercrime is represented across the selected newspapers.

Recognising the inherent risk of subjectivity in interpreting content units, a second coder was appointed to ensure reliability and consistency in the data analysis process during the pilot study phase. Holsti's (1969) percent agreement index was used to measure inter-coder reliability, with an initial threshold of 0.70 as the acceptable benchmark. To ensure unbiased treatment, articles from all three newspapers were randomly assigned to the coders. This randomised assignment ensured that each coder analysed content from each newspaper equally, reducing potential bias due to familiarity with specific publications.

RESULTS AND FINDINGS

The study sample consisted of 254 cybercrime-related news articles published in Malaysia over two years, distributed as follows: *The Star* (98 articles, 38.58%), *Harian Metro* (96 articles, 37.80%), and *China Press* (60 articles, 23.62%) (Table 1). *The Star* and *Harian Metro* exhibited a higher coverage intensity compared to *China Press*, suggesting a broader editorial focus on cybercrime. This disparity highlights the potential linguistic and cultural influences on news priorities. *The Star*, as an English-language publication, caters to a more diverse readership, possibly influencing its editorial emphasis on cybercrime to align with global trends and discussions. Conversely, *China Press*'s comparatively lower coverage intensity could reflect either editorial decisions to allocate resources to other pressing issues or cultural factors affecting news framing in Chinese-language publications.

Table 1. Intensity of coverage

Years	<i>The Star</i>	<i>Harian Metro</i>	<i>China Press</i>	Total
2022	51	49	26	126
2023	47	45	34	126

Cybercrime reporting predominantly took the form of straight news (82.68%, 210 articles), followed by columns (13.39%, 34 articles) and letters (3.94%, 10 articles) (Table 2). This reliance on straight news underscores a journalistic preference for factual reporting over interpretative or opinion-driven content. However, columns in *The Star* (14 articles) and *Harian Metro* (16 articles) provide spaces for in-depth analysis, reflecting these newspapers' efforts to contextualise cybercrime issues within broader societal trends. *China Press*'s overwhelming reliance on straight news (91.7%) suggests a more rigid focus on immediate reporting, possibly at the expense of critical discourse. Furthermore, this approach may also limit readers' engagement with discussions on cybercrime prevention, legal frameworks, and societal impacts.

Table 2. Types of news

Type of news	<i>The Star</i>	<i>Harian Metro</i>	<i>China Press</i>	Total
Straight news	78	77	55	210
Columns	14	16	4	34
Letters	6	3	1	10

Government sources dominated cybercrime-related reporting across all newspapers (60.54%, 181 articles), with the private sector (13.38%, 40 articles) and experts/academicians (10.70%, 32 articles) trailing significantly (Table 3). This heavy reliance on government sources reflects a tendency to amplify official narratives, potentially reinforcing a top-down approach to cybersecurity awareness. *The Star*'s relatively balanced use of sources (government: 55%, private sector: 18.33%, experts: 13.33%) demonstrates an effort to integrate diverse perspectives, enhancing the credibility and depth of its reporting. In contrast, *Harian Metro*'s reliance on government sources (72.90%) suggests a government-centric narrative, possibly limiting the inclusion of alternative viewpoints. *China Press*'s notable engagement with NGOs (15.28%) and the general public (12.5%) indicates a community-focused approach.

Table 3. News sources

Sources	<i>The Star</i>	<i>Harian Metro</i>	<i>China Press</i>	Total
Government sector	66	78	37	181
General public	9	1	9	19
Experts and academicians	16	10	6	32
Private sector	22	9	9	40
NGOs and activists	7	9	11	27

Thematic framing is predominant across all three newspapers (81.50%, 207 articles), with episodic framing appearing less frequently (12.99%, 33 articles) (Table 4). Thematic framing contextualises cybercrime within broader societal issues, promoting a comprehensive understanding of systemic vulnerabilities and solutions. *China Press*'s higher reliance on episodic framing (21.67%) suggests a focus on individual incidents, effective in drawing attention, perpetuating sensationalism but hindering deeper public understanding of cybercrime patterns. The thematic emphasis of *The Star* and *Harian Metro* aligns with their role in shaping informed public discourse, though a balanced integration of episodic and thematic framing could enhance reader engagement.

