Digital Literacy Efficacy in Enhancing Youth Resilience Against Misinformation on Social Media During Presidential Elections 2024 in Indonesia and Taiwan

Submitted in Completion of the **"2025 Taiwan Fellowship"** Programs

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2025

Abstract: *The spread of misinformation on social media increasingly threatens democratic resilience, particularly among youth who depend on digital platforms for political information. This study explores how digital literacy efficacy influences young people's ability to combat misinformation on social media during the 2024 presidential election in Indonesia and Taiwan, two distinct Asian democracies. By employing a quantitative survey of 55 respondents (30 Indonesians and 25 Taiwanese) alongside qualitative reflections, this study assessed exposure, trust, verification, and sharing behaviors, as well as awareness of fact-checking tools and perceptions of political polarization. Descriptive statistical analyses revealed that Indonesian youth faced higher exposure to misinformation (70% often or always) and greater unintentional sharing (40%), while Taiwanese youth reported lower exposure (32%), more consistent verification practices (52% always verify), and greater familiarity with fact-checking tools (60% occasional or frequent users). The findings indicate that digital literacy efficacy mediates resilience: Indonesian youth exhibit aspirational resilience awareness without consistent verification, whereas Taiwanese youth demonstrate institutionalized resilience bolstered by civic education and platform mechanisms. The study concludes that youth resilience against misinformation is not merely an individual skill but a capacity enhanced by social and technological factors. Therefore, enhancing youth resilience requires policies that integrate critical digital literacy education with accessible verification infrastructure.*

Keywords: misinformation, social media, election, Indonesia, Taiwan

Introduction

Misinformation is a serious threat to democratic processes in the digital era, particularly during presidential elections. Taiwan and Indonesia have both faced challenges due to the spread of misinformation on social media platforms. In the Indonesian context, the history of misinformation on social media during presidential elections peaked in 2014. A previous study showed that hoaxes and mass fake news circulated massively and were a sarcastic discourses on social media (Iskandar et al., 2017; Sastramidjaja et al., n.d.). In the 2014 and 2019 Indonesian presidential elections, social media platforms were extensively used for campaign purposes, but they also became a warm spot for spreading fake news and other misinformation.

A phenomenal misinformation was targeted at Joko Widodo. Previous research conducted by Morah and Nwafor (Morah & Nwafor, 2024)stated that President Joko Widodo was falsely accused of being a communist and having anti-Islamic views. From 2014 to 2019, the spread of misinformation caused political polarization, as highlighted in several research documents:

Table 1. Indonesia Highlighted Misinformation on social media

No	Years	Highlighted misinformation during IndonesiaPresidential Election
1	2014	smear campaigns centered on Obor Rakyat portrayed Joko Widodo as a 'puppet', 'bad Muslim', and linked him to the Chinese/Partai Komunis Indonesia (PKI). Misinformation is circulating via tabloids and social media. (Tyson & Purnomo, 2017)
	2019	- Indonesia's Ministry of Communication and Information (Kominfo) identified 1,6545 hoax items, with 341 targeting presidential candidates (August 2018–April 2019). A prominent example was the viral hoax alleging "seven containers of pre-marked ballots" intended to discredit the General Elections Commission (KPU). (Astiti et al., 2020) - Mafindo, Indonesia Anti Hoax Community database shows there were 1,221 hoaxes, with 52% or similar to 664 hoaxes related to politics.
3	2023	Mafindo recorded 2,330 hoaxes, of which 1292 were political and 645 explicitly linked to Elections 2024. This was mainly found on the YouTube platform.
4	2024	Kominfo reported 203 distinct hoax issues about Elections 2024, with 2,882 items across social media such as Facebook, X, IG, and TikTok.
5	2024 – D day election	misinformation reached unprecedented levels. Mafindo logged around 2,199 hoaxes detected. Around 48,9% were related to politics, with explicit election narratives in 31,6% and distributed on Facebook (30.4%), TikTok (26.7%), and YouTube (25.4%) (Mafindo, 2025)

Source: Researcher Summary from various research documentation

Meanwhile, in the Taiwanese context, the 2020 presidential election faced significant misinformation campaigns aimed at influencing public opinion, disrupting the election process, and destabilizing the political environment(Köckritz, 2023). In particular, the spread of fake news was designed to undermine public trust in the democratic process and sway voter opinions against the presidential candidates. This phenomenon is particularly prevalent on social media platforms. The misinformation in both countries consists of a surge in fake news, hoaxes, and misleading information aimed at discrediting candidates and polarizing voters.

Table 2. Taiwan Highlighted Misinformation during Election on Social Media

No	Year	Highlighted Misinformation during Taiwan Presidential Election
1	2019, early 2020	previous research identified approximately 157 instances of misinformation across three platforms: Facebook, Line, and mainstream media. The majority of misinformation targeted political or election integrity related to vote rigging, national defense, and U.S. skepticism. All misinformation is text-based, and fabricated posts dominate. (Taiwan FactCheck Center, 2023)
2	2020	approximately 69,165 posts were monitored by Doublethink Lab, a Taiwan-based think tank that focuses on investigating disinformation and information operations to safeguard democracy globally. The posts were mostly about COVID but related to political narratives. Doublethink claimed that the information posts were linked to mainland Chinese networks. (Doublethink, 2020).
3	2024	a study found that the top narrative attacking the DPP through LINE and Facebook accounted for approximately 18.1% of 911,510 information posts. Meanwhile, from the PTT (board bulletin systems), most posts and comments related to the campaign are traced to the pan-Blue/ROC identity group.
4	Post election 2024	there are electoral fraud claims (with no exact number of claims) reported by the Taiwan FactCheck Center (TFC) research bulletin.

Source: Researcher Summary from various research documentations

The data above show that Indonesia and Taiwan are vulnerable to misinformation and hoaxes, respectively. The spread of fake news was designed to undermine public trust in the democratic process and sway voters' opinions against presidential candidates who were significantly present on social media platforms. The issue of misinformation on social media platforms easily targets young people, who are potential voters in elections in both countries. According to the data shown, the eligible youth voters for the 2024 elections in both countries are as follows:

Table 3. Eligible Youth Voters in Indonesia and Taiwan

Country	Eligible Youth Voters per 2024 (18 – under 40 years old)	
	Total Numbers	Percentage (%)
Indonesia	115.622.550	56,45%

Taiwan	4.888.655	25%

Source: researcher summary from several resources (2025)

The numbers show that young people in each country comprise a significant portion of the electorate. It is expected that their votes will play an essential role in the election outcomes. The new generation is technology savvy. They are familiar with social media. For this reason, the issue of misinformation on social media platforms easily targets young people. According to a 2023 survey, a significant number of young people in Indonesia are active on social media, with approximately 188.6 million users aged 18-24 years old. In Taiwan, approximately 89.4% of the population are active social media users, equating to about 21,5 million young people (Digital 2023 Global Overview Report).

In Taiwan, platform choice matters: Instagram and TikTok have become meaningful news sources used by 14% and 10% of the public for news, respectively, while legacy forums like PTT still draw notable news use (=17%)(Reuters Institute for the Study of Journalism, 2025; Wang, 2023). Studies also show TikTok's young, active users encounter and engage with political content, with survey evidence linking heavier use to distinct political attitudes and higher exposure risks; national surveys document widespread concerns about misinformation and varied verification habits (Doublethink Lab, 2025; Taiwan FactCheck Center, 2023). Taiwan's National Security Bureau reported that more than 2.16 million pieces of false or biased information circulated in 2023, much of it amplified through Facebook, TikTok, and Line, which are popular among the youth.

In Indonesia, TikTok reaches over 126 million users; information is leveraged primarily through short-form videos, influencer collaborations, and WhatsApp groups to mobilize youth. The platform features that enable the viral campaign strategies of the candidate also facilitate the rapid diffusion of misinformation.

Misinformation is the result of spreading fake news online, and the public finds it simple to absorb information since misinformation spreads quickly and easily (Abdussalam & Alamsyah, 2021) . It misleads citizens, misrepresents reality, and causes damage to the information system itself (Beckett, 2017). In this research context, the younger generation may be wiser in using

and conveying the information received on social media. The author believes that literacy is required to combat misinformation. A previous study on media literacy interventions in Indonesia confirmed that structured online training can reduce belief in false news among youth.

