YOUNG ADULTS' ABILITY TO DETECT FAKE NEWS AND THEIR NEW MEDIA LITERACY LEVEL IN THE WAKE OF THE COVID-19 PANDEMIC

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ABSTRACT

In the wake of the current scenario of the Covid-19 pandemic, the phenomenon has attracted worldwide attention to the extent that countries are not only trying to battle the onslaught of the pandemic but also the spread of fake news. This research examines the ability of young adults in Malaysia to spot fake news and how do they counter its spread. This study also analyses the level of new media literacy among young adults to process fake news on social media. A quantitative data collection method using questionnaires was used to collect data from 450 young adults. Results showed that despite being confident of being able to distinguish fake news from real news, young adults have difficulties to differentiate between verifiable news and fake news. Respondents are also proactive in combatting the spread of fake news, where a large percentage would re-share the post to notify other users. Finally, study results also found that young adults have a moderate level of new media literacy. Overall, the study highlights the importance of initiating new media literacy education for all social media users, particularly with regards to fake news on social media.

Keywords: new media literacy, social media, fake news

INTRODUCTION
Fake news, or commonly understood as disinformation, is defined as "news articles that are intentionally and verifiably false and could mislead readers" (Allcott and Gentzkow, 2017, p.213). Using the current Covid-19 pandemic as a reference, World Health Organization director-general Tedros Adhanom Ghebreyesus highlighted this at the Munich Security Conference in February when he said that "we are not just fighting an epidemic; we're fighting an infodemic. Fake news spreads faster and more easily than this virus, and is just as dangerous" (Ghebreyesus 2020, para. 45-46). The phenomena of fake have also crept into the Malaysian society and more so now in the current situation of the disturbing pandemic. As a result, citizens are misled and struggling to tell apart what is accurate news or what is false.

The term 'fake news' is not new. Wardle and Derakhshan (2017) broke the term fake news into three different types. They defined misinformation as "false information shared without harmful intent", disinformation as "false information shared with harmful intent" and finally, malinformation is defined as "genuine information shared to cause harm" (p.5). Where else, researchers Lazer et al. (2018, p.2) defined fake news as "fabricated information that mimics news media content in form but not in organisational process or intent".

According to a creative agency, We Are Social and the Hootsuite social media management platform's latest Digital 2019 report, on average, Malaysians spend eight hours to five minutes online daily, with two hours and 58 minutes being attributed to social media consumption (Bernama, 2019). In another report, International market research agency YouGov Asia Pacific (YouGov Apac) reported that Malaysians spent an average of five hours and 47 minutes a day on social media, with 17% of Malaysians spending more than nine hours a day browsing on social media, (Ariff, 2019). Further, as of January this year, about 81% of the Malaysian population were active social media users with 22 million Facebook users. India leads the statistics of Facebook users with over 260 million users (Muller, 2020).

With such rapid changes, it is no doubt that social media have become increasingly popular as the place where news is first shared (Schifferes & Newman, 2013). According to McGrew, Breakstone, Ortega, Smith and

Wineburg (2018, p. 166), "young people's reliance on the Internet as a source of information presents both immense opportunities for democratic participation and formidable challenges". As a result, these sites have become an ideal space for the propagation of fake news (Duffy, Tandoc & Ling, 2019).

The recent spread of the Covid-19 pandemic across the globe has driven nations to not only work on fighting the virus but also the spread of fake news. While fake news is not a new situation in Malaysia, given the context of the Covid-19 pandemic, the authorities are troubled and pressured to ensure fake news is tightly controlled. This is particularly so with the unprecedented current pandemic that the world had never handled before, more so in Malaysia. The Malaysian Communications and Multimedia Commission (MCMC) and police force collaborated through a Cyber Crime Committee to investigate cases of individuals alleged to have spread fake news about Covid-19.

By looking at the amount of time the youngsters spend engaging in different activities online, it provides significant benefits to have sufficient knowledge in terms of new media literacy which are required in the years to come. Chen, Wu, and Wang (2011) defined new media literacy as a "combination of information skills, conventional literacy skills, and social skills" (p. 84), and plays a vital key for media users in this 21st century. According to Metzger, Flanagin, and Medders (2010), people use hints and heuristics to determine the credibility of a website. However, such heuristics can often be misleading, and users tend to struggle with the many elements of online information gathering including information finding and assessment (McGrew, Breakstone, Ortega, Smith, & Wineburg, 2018).