Table 4. Attribution of responsibility

Attribution of responsibility	<i>The Star</i>	<i>Harian Metro</i>	<i>China Press</i>	Total
Episodic framing	10	10	13	33
Thematic framing	83	83	41	207
Episodic and thematic framing	5	3	6	14

Prevention and intervention emerged as the most common theme (35.05%, 156 articles), followed by the prevalence of cybercrime (26.52%, 118 articles) (Table 5). This thematic focus highlights the newspapers' role in supporting governmental and societal efforts to combat cybercrime. By prioritising prevention, the media underscores the importance of proactive measures and public awareness. However, the limited coverage of laws and regulations (9.66%, 43 articles) suggests a gap in emphasising legal frameworks critical to addressing cybercrime effectively. Addressing this gap could enhance public understanding of existing legal protections and improve policies better.

Table 5. News genres

Themes	<i>The Star</i>	<i>Harian Metro</i>	<i>China Press</i>	Total
Prevention and intervention	64	60	32	156
Prevalence of cybercrime	50	44	24	118
Impact of cybercrime	16	16	20	52
Risks of Internet use	21	28	27	76
Laws and regulations related to cybercrime	10	24	9	43

DISCUSSION

Major frames in cybercrime reporting (RQ1)

Malaysian online newspapers—*The Star*, *Harian Metro*, and *China Press*—emphasised prevention and intervention strategies in reporting cybercrime, often citing government sources. This reflects the government's significant focus on combating cybercrime, highlighted by substantial budget allocations in 2023 (MalaysiaKini, 2022b). Anticipating a surge in news reports, the majority of media coverage is likely to pivot towards highlighting the government's preventive and intervention measures in the realm of cybersecurity, as news media is an important tool for the government to disseminate information (Indrawan & Nathanael, 2022). Media coverage is expected to shift towards detailing these efforts, including budget utilisation and the implementation of cybersecurity measures. By disseminating such information, the media shapes public awareness and engagement with government initiatives (Hansen, 2020).

Another key theme is the prevalence of cybercrime. News outlets incorporated data from private sectors, expert opinions, and academic insights to ground their reports in credible, real-world statistics (Lindgren et al., 2022). This approach not only underscores the journalistic tendency to emphasise the prevalence of cyber threats, but also highlights a concerted effort to present a comprehensive and informed narrative to the public (Koch & Peter, 2017). This approach lends authority to their narratives while emphasising the urgency of addressing cyber threats (Strömbäck et al., 2020).

Differences in cybercrime frames (RQ2)

The Star provided a balanced mix of content, with straight news (79.59%) dominating, supplemented by columns (14.29%) and letters (6.12%). Its diverse sources included government (55%), private sector (18.33%), experts/academicians (13.33%), and others. One possible reason is that *The Star* as an English-language newspaper is more likely to access information from the private sector like banking, cybersecurity, data providers, or fin-tech-related organisations, as well as related experts and academicians in the field of cybercrime. Further, English is the most widely used common language for communication, especially in the context of business and academic communities (Rao, 2019). Hence, *The Star* encapsulated a comprehensive view of cyber-related concerns by citing the data from the private sector, and the opinion of experts and academics (Dimitrova & Strömbäck, 2009). Below are some examples of extracts:

Private credit reporting agency CTOS has detected 335,000 pieces of personally identifiable information on the dark web belonging to over 58,000 Malaysian consumers in the last three years. (Yeoh, 2023)

On the rise of online banking fraud. Ubaid Mustafa Qadiri, head of technology risk and cyber security for KPMG in Malaysia: Cybercrime in banking or any other sectors will only continue to grow due to technological changes (including digitalization) and organizational advancements with the introduction of new technology to improve process efficiencies. (*The Star*, 2022)

In contrast, *Harian Metro* featured a higher percentage of columns, driven by its dedicated IT section (#ITMETRO). It heavily relied on government sources (72.90%), aligning with its role as a Malay-language daily focused on national concerns. While this approach ensures authoritative reporting, it may limit diversity in perspectives and reinforce a government-centric narrative (Powell & Self, 2003). This reliance may stem from *Harian Metro*'s status as a prominent Malay-language daily, where Malay is the official and national language of Malaysia. Given its central role in political and government communication, *Harian Metro* might naturally gravitate towards government sources. However, this reliance could limit the diversity of perspectives offered to readers, potentially reinforcing a government-centric narrative that may not fully capture the complexity of cybercrime issues in Malaysia (Basir et al., 2023). Below are some examples of extracts:

Kementerian Pembangunan Wanita, Keluarga dan Masyarakat (KPWKM) menubuhkan satu jawatankuasa khas bagi menangani isu buli siber dan jenayah seksual dalam talian terhadap kanak-kanak. (Rahim, 2021)

Beliau berkata secara keseluruhan, polis telah membuka 42 kertas siasatan berhubung kespenipuan membabitkan suspek di seluruh negara menurut Seksyen 420 Kanun Keseksamaan meminta orang ramai yang menjadi mangsa suspek supaya tampil membuat laporan polis. (*Harian Metro*, 2021)

China Press, with the lowest overall coverage, emphasised straight news (91.7%), reflecting a factual approach. Its sourcing included government (51.39%), NGOs/activists (15.28%), and the general public (12.5%), likely influenced by the prevalence of cybercrimes targeting Chinese communities, like “Pig Butchering” scams. These fast-emerging scams perpetrated by criminal organisations from China use victims of labour trafficking in a variety of scams targeting people in Southeast Asia over the years, with most of the victims being Chinese speakers (McPherson & Wilson, 2023). Since it is a major Chinese-language publication, they are more likely to engage and gain information from the general public, many of whom were probably victims of cybercrime, NGOs and activists. In addition, *China Press* also tended to get information from Chinese officials as a source of news (Sun & Yu, 2022). Hence, the paper employed episodic framing (21.67%) more frequently than *The Star* (10.2%) or *Harian Metro* (10.42%), focusing on specific incidents rather than broader trends. While episodic framing can heighten public concern by drawing attention to individual cases, it may also limit the audience’s understanding of broader patterns and systemic issues.

In contrast, thematic framing, which was more prevalent in *The Star* and *Harian Metro*, foster a deeper, more sustained public engagement by contextualising cybercrimes within larger societal trends and government policies (Mohamad Khari & Kho, 2024)). This combination of framing strategies across newspapers indicates varying approaches to informing and influencing public perceptions. In terms of thematic focus, *China Press* emphasised the risks of Internet use (17.86%) and the impact of cybercrime (24.11%) more prominently than its counterparts, shedding light on the consequences faced by individuals affected by cyber-related offences. Below are some examples of extracts:

来自马来西亚的李伟鸿（化名，26岁）是被骗到西港其中一个园区的打工者。他去年12月底抵达西港，受困四个月，今年4月获救后接受《联合早报》电访。 (China Press, 2022)

[Lee Wei Hong (a pseudonym, 26) from Malaysia was tricked into going to one of the Westport parks as he arrived in Westport at the end of December last year and was trapped for four months. He was rescued in April this year and was interviewed.] (China Press, 2022)

国云南省西双版纳公安与缅甸执法部门跨境合作，在缅北破获11个电信网络诈骗窝点，一举拘捕269名网络诈骗罪犯，包括马来西亚籍2人，涉案金额1.2亿元人民币（约7679万令吉）。 (China Press, 2023)

[The Public Security Bureau of China’s Yunnan Province and Myanmar law enforcement authorities have cooperated across the border in the northern Myanmar 11 telecommunication network fraud and arrested 269 people in one fell swoop. The total amount of money involved was 120 million yuan (about RM76.79 million), including two Malaysian nationals.]

(China Press, 2023)

Impact of media framing on public perception (RQ3)

Media framing significantly shapes public perceptions of cybercrime. The focus on prevention and intervention aligns with government priorities and may foster public trust in these measures (Bruijn & Janssen, 2017). By highlighting government-led strategies,

media outlets create a sense of urgency, framing cybercrime as a pressing issue requiring collective attention and participation. This framing not only informs but also shapes public attitudes toward the efficacy of government measures in safeguarding against cyber threats (Liu & Ahmed, 2023).

The framing of cybercrime prevalence, as observed across different newspapers, has a profound impact on public perceptions. Emphasising the omnipresence of cyber threats, supported by data and expert opinions, heightens public awareness and concern, underscoring the urgency of addressing these issues (Akpoghiran, 2022). Reports grounded in real-world statistics and expert insights create a narrative that highlights the severity of cyber threats. This approach fosters a collective understanding of cybercrime risks and instils a sense of urgency among the public. Moreover, the inclusion of expert and academic viewpoints enhances the credibility of these narratives, further emphasising the necessity of urgent and comprehensive mitigation efforts (Eastin, 2001).