Digital literacy among youth voters is a critical factor in combating misinformation during the 2024 presidential elections in Taiwan and Indonesia. Taiwan has outlined strategic interventions to promote media literacy and counter disinformation through the government's Digital Era Media Literacy Education White Paper. Similar to Indonesia, the Indonesian government has been leading a media literacy initiative called the National Digital Literacy Program (Indonesia Makin Cakap Digital), also known as Indonesia More Digitally Capable, under the Ministry of Communication and Information, since 2021. This initiative aims to enhance digital skills and combat misinformation in the media. There are also civil society initiatives in both countries, including fact-checking organizations, aimed at strengthening people's ability to critically evaluate and verify misleading information, hoaxes, and misinformation during elections.

However, the 2024 election became a battlefield of massive misinformation in both countries. News, opinions, and candidate campaigns, along with false narratives charged by Artificial Intelligence, have become a significant phenomenon spreading across social media. Most young people are in a critical phase of political and social integration, making them potentially vulnerable to misinformation.

While previous research conducted by Taiwan Fact Check in 2024 demonstrated that most Taiwanese are aware of and consider the impact of misinformation, it is also said that literacy initiatives in Taiwan have been effective in helping society use fact-checking online information (Lee et al., 2023). The same situation applies in Indonesia, where a study has shown that efforts to promote digital literacy are essential for mitigating the spread of misinformation or false information (Aditya & Zuhdi, 2023).

Digital literacy enhances what is called digital efficacy, which is the confidence and skill to use digital tools effectively for civic and political participation. However, digital literacy alone is insufficient because youth may recognize misinformation but fail to resist it. Therefore,

efficacy is essential in such cases. Efficacy enhances resilience, enabling youth to counter, combat, and correct misinformation and manipulative content during the elections. This study aims to fill this gap by examining how digital literacy can strengthen youth resilience against misinformation in both countries. This study presents comprehensive research addressing (1) youth digital literacy efficacy in identifying and resisting misinformation in Taiwan and Indonesia and (2) how digital literacy enhances youth resilience against misinformation during presidential elections. By comparing Indonesia and Taiwan, this study provides a perspective on the importance of digital literacy efficacy in enhancing youth resilience against misinformation during presidential elections. Furthermore, this study addresses a gap in the literature and contributes to both the theoretical and practical understanding of youth resilience to misinformation on social media. This study presents its empirical findings using a mixed-methods research design that combines quantitative and qualitative data.

Literature Review

This research, accompanied by a literature review, clarifies the concept of digital literacy and its related themes.

Digital Literacy

Digital literacy is not a new concept. Gilster (1997)proposed a term for digital literacy that refers to the competence to derive useful information from various sources on the internet (Spante et al., 2018). Another definition offered by some scholars describes digital literacy as the competence to adapt to new media, including the ability, attitude, and awareness to use digital devices, as well as the ability to understand and use information in various forms (Chan et al., 2017; Martin & Grudziecki, 2006). The concept of Digital Literacy covers a comprehensive range, from specific skills and competencies, as Gilster mentioned in his book 'Digital Literacy,' which refers to the ability to understand and use information in multiple formats from a wide variety of sources via computers (Pangrazio et al., 2020). Digital literacy was first defined in the late 1990s and has a broader meaning that can involve critical literacies and evolve over time.

Digital literacy has been widely discussed as a multifaceted competence that extends beyond technical skills to include cognitive, social, and ethical dimensions of online engagement.

Scholars emphasize that digital literacy is closely tied to cognitive abilities and self-control, suggesting that individuals with stronger digital literacy skills are better equipped to critically evaluate information and regulate their behavior in digital environments (Williams et al., 2022). In alignment with this view, the United Nations Educational, Scientific and Cultural Organization (UNESCO) (Law & Wong, 2018) defines digital literacy as *"the ability to access, manage, understand, integrate, communicate, evaluate, and create information safely and appropriately through digital devices and networked technologies for participation in economic and social life."*

In the Indonesian context, the urgency of promoting digital literacy became especially evident during the COVID-19 pandemic, when the public's need for reliable information led to a surge in both information seeking and misinformation. Although the Ministry of Health sought to disseminate accurate data, false and misleading claims about the pandemic proliferated on social media. As of mid-March 2020, at least 196 COVID-19-related hoaxes were identified in Indonesia (Putri, 2020). Recognizing these risks, the government prioritized digital literacy as a national agenda through initiatives such as the *Guidelines for the National Literacy Movement,* developed by the Ministry of Communication and Information (MCI). This framework identifies four foundational pillars of digital literacy—digital skills, culture, ethics, and safety—which together aim to foster a more resilient and informed digital society.

In Taiwan, digital literacy has traditionally been discussed in the context of *media literacy* (C. S. Chang & Liu, 2011). Similar to Indonesia, the COVID-19 pandemic accelerated digital transformation in China, shifting education and communication to online platforms. Scholars argue that media literacy in Taiwan encompasses both traditional literacy skills—reading and writing—as well as competencies for navigating social and interactive media (Bittman et al., 2011). Recent studies have shown that Taiwan's digital environment continues to evolve rapidly, necessitating expanded media literacy education beyond the classroom (W. Hung, 2024) .In response, the Taiwanese government has incorporated media and information literacy into the *108 Curriculum Guidelines* and the *Digital Era Media Literacy Education White Paper*, embedding "Information and Media Literacy" as one of the nine core competencies in the national curriculum. These initiatives demonstrate Taiwan's systematic efforts to strengthen citizens' critical engagement with digital content and combat misinformation in an increasingly polarized media environment.

Misinformation on social media and Democracy

Misinformation is defined differently in various disciplines. Chou et al. (Sylvia Chou et al., 2020) defined misinformation as false or inaccurate information regardless of intentional authorship. Other scholars have defined misinformation as occurring when people confidently hold inaccurate beliefs (Kuklinski et al., 2000). In the field of communication, misinformation is defined as fake news and the sharing of false information. The fake news appropriates the look and feel of real news, from how websites look, to how articles are written, to how photos include attributions. (Tandoc et al., 2018). However, scholars have distinguished between misinformation and disinformation. While misinformation is defined as false information without malicious intent or not created with the intention of causing harm (Wardle & Derakhshan, 2017), disinformation is more problematic, as is involves deliberate alienation or disempowerment other people (Southwell et al., n.d.). In this research context, misinformation refers to false information that is deliberately created and shared with the author's intent to mislead.

Misinformation causes damage to societies and democratic institutions (Allcott et al., 2019) and is widespread on social media in various forms. All types, including rumors, false information, and disinformation, are commonly found on social media. As one of the freest regions in Asia from a socio-political standpoint, Taiwan receives some of the highest concentrations of online disinformation (Huang, 2020). Indonesia, the third-largest democracy in the world, faces widespread hoaxes and fake news on social media, especially during presidential elections. These phenomena are giving such effects for society because it leads emergence chaos (Syahputri et al., 2021) .A joint statement in the National Academies (2012) mentioned that misinformation is worse than an epidemic. It spreads at the speed of light worldwide and can prove deadly when it reinforces misplaced personal bias against trustworthy evidence (Hui, 2020).

However, a long time ago, before social media, rumour, fake news, and other misinformation also became a problem. Therefore, social media has become a powerful source of misinformation (Shu et al., 2017). During presidential elections, social media platforms such as Facebook and Twitter are used as personal media for political information. A study indicated that engagement with political news on social media is associated with more profound

cognitive elaboration (Oeldorf-Hirsch, 2018) and greater civic engagement (Kim et al., 2013). However, engagement with misinformation can have damaging effects on democracy. Hence, misinformation may limit citizens' abilities to engage in a democratic course (Lewandowsky et al., 2023; Lilja et al., 2024; Pira, 2023) and cause potential youth, in this case, young voters, to vote incorrectly (Anspach & Carlson, 2020; Bartels, 2002). Research evidence suggests that one social media platform, Twitter, indicates that false news stories diffuse faster than the truth (Vosoughi et al., 2018); furthermore, users are more likely to circulate misinformation.