Past studies show on the new media literacy level among young adults portrays a different picture. In a survey conducted by McGrew, Ortega, Breakstone, and Wineburg (2017), the researchers reported that while students were familiar with social media sites and contents, they do not have the skills to differentiate "reliable from misleading information" (p. 7). They stressed that if the young generations

become victims of misleading information, the effects can be dire. In another study on new media literacy in higher education in South Jakarta, Maryam, Efianda and Sevilla (2018) noted that despite being familiar with using electronic devices and online media, students' ability to search effectively is still weak. Additionally, Wardle and Derakhshan (2017) noted that analysing information and evaluating the authenticity of sources on social media "will require our brains to adapt with new cognitive strategies for processing information" (p. 13).

For this reason, it is crucial to understand where the young adults stand in terms of their ability to differentiate fake news from genuine news as well as their new media literacy level.

PROBLEM STATEMENT

As social media has become an essential source of news for the users, it also makes it "difficult for people to judge the credibility of any message" (Wardle & Derakhshan, 2017, p.12). According to Rubin, Chen, and Conroy (2015), the shifts in how individuals may interpret 'truth' and access information and news has opened Pandora's box of 'fake news' from various online platforms. Significantly, researchers Moravec, Minas, and Dennis (2019), and Paschalides et al. (2019) also cautioned on the increase of misinformation on the Internet.

Further, the 2019 Digital News Report found that online and social media remain the predominant sources of news for Malaysians, with Facebook being the most popular platform (Nain, 2019). However, Tandoc, Zheng and Ling (2018) pointed that aside from being dominated by a mass audience, social networking platforms also promote the quick sharing and distribution of information. Unfortunately, together with this, they have also promoted the distribution of fake news.

What worries scholars is the effect of false news on public perception causing them to make reasonable decisions based on misinformation (Tandoc et al., 2018). This is even so more when users are most likely to share negative news, and with the recent pandemic, there are many news related to Covid-19 that are negative (Nyilasy, n.d.).

Consequently, Chen et al. (2011) stressed the need for individuals to be new media literate to engage competently in this new environment.

It is in these contexts that this research will look at the ability of the young adults in Malaysia to distinguish fake news from real news, and their level of new media literacy.

RESEARCH QUESTIONS

This study aims to analyse young adults' ability to distinguish fake news from real news. It will also look at their level of new media literacy. The following questions are asked:

RQ 1: What are the young adults' ability to identifying fake news?

RQ 2: What are the new media literacy skill levels of young adults?

LITERATURE REVIEW

Spreading of Fake News on Social Media

Lazer et al. (2018, p.2) defined fake news "to be fabricated information that mimics news media content in form but not in organisational process or intent" which has been drawing much focus from the 2016 US presidential election. People spread fake news based on their pre-existing views, media functionalities, and message structuring (Marwick, 2018) and also to obtain social acceptance and build an identity (Talwar, Dhir, Kaur, Zafar, & Alrasheedy, 2019).

The dissemination of fake news amongst the public can trigger confusion and unnecessary distress (Figueira & Oliveira, 2017), and despite that, "the high level of online trust is likely to cause users to lend more support to the information shared with them by sharing it further on their social network," (Talwar et al., 2019, p.75). In addition, they said that because of the high confidence in the information and news they get on social media like Whatsapp, users are "more likely to share the news and less likely to authenticate the news before sharing" (p.75).

According to Sterrett et al. (2019), browsing through a Facebook or Twitter feed varies in several aspects when compared with newspaper subscriptions or flipping on a newscast. They stated: "On social media, people often see news via posts and comments from public figures and celebrities alongside those from friends, family, and acquaintances" (p.784).

Furthermore, a study by NewsWhip stated that despite changes to Facebook's news feed algorithm in 2018 which was made to limit the spread of false content, fake news remains a significant concern on this platform. In November 2019, Facebook became the first technology company to be ordered by the Singapore Government to correct a posting that contained false information (Mandhana & Dvorak, 2019). It was part of the Singapore Government's Protection from Online Falsehoods and Manipulation Act that was meant to curb fake news.