However, differences in framing strategies across newspapers like *The Star*'s diverse mix of news types and sources compared to *Harian Metro*'s reliance on government sources, reveal varying approaches to shaping public perceptions. *The Star* emphasised balanced reporting, leveraging its access to private-sector data and expert opinions. This approach offers a comprehensive perspective on cybercrime while catering to its business and academic audience (Liu, 2017). However, its corporate-oriented narrative may unintentionally marginalise grassroots-level concerns (Raza et al., 2017).

In contrast, *Harian Metro*'s focus on government sources reflects its role as a Malay-language daily addressing national priorities. While this ensures timely and authoritative reporting, it also limits the diversity of viewpoints and reinforces a government-centric narrative (Powell & Self, 2003). Readers may develop a stronger trust in government-led interventions but may miss perspectives from independent cybersecurity experts or marginalised voices (Wan Mohd Ghazali et al., 2020).

China Press adopted a factual approach with a higher reliance on episodic framing, focusing on specific incidents like "Pig Butchering" scams, which resonate strongly with its Chinese-speaking readership. This framing fosters immediacy and relatability but risks overlooking broader systemic trends (Yan & Lee, 2024). By prioritising stories relevant to its audience, *China Press* limits the depth of its societal impact while emphasising community-level cybercrime concerns (Yao & Li, 2024).

These biases and framing choices directly influence how the public perceives cybercrime. For instance, thematic framing by *The Star* and *Harian Metro* allows readers to contextualise cybercrimes within societal trends and government policies. This promotes sustained engagement but can also skew perceptions by emphasising institutional perspectives over individual experiences. Meanwhile, *China Press*'s episodic framing of incidents may heighten public concern for specific cases, but limit understanding of the broader context.

CONCLUSION

The escalating threat of cybercrime, as reflected in the intense and diverse thematic focus across *The Star*, *Harian Metro*, and *China Press*, demands both immediate and sustained attention. Cybercrime is not merely a technological issue; it is a societal challenge that requires concerted efforts from governmental bodies, law enforcement

agencies, cybersecurity experts, educational institutions, and the public. The comparative analysis of these newspapers' coverage underscores the critical importance of prevention and intervention in combating cybercrime. Each publication consistently emphasised the need for proactive measures to address the growing prevalence and risks associated with cyber-related offences.

Over the two years' worth of articles studied, distinct patterns in the intensity, news types, sources, framing, and thematic focus of cybercrime reporting emerged, shaping the diverse narratives presented to readers. The varied approaches by these newspapers illustrate the importance of media literacy and the need for the public to engage with multiple sources to gain a comprehensive understanding of cyber-related issues. Accessing diverse perspectives and emphases enriches the public's understanding and critical analysis of cybercrime-related news.

The findings of this study serve as an urgent call to action for all relevant entities including governmental, private, and educational sectors to unite in addressing these escalating challenges. The complexity of cybercrime necessitates comprehensive strategies that integrate technological advancements, legal frameworks, public awareness campaigns, and proactive measures. Failing to address these issues will only exacerbate the problem. As cybercriminals continue to evolve their tactics, the risks to individuals, businesses, and the integrity of digital systems will intensify. Therefore, all stakeholders must prioritise this issue, allocate adequate resources, and collaborate effectively to combat the growing threat of cybercrime.

Limitations and recommendations

One of the key limitations of this study is its focus on only three major online newspapers in Malaysia, which may not fully capture the diversity of perspectives within the broader media landscape. The selection of three newspapers was guided by their high readership and representation of the three major linguistic and cultural segments in Malaysia. However, this limited dataset may constrain the generalisability of findings, as it does not account for other media outlets, such as regional newspapers, digital-only platforms, or alternative media sources. This limitation suggests that the findings reflect dominant narratives in mainstream media but may not fully capture the diversity of perspectives within Malaysia's broader media landscape. Thus, future research should consider a wider array of news sources to enhance generalisability and provide a more comprehensive view of media framing in cybercrime reporting.

While the framing theory provides a robust foundation for analysing media construction of cybercrime narratives, it has notable limitations. It often assumes a one-way influence from media to audience and neglects the active role of audiences in interpreting and negotiating media messages (Entman, 1993; Goffman, 1974). To address these gaps, this study can be expanded to merge the agenda-setting theory to understand how media prioritisation shapes the salience of cybercrime issues and audience reception studies to explore the variability in how individuals decode and internalise media frames (McCombs et al., 2018). This multidimensional approach can provide a more comprehensive understanding of media influence on public perceptions of cybercrime.

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