The Efficacy and Youth Resilience

Efficacy refers to the capacity to produce a desired outcome and is conceptually linked to self-efficacy, which denotes an individual's belief in their ability to influence event and outcomes (Patel, 2021). In the present research context, efficacy is understood through the lens of self-efficacy theory, originally proposed by Bandura (Bandura, 1997). According to this theory, self-efficacy is defined as people's judgement of their capabilities to organize and execute courses of action required to attain designated types of performances. (Bhati & Sethy, 2022). Rooted in social cognitive theory, self-efficacy encompasses the belief in one's capacity to marshal motivation, cognitive resources, and agency to regulate or influence specific tasks or events (Hamill, 2003). Cognitively, self-efficacy plays a pivotal role in reframing adverse situations, enabling individuals to approach challenges with a more adaptive and constructive mindset. Research indicates that stronger self-efficacy beliefs are associated with lower levels of psychological distress and negative affect (Sumer et al., 2005). Furthermore, self-efficacy has been identified as a key contributor to resilience; individuals with higher self-efficacy demonstrate greater psychological adaptability and are more likely to recover effectively from life's setbacks (Chemers et al., 2001).

Resilience is the capacity to adapt positively and grow in the face of adversity. Earlier conceptualizations of resilience often treated it as a relatively stable personality trait (Luthar & Cicchetti, 2000)or simply as the ability to cope with and adapt to adverse circumstances (Tedeschi & Kilmer, 2005). More recent frameworks, however, emphasize resilience as a dynamic, context-dependent process that unfolds over time in relation to environmental and individual factors (Masten, 2001).

Hence, self-efficacy and resilience are intimately connected, as both reflect an individual's capacity to persist in the face of adversity. Specifically, self-efficacy captures the belief that

one can successfully complete tasks and achieve desired goals, whereas resilience denotes the ability to adapt to change, recover from setbacks, and withstand challenges (Djourova et al., 2020; Schwarzer & Warner, 2013). In the context of this research—focusing on the youth generation's capacity to navigate misinformation during presidential elections—there is growing recognition of resilience's importance alongside self-efficacy as a personal resource for effective civic engagement.

Data and Research Design

This study applied several data collection methods. Drawing on a mixed methods approach, survey data (n=55) were integrated with qualitative responses coded using NVivo. First, the data collected through the survey assessed the level of digital literacy and ability to identify misinformation on social media. Participants were chosen to represent youth aged 18–30 years in Taiwan and in Indonesia. The questionnaire was distributed online through social media platforms and other youth groups. Second, to understand youth resilience to misinformation, data were gathered through in-person semi-structured interviews with groups of youth and experts. Third, secondary data were also used in this research to enrich the data collection. Secondary data were obtained from previous research, news articles, interviews, and literature reviews. The ethical considerations applied to protect the identities and participation of the participants included keeping personal information confidential.

Main Results

The findings of this study reveal that digital efficacy played a crucial role in shaping youth resilience against misinformation during the 2024 presidential elections in both Taiwan and Indonesia, as supported by both quantitative and qualitative reflections.

For quantitative data, this study distributed an online questionnaire to 30 Indonesian and 25 Taiwanese youth. The findings revealed differences in exposure, sharing verification, fact-checker awareness, and polarization beliefs.

Profile of Respondents

Most respondents, both Indonesian and Taiwanese, were 18-24-year-old university students who were active social media users, using to 4-5 platforms and spending more than three hours daily on social media.

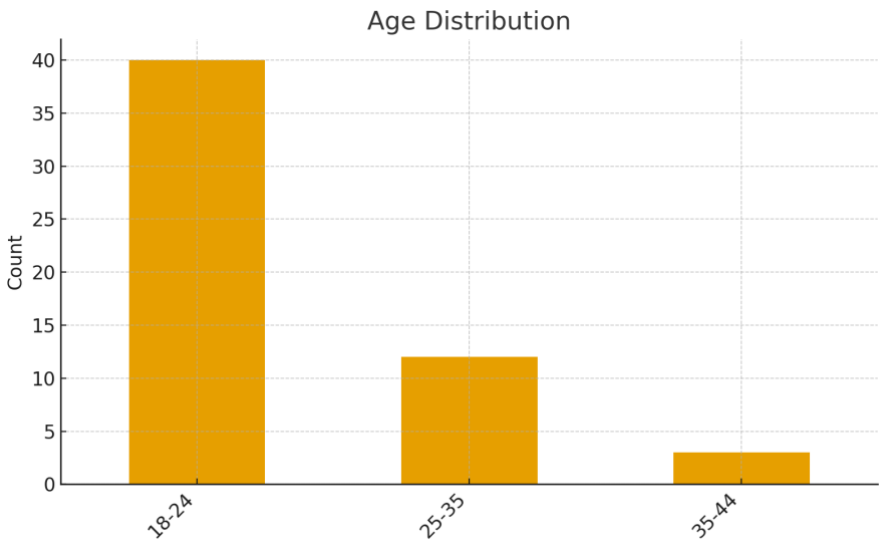

Figure 1. Distribution of Demographic

Figure 1 illustrates the age distribution of the respondents in this study. It shows 55 respondents reveals that the majority are 18-24, accounting for approximately 72.7%, followed by the 25-35 age range with 21.8%, and only 5.5% are in the 35-40 age group.

Both Indonesian and Taiwanese youth are heavily immersed in digital environments and social media. Meanwhile, in Figure 2, they have used social media for over five years, typically engaging with around to 4-5 platforms and spending more than three hours online each day.

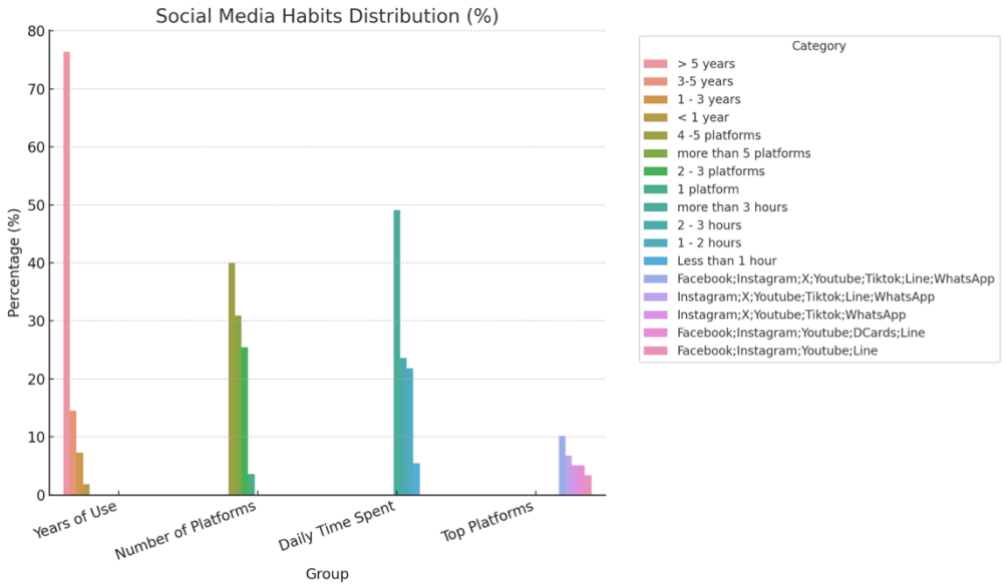

Figure 2. Social Media Habits Distribution

Most respondents were digital natives who were born and raised in the digital age. Over 60% of respondents spent more than three hours per day on social media, up to five hours. The more time they spend on social media, the greater their risk of encountering misinformation. The most mentioned platforms were Instagram, YouTube, WhatsApp, TikTok, and Line. Indonesian youth relied on TikTok and WhatsApp, whereas Taiwanese youth relied more on Instagram and Line. Instagram and TikTok drive visual content, amplifying memes and short-form misinformation. WhatsApp and Line are more focused on the private sharing of unverified rumors and their rapid spread.

Misinformation Encounter on social media

This section examines how respondents are exposed to information through social media. The survey results showed different patterns in the frequency with which youth encountered misinformation. Indonesian respondents were more likely to encounter misinformation because of frequent exposure, with the majority selecting ‘often’ or always.’ In contrast, Taiwanese respondents reported less frequent exposure to misinformation by selecting ‘sometimes.’