As the Covid-29 pandemic continues spreading around the globe, it had also opened up an entirely different problem, where conspiracy theories and misinformation on outbreak have also gone viral on various social media platforms. In Malaysia, as of July 18, 2020, a total of 266 investigation papers in connection with fake news postings about Covid-19 on social media have been opened by the police force and MCMC, of which 30 cases taken to court (Arumugam, 2020). Among those who have been charged in court so far is the Malaysian Artistes Association (Seniman) president Rozaidi Jamil, who was among four people charged for sharing fake news on the Covid-19 virus (FMT Reporters, 2020). In another case, a senior citizen was fined RM2,000 by the Magistrate's Court for spreading fake news about Covid-19. ("Senior citizen fined RM2,000", 2020). It was reported in the news article that the accused had circulated a message via WhatsApp alleging that an acquaintance, part of the tabligh cluster, tested positive for Covid-19 but refused to seek medical treatment. In addition, a total of 352 fake news denials and clarifications (Arumugam, 2020) had been published through the information verification portal, 'sebenarnya.my'. The portal was set up by MCMC for the people to verify the news received on social media.

Besides Malaysia, a number of nations have introduced or passed legislation that curtails the proliferation of misleading information on social media platforms, whereas others have enforced strict laws against hate speech on social networks (Rodrigues & Xu, 2020). For example, the Philippines adopted an emergency law giving it more powers to arrest people who share fake news. Similarly, Thailand passed a state-of-emergency decree criminalising any sharing of misinformation online that could "instigate fear" (AFP, 2020).

The Russian government had approved a fine of up to US$25,000 (RM108,815) and prison terms of up to five years for anyone who spreads what is deemed to be false information and media outlets can be fined up to US$127,000 (RM552,780) if they disseminate disinformation about the outbreak (Litvinova, 2020). Over in India, the existing penal laws and Epidemic Diseases Act 1897 is used to curb the spread of fake news (Rodrigues & Xu, 2020), where else nations like Singapore and Indonesia imposed stringent policies and laws to prevent the spread of misinformation (AFP, 2020).

Over at the World Health Organization, a team of "mythbusters" are working with media organisations and social media platforms to fight the spread of fake news on the Covid-19 virus (Department of Global Communications. 2020, para. 4).

Looking at the news reports on fake news postings about Covid-19 on social media, it indicates the gravity of the issue at hand. Therefore, this research looked at the ability of young adults in Malaysia to distinguish fake news from genuine news.

New Media Literacy

As digital media technologies evolve, traditional literacy is no longer adequate for a person to sustain and be prepared to connect in the new media world. Media literacy is the ability of an individual to make proper use of the media. In other words, Hobbs (2001) defined media literacy as "the ability to access, analyse, evaluate and communicate messages in a variety of forms" (p. 7). Likewise, Tugtekin and Koc (2019) noted that new media literacy is an evolving term and refers to a range of skills that allow users to deal with the challenges and demands of living in today's growing digital environment. Koc and Barut (2016) noted that the popular types of news media are the Web 2.0 tools like the social networking sites where "a user can create media messages individually or collaboratively in the digital form of text, image, video or hybridity of these and share them with other users" (p. 835).

Researchers Chen et al. (2011) proposed the existing new media literacy framework and was described as a two-way continuum. The framework consisted of four components (a) functional consuming, (b) functional prosuming, (c) critical consuming and (d) critical prosuming. Researchers Chen, Li, Lin, Lee and Ye (2014, p.2) defined the components as follows:

a) Functional consuming: the ability to gain access to new media and understand what is conveyed.

b) Critical consuming: media consumers' ability to consider the social, economic, political and cultural contexts of media content.

c) Functional prosuming: the ability to participate in the creation of media content,

d) Critical prosuming: focuses on media users' contextual interpretation of media content when participating in media activities.

Chen and Wu (2011) suggested critical prosuming be championed as a key element in the knowledge society of the 21st century. According to Brown (2018), this is important as the current generations should have a critical mindset rather than merely technical skills. This is further proven necessary when researchers El Rayess, Chebl, Mhanna, and Hage (2018) reported that young users are not adapt to check credible information on social media. Therefore, teaching students with new media literacy is an important issue on the educational agenda (Chen, Lin, Li, and Lee, 2018) as people must be knowledgeable in new media to survive in the new media environment (Chen et al., 2011).

Although Lin, Li, Deng, and Lee (2013) said since new media literacy is an emerging term, the prevalence of social media has recently drawn educators and researchers to turn their focus on the younger generation, to explore their abilities in this new media ecology (Tugtekin & Koc, 2019). For example, in assessing youth's media exposure, engagement in Web 2.0 services and new media literacy skills in Zadar, Miočić and Perinić (2014) found that higher media penetration indicates a higher degree of new media literacy competencies. In concluding, they stressed that "young people need resources and learning principles to acquire new skills and to think critically about their own relationships to the media" (p.249). This corroborates with the study by Chin and Zanuddin (2019) who reported that university students, aged 18 to 25 displayed a medium level of new media literary and those who rarely use media showed low access to media content. As a result, this limits their ability to analyse the information shared online. The researchers pointed out that "they are also less likely turn to the online source to find information to evaluate any news they receive from others," (p.472).

Similarly, Syam and Nurrahmi (2020) who surveyed 500 university undergraduates reported that most of the respondents were less critical of social media content, as they found it hard to differentiate between fake or actual news. Further, McGrew et al. (2018) found that students had trouble to evaluate online sources, claims and evidence. In another study, researchers Kasra, Shen, and O'Brien (2018) in evaluating college students' ability to identify the credibility of images reported that students are unable to detect professional image manipulation and often fail to challenge its authenticity. This calls for image creators and publishers to work towards increasing the credibility of the images produced.

Despite past literature showing the inability of young adults to distinguish fake news (Kasra et al., 2018, McGrew et al., 2018, and El Rayess et al., 2018), the work available on new media literacy is also limited, and so far, it has concentrated on its theoretical conceptualisation. This was further reiterated by Syam and Nurrahmi (2020), who said

previous literature has not focused on the new media literacy particularly with regards to fake news on social media.

Thus, in this study, we sought to assess new media literacy skills among young social media users in Malaysia.

METHODOLOGY
In this study, the targeted participants were young adults in Malaysia who are active social media users. According to Bleyer and Albritton (2003), young adults' age range is between 15 to 29 years old, while Petry (2002) categorised young adults as those aged between 18 and 35 years old. In Malaysia, the Youth and Sports Ministry had determined young adults as those aged from 15 to 30 years old (Yunus & Landau, 2019). For this study, the age bracket is set to be between 18 and 30 years old.

To answer the research question, the quantitative method, using the survey research method was used to collect data from 450 young adults using convenience sampling. In the first section of the questionnaire, respondents were asked about their social media activities. In order to evaluate their ability to spot fake news, respondents were presented with 10 news stories concerning Covid-19 that were widely circulated on social media platforms, of which six were fake. These pieces were taken from Malaysia's information verification portal, 'sebenarnya.my'.

The questionnaire on new media literacy was adopted from Koc and Barut (2016) who had developed and validated it. Although the researchers had developed the questionnaires for university students, their participants in the validation process were those whose age ranged from 18 to 30. The 35-item scale included four sub-scales tested on a 5-point Likert scale.

Data collected were analysed using the SPSS software. The descriptive statistical analysis was used to summarise and describe the respondents' demographic profiles. Further, a descriptive test based on the mean score was also analysed for each dimension. The composite mean is divided into three levels of equal intervals, so that the mean score can be interpreted. According to Pallant (2010), by

classifying the mean score into three categories, the differences in the categories would be more straightforward and easier to see. The three levels are low (1.00-2.33), moderate (2.34-3.67), and high (3.68 – 5.00). A high mean value indicates a high level of new media literacy.

FINDINGS

The respondents' demographic profile is looked upon in terms of gender and age. The findings are tabulated in Table 1. In the sample, 167 (37.1%) were male, and 283 (62.9%) were female. As for the age distribution, almost half of the respondents (42.0%) were aged 21 to 23 years old, whereas 117 (26.0%) respondents were aged 27 to 29. Eighty-five of them (18.9%) were between the age of 24 and 26, followed by 36 of them aged between 18 and 20 years old. Respondents who were aged 30 only constituted 5.1% of the total respondents.

Table 1. Demographic profile of respondents

Demographic	Characteristics	Frequency	Percentage (%)
Gender	Male	167	37.1
	Female	283	62.9
Age	18-20	36	8.0
	21-23	189	42.0
	24-26	85	18.9
	27-29	117	26.0
	30	23	5.1

Table 2 shows slightly more than half of the respondents (58.2%) devotes 4 to 7 hours on social media platforms in a day. Whereas 20.4% of them spend eight to 10 hours a day. The analysis also revealed that 19.6% of the youth spends between one and three hours a day on their social media while only eight of them or 1.8% spends more than 10 hours in a day.