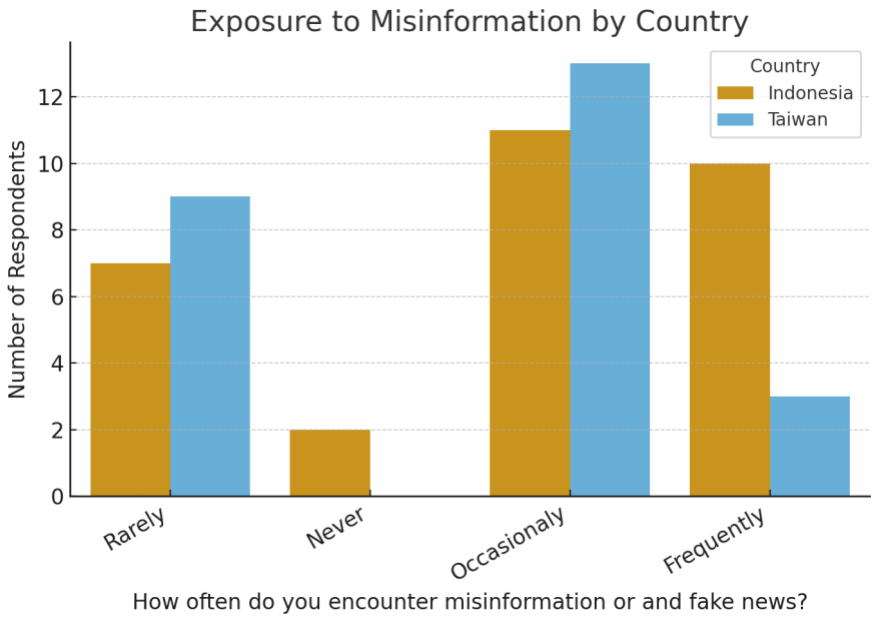

Figure 3: Graphic Indicated Exposure to Misinformation in Indonesia and Taiwan

There was a clear difference between Indonesian and Taiwanese youth in their exposure to misinformation, but this does not mean that misinformation was absent from their daily encounters. This difference may be explained by the platforms they used. Indonesian youth are heavily exposed to misinformation on WhatsApp and TikTok, platforms that often spread viral falsehoods. In contrast, Taiwanese youth, while also active on Instagram and YouTube, tend to rely more on LINE, which is integrated with fact-checking apps such as Cofacts. This integration appears to decrease exposure to misinformation.

Moreover, the results also reveal differences regarding trust in social media information. Indonesian respondents were likely to admit that they sometimes or often believed what they saw on social media. This shows the level of trust in social media information, as shown in the following graphic data:

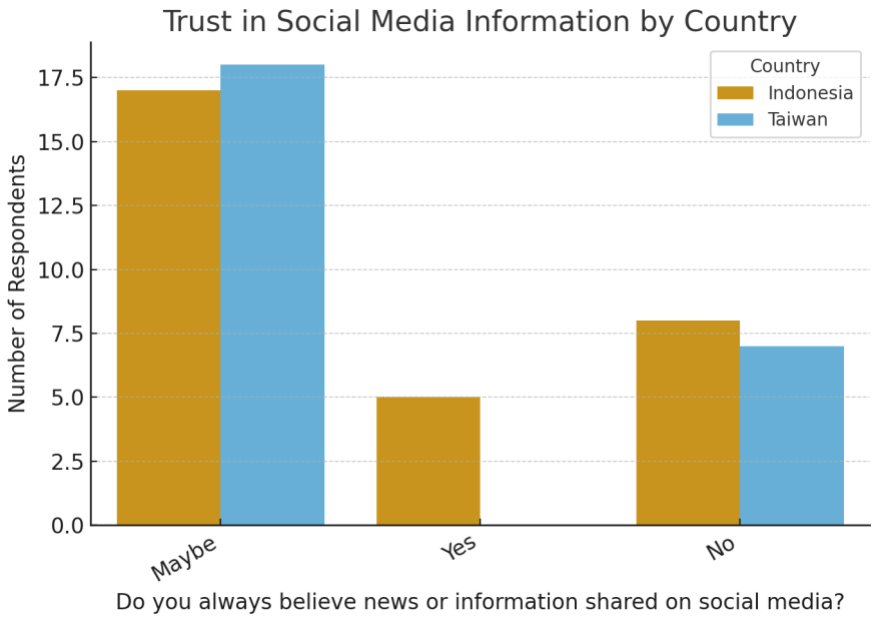

Figure 4. Trust in Social Media Information among Youth in Indonesia and Taiwan.

In contrast, Taiwanese respondents were more skeptical. A larger percentage of them indicated that they 'rarely' or 'never' fully believe social media content. This gap may be due to the country's sociopolitical history. Indonesia, with its collectivist culture, has successfully maintained trust-based sharing among families and peer groups. Meanwhile, Taiwan's civic environment encourages a culture of cautious skepticism, influencing people's habits of questioning sources. In contrast, Indonesian youth, despite being highly aware of the risks, still rely on trust-based verification. However, social media is a platform where political misinformation spreads and has gained attention as a serious threat to democracy (Ehrenberg, 2012; Shin et al., 2018), and it can sometimes be challenging to identify its sources.

The youth' digital literacy efficacy in identifying and combating misinformation in Taiwan and Indonesia

This chapter examines youth's digital literacy efficacy in both countries, focusing on their behavior toward misinformation. Eysenbach outlined a comprehensive framework for combating the spread of misinformation, identifying four foundational pillars of infodemic management. One of these pillars emphasizes the importance of knowledge refinement through mechanisms such as fact-checking and peer review, highlighting the role of quality assurance in maintaining the integrity of the information systems. (Eysenbach, 2020). Similarly, Diepeveen and Pinet situate digital literacy within a broader set of strategies aimed at

addressing the misinformation problem. They argue that enhancing users' digital competencies—including fact-checking, critical evaluation of content, and responsible engagement—can support individual and societal resilience against misinformation, particularly in online environments. (Diepeveen & Pinet, 2022).

The findings of this study indicate the digital literacy behaviors of Indonesian and Taiwanese youth, as indicated by their sharing and verification habits, as shown in Figure 4.

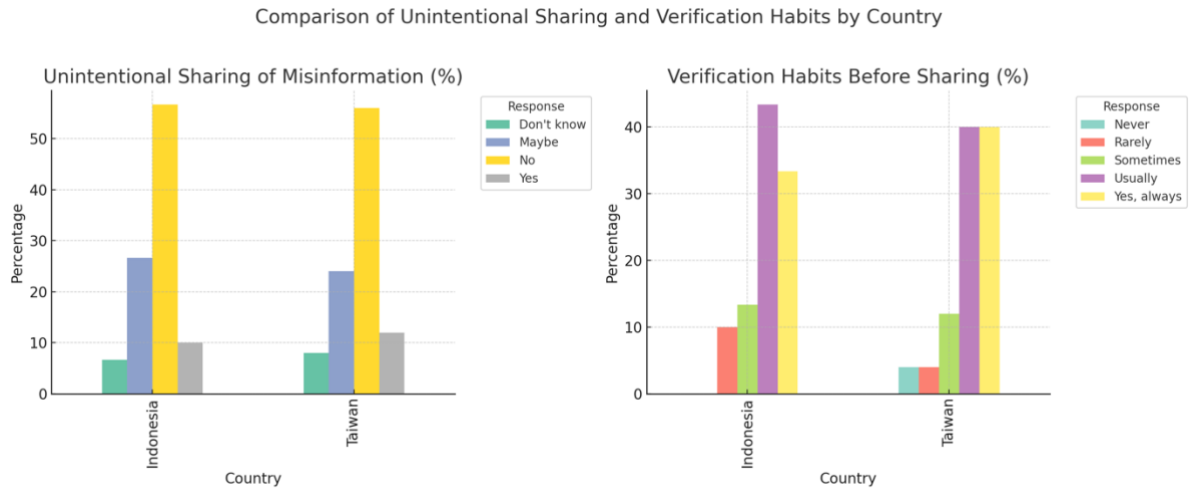

Figure 4: Comparison Chart of Sharing and Verification Habits in Indonesia and Taiwan

Of the 30 Indonesian respondents, 40% reported accidentally sharing misinformation, compared to approximately 24% of respondents in Taiwan. This means that Indonesian youth are nearly twice as likely to spread misinformation without even realizing it. This explanation is related to the platform cultures in each country. Indonesian youth are deeply engaged with WhatsApp, TikTok, and Instagram, which are platforms designed for speed, virality, and interpersonal sharing. Messages often gain credibility because they come from trusted social circles, such as friends, classmates, and family members. A strong sense of community escalated the spread of misinformation. However, the habit of re-sharing information is typical of the collectivist culture in Indonesia. As mentioned above, the culture is characterized by the habit of establishing close relationships with people in their social groups, and one of the efforts to establish these relationships is by sharing information. What makes it more dangerous is that information is shared without being checked first, and id immediately shared with others

(Arisanty & Wiradharma, 2020) .For Indonesian youth, verification practices can still be a significant challenge, requiring additional support and understanding from the platforms.

Meanwhile, Taiwan's youth are embedded in LINE, which incorporates fact-checking tools. When rumours arise, they are presented with opportunities to verify misinformation. It appears to be their practice to pause before further disseminating the message. This is why Taiwanese youth consistently reported verifying information before sharing. Furthermore, the verification habit highlights this contrast. In Taiwan, around 52% of respondents revealed that they 'always verify' before sharing, while in Indonesia, only 30% chose the same. Unfortunately, approximately 33% of people tend to rarely or never verify information before sharing, whereas in Taiwan, only 16% do the same.

Verification is a common practice among Taiwanese youth, making it familiar and straightforward. Empirical evidence from the 2024 'Annual Misinformation Survey' by National Taiwan University revealed that the youth Taiwanese verification behavior using fact-checking tools rose from 60.5% in 2023 to 71.03% in 2024. They also mentioned trust in fact-checking organizations, such as the Taiwan Factcheck Center, as very credible, with up to 68.41% in 2024. Sharing and verification habits in Taiwan may have originated from China's efforts to shape public opinion in Taiwan, including the dissemination of false information on the Internet (Chien, 2019; Dickey, 2019) . Since 2019, Taiwan has developed a mechanism to protect its democracy and social stability by employing a whole-society approach to combat disinformation. This includes civic technology communities like Co-Facts collaborating with fact-checkers and leveraging chatbots to identify and debunk viral conspiracy theories, while social media platforms engage in multi-stakeholder partnerships to suppress inauthentic content and promote accurate information (H.-C. H. Chang et al., 2021; Goh & Ho, 2019; Tu, 2021). Social media platforms in Taiwan have taken proactive measures to mitigate the spread of false information. In 2019, social media platforms strengthened their collaboration with government agencies, fact-checking entities, and civil society organizations to curb the proliferation of false information. Fact-checking has become well-known and is a habit among Taiwanese citizens who value accurate information. Hung, Chang, and Hsieh on their study stated that the Taiwanese public tends to use fact-checking mechanisms when encountering suspicious or potentially false information(C. Hung et al., 2022)

However, sharing and verification habits, whether spontaneous or guided by digital literacy efforts, reflect an emerging awareness among users of the need to combat misinformation on social media platforms. These habits demonstrate a growing sense of digital responsibility, where combating misinformation is viewed as a collective duty among users (Wardle & Derakhshan, 2017). Awareness of fact-checking represents more than just an individual's media literacy; it also functions as a crucial moderating factor in the broader dynamics of political polarization.

Social media plays a significant role in the spread of polarizing content because social media is believed to be linked to democratic quality, though social media itself is neither inherently democratic nor undemocratic, but simply an arena in which political actors contest for power and influence (Gaultney et al., 2022)

To understand how Indonesian and Taiwanese youth engage with fact-checking, the survey obtained the following resources:

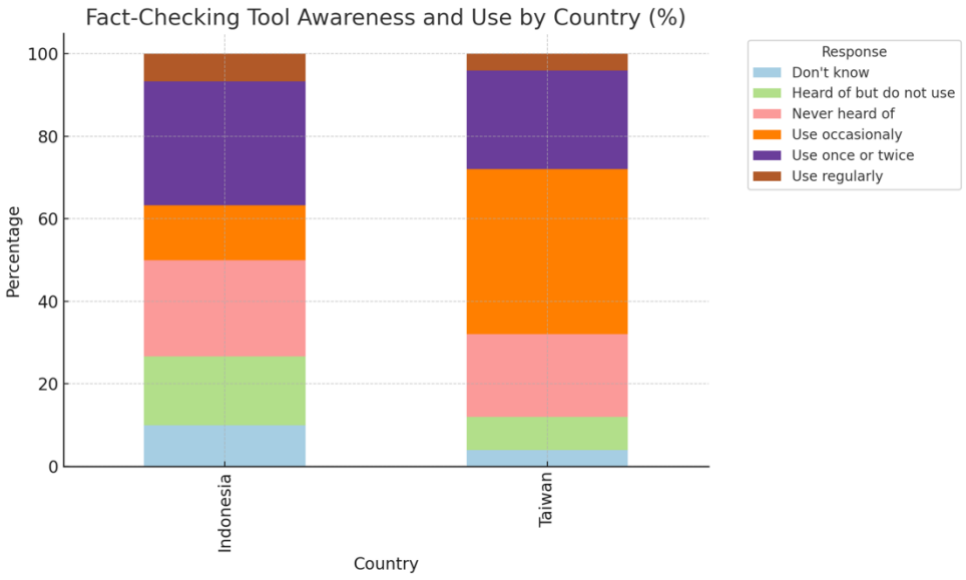

Figure 6. Fact Checking Tool Awareness and Use in Indonesia and Taiwan

The graph above shows that in Indonesia, most respondents (46.7%) claimed that they had either never heard of fact-checking tools or had heard of them but did not use them (33.3%); only a small minority (20%) indicated occasional or regular use. In Taiwan, awareness and engagement were significantly higher. Around16% reported that they had never heard of such

tools, 24% had heard of them but had not used them, 48% reported occasional use, and 12% identified themselves as regular users.

In Indonesia, tools such as the Indonesian Anti-Defamation Society (Mafindo) and CekFakta exist but are not integrated into the most widely used platforms, such as WhatsApp, TikTok, or Instagram. Youth resilience in Indonesia may be aspirational; they know misinformation is a problem, but their digital environments do not make verification easy for them. Even though Mafindo already has a mission to actively build media literacy and tackle the spread of misinformation and disinformation.(Purnama, 2024). Mafindo provides hoax reporting services to the public through various platforms and applications; however, Indonesian youth are still unfamiliar with fact-checking habits and mechanisms.

Hence, Taiwan hosts several well-established fact-checking organizations that serve as critical components of the country's information integrity infrastructure. Key organizations include the Taiwan FactCheck Center (TFC), MyGoPen, Line Factchecker, and CoFacts. These civic-led initiatives, particularly TFC, are actively engaged in identifying and debunking misinformation, regularly publishing verified findings on their respective platforms. According to recent findings, these organizations played a significant role in addressing misinformation ahead of the 2024 general election, contributing to public awareness of coordinated disinformation efforts (Chen et al., 2024). Furthermore, data from the NTU Center for Information Integrity Research (CIIR) indicates that Taiwanese youth exhibit a high degree of familiarity with these fact-checking services and demonstrate trust in platforms such as TFC, CoFacts, and MyGoPen when assessing the credibility of online information (Center for Information Integrity Research, 2024)

The presidential election in Indonesia is an important event in the political sector and is certainly influenced by social media, which is believed to increase the spread of misinformation. Platforms such as TikTok, Instagram, Facebook, and Twitter (X) have been used as tools to spread fake news and hate speech. According to Tirto News, the number of misinformation issues circulated at the 2024 Indonesian presidential election is around 240 fact-check articles per June-November 2023, and Tirto spotted 102 misinformation about the election discussed in 71 articles. (Susanty et al., 2024)

In terms of political polarization, the responses from Indonesian youth show mixed but significant concerns about polarization. Around 26,7% said misinformation will 'always' cause polarization, 53.3% believed it will 'somewhat' cause polarization, and the remaining 20% were 'not sure', as shown in the graphic below.