Table 2. Hours spent on social media

	Categories	Frequency	Percentage
Hours spent on social media in a day	1-3	88	19.6
	4-7	262	58.2
	8-10	92	20.4
	>10	8	1.8

In terms of the frequently used social media platforms, almost half of respondents – 48% preferred Instagram, followed by 23.6% who picked Whatsapp. Sixty-three (14%)

respondents spend most of their time on Facebook, and another 9.8% said their first choice is Twitter. Only 21 respondents selected WeChat as their preferred platform. This is shown in Table 3.

Table 3. Frequently used social media platforms

	Frequency	Percentage
Instagram	216	48.0
Whatsapp	106	23.6
Facebook	63	14.0
Twitter	44	9.8
WeChat	21	4.7

In terms of the young adults' ability to identify fake news when received, the majority of them, (78.4%) were confident of being able to do so. As shown in Table 4, only 21.6% admitted to not having the confidence to differentiate fake news from non-fake news. However, in contrast to this answer, the majority (62%) of the respondents were not able to differentiate correctly between fake news and real news.

Table 4. Respondents' ability to identify fake news

	Frequency	Percentage
I am confident in identifying fake news	353	78.4
I am not confident in identifying fake news	97	21.6

Following this, participants were asked about their actions when they receive fake news. As displayed in Table 6, the majority of them would re-share the news to inform the others on the credibility of the news (60.4%), while choosing to ignore the post 33.6%. However, 27 respondents admitted to sharing the post as it is.

Table 5. Respondents' action upon receiving fake news

	Action	Frequency	Percentage
Valid	Re-share the post to warn others	272	60.4
	Ignore the post	151	33.6
	Report the post	27	6.0

New media literacy level

Table 6 displays the different levels of new media literacy among young adults. The overall mean value of young adults' new media literacy is moderate (*M*=3.34, *SD*=0.24), which implies that there is an average level of new media literacy knowledge among the respondents.

The mean values for the four components are between 2.30 and 4.27. Among the four new media literacy components, functional consuming showed the highest mean value (*M*=4.02, *SD*=0.38). This indicates that the respondents have high levels in terms of software and hardware technical skills and the abilities in understanding the meanings of the message conveyed.

Respondents also have a high level in functional prosuming (*M*=3.98, *SD*=0.35) which relates to the ability to participate in the creation of media content. Respondents showed a moderate level of critical consuming (*M*=3.12, *SD*=0.53), which looks at the users' ability to interpret media messages in terms of their authorship, structure, context and purposes. However, the analysis showed that respondents' skills in consumer presuming is low (*M*=2.24, *SD*=0.30). Critical presuming focuses on the uses' contextual understanding of media content when they engage in media activities. It is exclusively linked to the constructive participation and common intelligence of Web 2.0 technologies.

Table 6. *Respondents' level of new media literacy*

New Media Literacy Component	Mean	Standard Deviation	Level
Functional consuming	4.02	0.38	High
Critical consuming	3.14	0.53	Moderate
Functional prosuming	3.98	0.35	High
Critical prosuming	2.24	0.30	Low
Overall	**3.35**	**0.24**	**Moderate**

Note: Low level = 1.00-2.33; Moderate level = 2.34-3.67; High level = 3.68 – 5.00

DISCUSSION

Overall, the majority of the respondents spent 4 to 7 hours on social media platforms in a day, with Instagram being their top choice, followed by Whatsapp and Facebook. The findings of this study corroborate with the data collected by international market research agency YouGov Asia Pacific (YouGov Apac) which reported on average, Malaysians spent close to six hours a day on social media. The results also support the study by Ahmad, Hassan, Tajuddin, and Wimpi (2018) who found that a significant number of university students owned more than three social media accounts and spent between three to five hours on social media daily.

Looking at the choices of social media platforms, the results are similar to those of Meşe and Aydın (2019), and Yesil and Fidan (2017). However, it differs slightly from the results reported by Miller and Melton (2015) and Sendurur, Sendurur, and Yilmaz (2015) who found Facebook to be the most preferred SNS among their respondents. The present study revealed that the majority of respondents preferred Instagram and WhatsApp. This can be presumed that the choice of social media platform used by the younger generations can vary depending on their environment and interest. With the social media users growing tremendously over the years, the higher engagement rate and user-friendly interface of Instagram could be among the reasons for Instagram to dominate Facebook. Furthermore, Instagram is well known for its photo and video sharing applications which are in line with the young users' preference of images rather than long articles.