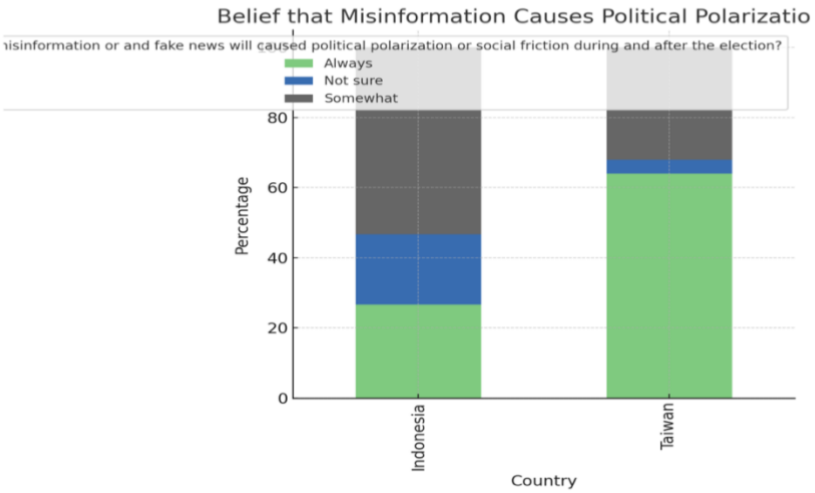

Figure 7. Polarization Belief caused by Misinformation

However, Taiwanese respondents were more decisive. Of the respondents, 64% said misinformation will 'always' cause polarization, 32% believed it would 'somewhat, and only 4% were 'not sure.'

The political polarization that occurs in Indonesia and Taiwan cannot be separated from the presence of social media. Sphor (2017) notes one of the characteristics of social media is message customization, where users can choose the message that best suits their needs (Spohr, 2017). Alongside the customization is the phenomenon of the selective exposure, contributes significantly to ideological fragmentation. Social media provides the audience with a lot of information, which can lead to cognitive overload and discomfort at the same time. To manage discomfort, users often seek content that confirms their existing political views, reinforcing their ideological leanings (Iyengar & Hahn, 2009). This selective engagement with politically congruent information strengthens partisan divisions and exacerbates polarization within digital communities.

The difference between Indonesian and Taiwanese Youth shows not simply a gap but reflects socio-political conditioning. Indonesia's elections have historically weaponized identity politics (SARA issues), while Taiwan's polarization of beliefs has stemmed from foreign misinformation campaigns and their threat to democracy. One is uncertain, and the other is decisive, shaping how resilience is built in each context. Young people in Indonesia view misinformation as a disruption that can be addressed, whereas those in Taiwan see it as a systemic threat that requires constant attention.

The Importance of Digital Efficacy and Resilience in Combating Misinformation on Social Media

Digital efficacy regarding misinformation is the perceived ability to judge source credibility to verify and reframe sharing when uncertain, while resilience is related to behavioral outcomes in the way people recognize, respond, recover, and learn (Jones-Jang et al., 2021). Thus, building digital efficacy is the engine that powers digital resilience, especially in the fight against misinformation on social media.

In terms of digital efficacy and digital resilience, most Indonesian youth recognized that their digital literacy skills are influenced by how they respond to misinformation, as shown below:

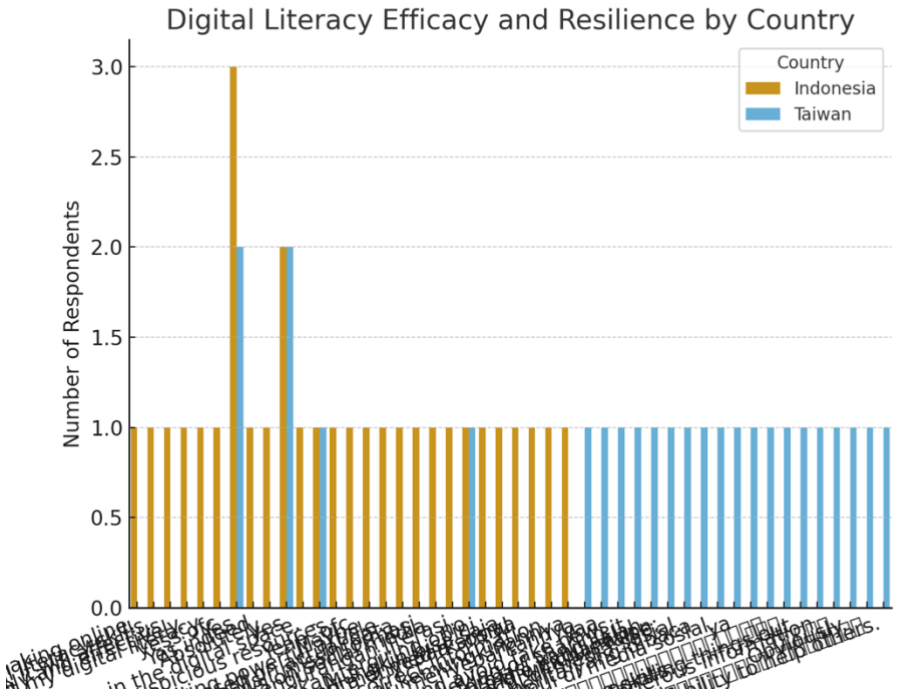

Figure 8 The Digital Literacy Efficacy and Resilience by Country

Approximately 60% of the respondents strongly agreed, 26.7% agreed somewhat, and the remaining 13.3% were uncertain or disagreed. The chart revealed that Indonesian youth see resilience as a skill gained through practice; the more they respond to misinformation, the more capable they feel.

Previous research in Indonesia has highlighted that digital literacy levels vary widely across different demographics and regions lines (Arninda et al., 2025; Sonni et al., 2025). A survey of internet users aged 13 to 70 found that overall digital literacy was classified as ranging from average to good, with users demonstrating moderate proficiency(Luthfia et al., 2021) . Both the public and government in Indonesia consider digital literacy an important issue, particularly among youth, because digital media allows young people to access information and shape public opinion in a decentralized way (Yue et al., 2019). With these digital skills, youth are better equipped to evaluate information critically and distinguish facts from misinformation or falsehoods, which is especially crucial during political debates (Luthfia et al., 2020)

Meanwhile, Taiwanese youth respondents were even more decisive. Approximately 80% strongly agreed, 16% agreed somewhat, and 4% expressed uncertainty. The number indicates a clear consensus that resilience in Taiwan is directly tied to efficacy, and the way they respond to misinformation actively enhances one's literacy skills. This reflects Taiwan's civic culture of fact-checking, where critical evaluation is taught as an essential part of digital citizenship. Complementary surveys by the National Cheng Chi University revealed that over three-quarters of Taiwanese youth reported engaging in fact-checking during election periods (National Chengchi University Election Study Center, 2024). Engagement in fact-checking demonstrates that responding to misinformation actively reinforces digital literacy skills. This is why Taiwanese respondents perceive resilience and efficacy in combating misinformation during elections.

In Indonesia, efficacy in addressing misinformation is shaped by exposure to disinformation threats and by collective adaptation at the societal level. However, the efficacy remains fragile. A report from the Center for Strategic and International Studies (CSIS) in 2024 shows that governance gaps, regulatory insufficiencies, and a weaker organized fact-checking ecosystem

make the civic system less able to compensate for misinformation (Okthariza, 2024) and more difficult for Indonesian society to counter misinformation at scale.

Meanwhile, in Taiwan, efficacy is habitual and supported by civic infrastructure, which ensures resilience sustainable. As the National Bureau of Asian Research (NBR) report notes that "governmental and civil society fact-checking organizations can reinforce each other while maintaining distance" (Kao, 2021). The differences in each country may be related to variations in the media ecology and civic system that shape digital literacy practices in each countries.

In addition to quantitative data, this study collected qualitative data. Qualitative insights add depth to the numbers by explaining why people act in a certain way. These insights were obtained from an open questionnaire, similar to an open interview with young people from Indonesia and Taiwan. This helped strengthen the research. Indonesian youth often talk about how fast and widespread misinformation is. Taiwanese youth have a deeper understanding of digital literacy. This shows how well young people in both countries handle misinformation. The NVivo coding framework was used to break down the analysis into key points, such as awareness of misinformation, youth political involvement, digital literacy and resilience through practice.

Indonesian youth reported encountering misinformation more frequently because of its rapid spread and viral nature. In contrast, Taiwanese youth were more aware of misinformation and its damaging effects on credibility; however, it remained manageable. This is reflected in their responses:

No	Country	Responses
1	Indonesian (R12)	*"misinformation during presidential elections spreads very fast and can influence people's choices*
2	Indonesian (R8)	*"Sometimes we don't realize what we share is misleading until someone points it out"*
3	Taiwanese (R9)	*"we should not trust everything from social media, because some news are misleading"*
4	Taiwanese (R3)	*"misinformation and fake news have become a big problem because they confuse people about who to trust"*

Table 2. Qualitative Responses from Participants R3, R8, R9 and R12

These findings show that both countries are alert to misinformation. However, Indonesians described it as being overwhelmed by the volume and speed, indicating an information environment in which misinformation is normalized as part of the daily social media flow.

Verification practices and fact-checking tools are the key dimensions for resilience in both contexts, but of course, both countries have important differences in emphasis. Indonesian youth often describe verification as something to strive toward. This reflects awareness without consistent practice. In contrast, Taiwanese youth described verification as a habitual practice that they saw as integral to digital literacy:

No	Country	Responses
1.	Indonesian (R15)	*"One of the things that can be done is to keep verifying and not believe in things immediately."*
2.	Indonesian (R27)	*"I try to check the news, but sometimes I just trust it is from friends."*
3.	Taiwanese (R11)	*"I always check with other sources before sharing, because it is part of digital literacy."*
4.	Taiwanese (R17)	*"We must evaluate before believing, otherwise we can spread harm."*

Table 3. Qualitative Responses from Participants R11, R15, R17, and R27

In Indonesia, they either had never heard of such fact-checking tools or only vaguely knew of them, such as Mafindo or ChekFakta. Meanwhile, Taiwanese youth frequently cited LINE and CoFacts as resources.

No	Country	Response
1	Indonesian (R21)	*"I have heard of fact-checking websites, but I never use them."*
2	Taiwanese (R7)	*"If I am not sure, I use Cofacts in LINE to check."*
3	Taiwanese (R20)	*"Fact-checking tools are part of what we do now in Taiwan."*

Table 3. Qualitative Responses from Participants R7, R20, and R21

These reflections confirm that Indonesian youth are disengaged from fact-checking tools, while Taiwanese youth see verification tools as normal, expected, and accessible, and embedded in the platforms they use the most.

The definitions of digital literacy reveal how cultural frames shape efficacy. Indonesian youth often emphasize operational or functional metaphors. On the other hand, Taiwanese youth explicitly tied digital literacy to evaluation and resilience.

No.	Country	Responses
1.	Indonesian (R20)	*"Digital literacy is like reading a book or newspaper but thorugh digital media."*
2.	Indonesian (R28)	*"It is about using social media wisely, not too much."*
3.	Taiwanses (R14)	*"Digital literacy refers to the ability to effictevely use and evalueate information from the internet."*
4.	Taiwanese (R19)	*"It means you can identify which is true and which is false."*

Table 2. Qualitative Responses from Participants R14, R19, 20, and R28

Responses from both countries indicate a more profound, critical-level understanding of literacy. Indonesian youth focus on access and responsible use, but not necessarily on critical evaluation. Hence, Taiwanese youth show a higher consensus in linking literacy with resilience.

This study also gathered data from experts in various areas, such as academics, independent researchers, and members of civic organizations. One of the experts, Lin, stressed that there are at least two reasons for misinformation, hoax, fake news, or disinformation stresses easily on social media: (1) political identity and (2). For money, the buzzer phenomenon or misinformation is used to gain or raise money. She analyzes that the misinformation phenomenon is similar between Indonesia and Taiwan and that it not only occurs on social media but also on specific newspapers, not all mainstream media.

Regarding misinformation phenomenon in Taiwan, Lin mentioned that the eletion period are the crucial time as she said,

"I think when the election or the activity happened in society to understand that good chance for misinformation to appears, and we try to understand what is misinformation or disinformation itself. This information comes from outside of mainland China. Know that in Taiwan we concerned about misinformation approach on youtubem social media and also from nes media" (Lin, Communication Professor in Taiwan University, personal interview – 2025/05/28)

Meanwhile, an expert informant from Indonesia, Sherly, as an independent researcher, said that misinformation is not only hoaxes and fake news anymore, but now what happened in Indonesia, misinformation is part of political campaigns. Sherly stated in the interview that we conducted on 2025/04/09.

"Social media as a battlefield of misinformation lacks a clear border. While they refer to what Jurgen Habermas said about the public sphere that encourages democracy, it resembles a battlefield. War of words' (Sherly–Indonesia Independent Researcher, personal interview – 2025/04/09).

Sherly also put her argument about misinformation phenomena in Indonesia right now as toxic positivity. Nowadays, trends are shaped by the fact that everyone can produce news or content on social media platforms. The content tends to be softer and less explicit; it appears accurate but the facts are often incorrect. It appears that ti is organic, but actually the content is not inorganic. This is why people easily engage with this type of content. Misinformation linked to toxicity leads to content abuse.

From the Indonesian civic organization, SAFENET, the interview resulted in the main medium of misinformation being social media because their primary target of misinformation during the presidential election in 2024 is the Z generation or youth generation. They mainly posted content on social media, such as TikTok, in campaign format. SAFENET stresses that campaign content is a form of misinformation.

"*However, what happens in social media, in this term, is misinformation, also spreading by conventional media, such as television, which also amplifies misinformation. Our media ecosystem also responsible for amount of misinformation circular in Indonesia"* (SAFENET, Indonesian Civic Organization – personal interview, 20205/04/10)

Discussion

The findings of this study highlighted important distinction between Indonesia and Taiwanese youth in their digital literacy efficacy, especially in combating misinformation during presidential election 2024 and the efficacy translates into resilience against misinformation. According to this study, both groups were aware of the risk of misinformation, but their responses revealed that Indonesian youth encounter misinformation more frequently, are more likely to trust or share it, and often describe verification as an ideal rather than a routine process. Taiwanese youth reported more skeptical attitudes, more consistent verification, and greater engagement with fact-checking tools integrated into their daily digital practice. The divergence shows that resilience against misinformation is not merely the outcome of digital exposure, but also the product of digital efficacy and literacy practice. These findings resonate with, and in some ways, challenge the existing literature on digital literacy and misinformation resilience.

However, the verification process in Indonesia is a different issue. Sherly, an independent researcher and specialist on internet safety, stated that

"Verification is a different kind of problem not only in Indonesia, but maybe for all Southeast Asian countries. Challenges and adaptations require significant effort. Once again, the definition of misinformation in Indonesia has shifted. So the question raised is, what is the role of fact-checking tools or organizations nowadays?" (Sherly – Indonesia Independent Researcher, personal interview 2025/04/09).

Indonesia has more than one fact-checking tool. According to SAFENET, there are around six official and registered fact-check tools and NGO that focus on Internet safety. However, the effectiveness of these fact-checking tools remains questionable.

"They were still confused about how to respond to toxic positivity, whether this falls under misinformation or not. However, compared to 2019, the misinformation in Indonesia was more sophisticated". (SAFENET, Indonesian Civic Organization – personal interview, 2025/04/10)

According to the expert interview, misinformation in Taiwan rose after the election of 2016, as did the established fact-check organization. Although digital literacy is not a specialized course at the university, Lin believes that the younger generation can recognize fake news and misinformation. However, because misinformation is widespread, the number of people still falls.

Discussion

The concept of digital literacy, as mentioned in the literature reviews section, was introduced by Gilster, defined as the ability to understand and critically evaluate digital information in everyday life (Gilster, 1997). It also covers a person's understanding of digital content.