Further, the study revealed that 78.4% of the respondents were confident of being able to identify fake news. However, when given several fake news, the majority of them failed to do so. This mirrored the findings by Kasra et al. (2018), McGrew et al. (2018), and El Rayess et al. (2018). This incapability of young adults to validate false information and doubtful sources requires immediate attention. As noted by El Rayess et al. (2018) "this could indicate that students could be an easy target for purposeful manipulation of information" (p. 156). Therefore, the younger generation must be equipped with the proper knowledge to be a critical and impartial user of social media.

Additionally, the results also showed that most of the respondents take a more proactive

role when they receive fake news by warning their social network of the circulation of fake news. However, the remaining participants would either ignore the post or share it as it is. This is similar to the results reported by El Rayess et al. (2018) and further supports the notion put forward by Abu-Fadil, Torrent, and Grizzle (2016) that users do not take time to verify the credibility of the news before accepting it or re-posting it. Similarly, Raj and Goswami (2020) concluded in their study that self-regulation will not be effective to curb the spread of fake news.

This brings us to the question of the respondents' literacy level on new media. The results showed that participants in the present study have a moderate level of new media literacy. Notably, the most developed new media literacy skills were functional consuming and functional prosuming. Chen et al. (2011) associated functional consuming and prosuming with computer literacy, whereby consuming is related to the required technical skills needed when accessing media content, while prosuming skills are those technical skills required to create media contents such as writing articles, or producing videos. With the advancement of technology, it is no doubt that young adults are more comfortable in consuming media contents and also to create one. In this study, the respondents are said to be able to use their devices and social media competently without the aid of others. However, just being a functional consumer and a prosumer is insufficient. Criticality is also vital for the consumption and prosuming of new media (Chen et al., 2011).

The present study revealed that respondents have a moderate level of critical consuming and a low level of critical prosuming. Critical literacy, according to Kellner (2000), refers to analyse, evaluate, and criticise media. Chen et al. (2011) explained this includes an interpretation of the textual and social definitions of media content, social values, media producers' intentions as well as the influential role of media producers and audiences.

A critical user and prosumer has a strong understanding of the different dynamics of media consumption and production and is able to exercise these critical views of media consumption and production to their

advantage. Overall, the study results showed that respondents have a moderate level of new media literacy skills. This mirrors the studies by Miočić and Perinić (2014) and Chin and Zanuddin (2019).

In summary, the findings of this study revealed valuable information on the use of social media, understanding of fake news and level of new media literacy among young adults in Malaysia.

CONCLUSION
Access to smartphones, affordable Internet connectivity and various social media platforms allow users to manipulate false information and rumours. Particularly during this Covid-19 pandemic, the number of fake news is increasing.

This study aimed to understand how young adults in Malaysia were engaging with the term "fake news" and how was their new media literacy level. This study will help generate knowledge, and provide useful information to society, which will contribute to the prevention of the spread of fake news.

The findings of this study clearly show that young adults in Malaysia, despite being confident of being able to distinguish fake news from real news, are having difficulties to differentiate between verifiable news and fake news that is shared to mislead the readers, making them an easy target for intentional information misuse. Therefore, it is vital to further research on the methods used by social media users to verify the news they received and believe are fake. Interestingly, this study revealed that users are proactive in curbing the dissemination of fake news. The majority of the respondents would re-share the post to warn other users. Yet, some users would re-share the post, despite knowing it is fake. On this aspect, there is a need to expand the present study to identify the authentification practices by users.

Further, the findings revealed that young adults in the present study have a moderate level of new media literacy. The results shed light on the importance of new media studies and literacy amongst young adults. As the respondents have low critical prosuming level, there is a need for relevant organisations, particularly education providers, to include

and emphasise new media literacy as part of their syllabus. Hence, effective new media literacy education must be initiated to tackle fake news and misinformation. Furthermore, it is crucial for young people to have the required skills to overcome the challenges surrounding new media technologies and access to online news.

Finally, this study is limited to young adults in Malaysia; therefore, the results of the study cannot be generalised to other populations.

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