However the practiced of digital literacy between two countries in this research is varies significantly. In Indonesia, the digital literacy practice is associated with the functional or operational abilities, like reading or knowing the information online. The term ' operational literacy' refers to the most basic layer in the digital skill framework. Livingstone stated that without critical literacies, the youth respondent may be limited in detecting misinformation (Livingstone, 2014). Meanwhile, digital resilience depends on moving from functional confidence to critical ability. Thus, while Indonesian youth are digitally active, their literacy efficacyremains in producing awareness or at the surface level.

A previous research noted that Indonesian fact-checking organizations like MAFINDO, despite their activity, operate within a fragmented civic environment with limited platform integration. The research also stated that this operation might decerease the accessibility of their tools for daily use. Consequently, digital literacy among Indonesian yout often result in increased awareness without the habitual use of verification skills (Dangin et al., 2023)

In contrast, Taiwanese respondents consistently demonstrated higher-order digital literacy skills. They described digital literacy in terms of evaluative capabilities—specifically the ability to assess truth and falsehood—reflecting what Chang and Liu (2011) define as digital literacy requiring higher-order skills of judgement and synthesis rather than just access. The 2023 Annual Misinformation Survey conducted by the Taiwan FactCheck Center revealed that 58,6% of respondents are aware of fact-checking organizations such as TFC, COFacts, and myGoPen. Among them, approximately 37.1% reported using these organizations

occasionally, while 10.6% use fact-checking tools daily or (Taiwan FactCheck Center, 2023) . Only Taiwanese respondents who routinely verify information and utilize fact-checking tools exemplify the progress of digital literacy, which Hobbs & Jensen (2009) describes as critical autonomy- the ability to evaluate and ethically use information independently . Verification is not only known but also practiced regularly, becoming habitual. This practice fosters what is called resilience.

The difference in how Indonesian and Taiwanese youth combat misinformation on social media is actually shaped not only by individual competence, but also by civic and technological infrastructure. Taiwan's ecosystem integrates verification tools into commonly used platforms like LINE, reducing barriers to action. Taiwan's participatory digital governance enhances citizens' evaluative capacity, as reported in the CIVICUS Digital Democracy Report (2025). It shows how Taiwan's government supports fact-checking and media literacy initiatives as part of its national strategy. In contrast, Indonesia's verification tools such as CekFakta (MAFINDO) and Hoax Buster function only outside mainstream platforms, which creates more resistance and reduces their use. In fact, as part of the push for digital transformation and the integration of national digital services in Indonesia, the Ministry of Communication and Information (Keminfo) launched a digital literacy program in 2021. The program is carried out in communities, including among students. Multiple parties, including the government, universities, and industry, recognize the importance of digital skills for youth and have incorporated them into school curriculums development. However, in an interview with Sherly, independent researchers and experts on Indonesian Digital Literacy stated that combating misinformation requires more than just verification habits, as the trend of misinformation in Indonesia has evolved and now demands more comprehensive efforts beyond fact-checking organizations. As she said

"In this situation, we need to rethink htow important the societal foundation is in this kind of misinformation situation in Indonesia. Also to keep trustworthy of societal foundation" (Sherly Indepenent Researcher, personal interpretation – 2025/04/09)

Sherly also noted that digital resilience requires youth participation, including involvement in policymaking. This does not occur in Indonesia.

Civic organization SAFENET in Indonesia highlighted their efforts to combat misinformation, especially during the 2024 presidential election. They conduct content moderation by reporting

misinformation to social media platforms. SAFENET refers to these platforms as 'META trusted partners.' However, there is a limit in the content moderation context as explained,

"They provide limited space; content moderation is only for enforcement, with no opportunity for community policy participation. Meanwhile, other civic organizations in different countries have successfully contributed to shaping social media platform policies". (SAFENET, Indonesia Civic Organization, personal interview – 2025/04/10)

The divergence between Indonesia and Taiwan carries substantial implications for democratic resilience in the era of misinformation and disinformation. Previous studies have shown that digital literacy significantly influences active participation and the quality of democracy. Low level digital literacy can impact a society that is less critical of information, vulnerable to political manipulation, and has a low level of political participation (Bulya & Izzati, 2024).

In the Indonesian context, youth who report frequent exposure and unintentional sharing exemplify this. Trust within social groups amplifies misinformation, making it more difficult to rectify. Scholars have advanced this point by framing fake news not as an accident but as an intentional form of misinformation tied to political and economic incentives. Indonesian data reflect this dynamic, as many youth have reported seeing misinformation tied to electoral politics that circulated widely on social media (Tandoc et al., 2018). High exposure to misinformation in Indonesia during the 2024 presidential election 2024 combined with limited civic support, amplifies the risks that misinformation is difficult to correct because it is embedded in social trust networks (Kuklinski et al., 2000) and is further compounded by platform structures that favour virality and emotional content (Milli et al., 2023). Indonesian youth experience these effects directly through social media platforms such as TikTok and WhatsApp, where misinformation often circulates unchallenged.

Taiwan serves as an example of how digital literacy infrastructure and civic culture can converge to foster resilience. Taiwanese respondents' reliance on Cofacts in LINE exemplifies the integration of behaviour. Resilience to misinformation can emerge when users adopt active strategies to scrutinize content. However, technical and behavioral interventions are also important for effectively fighting misinformation. (Sharma et al., 2018; Shu et al., 2017).

Resilience is the most effective way to combat misinformation. In the case of Taiwanese youth, verifying content as an automatic habit exemplifies how individual confidence and structural support interact to foster consistent resistance to misinformation.

Previous research indicates that digital literacy and online resilience can be combined as protective factors for youth facing online misinformation risks. In addition, online resilience and digital literacy serve as potential safeguards for young people against the harmful consequences of negative online experiences. The digital resilience also helps individuals recognize and manage risks and threats they encounter with misinformation in their daily life (Sun et al., 2022). In this context, misinformation is spreading during the presidential elections of 2024 in Indonesia and Taiwan.

The findings also illustrate the importance of efficacy in building resilience among youth. In terms of youth resilience in combating misinformation on social media, self-efficacy theory offers the ability to act effectively in performing a task (Bandura, 1997), such as recognizing forms of misinformation and utilizing tools to avoid it. Additionally, another scholar argued that efficacy must be combined with self-regulation, which is the ability to plan, monitor, and reflect on digital actions. (Zimmerman, 2002). Taiwanese youth who reported verifying information 'almost automatically' exemplified the regulatory cycle, where confidence fosters active participation, enhances skill mastery, and builds even more confidence. This confidence in engaging with misinformation boosts their skills, turning awareness into consistent behaviour through a sense of efficacy.

Indonesian youth, while aware of the need for verification, often expressed it as an aspiration rather than a habit, indicating weaker efficacy. Efficacy is vital for youth in information-dense environments (Patel, 2021), particularly in the context of the 2024 presidential election, digital skills alone may not be enough without the confidence to act. A research work by Luthar (Luthar & Cicchetti, 2000) on resilience further clarifies this point, emphasizing that resilience is a dynamic process co-produced by individual agency and environmental support.

The Indonesian respondents may come from areas where misinformation spreads more easily, whereas the Taiwanese respondents could be more actively involved in their communities than average. This means that in Taiwan, checking and verifying information verification is encouraged by strong systems and routines. On the other hand, in Indonesia, the lack of such integrated systems makes it harder to create effective feedback loops, leading to high hopes

that often fail to materialize into action. Taiwan's example demonstrates how robust institutional structures can enhance the confidence and resilience of young people. Indonesia's situation highlights the challenges that arise when these structures are weak or missing.

Conclusion and Closure

This study demonstrates that digital literacy is not a uniform shield against misinformation but rather a contextual practice. Indonesian youth are aspirational and resilient; they are aware of misinformation but still developing verification skills. Taiwanese youth display institutionalized resilience, with verification integrated into their digital and civic activities. These findings confirm earlier insights and suggest that resilience is more than an individual trait; it involves skills, confidence, infrastructure, and culture. For researchers and policymakers, building democratic resilience requires teaching skills and reshaping digital and civic environments to make efficacy actionable.

Despite its contributions, this study has significant limitations. First, the sample size was relatively small (n = 55), which restricts the ability to generalize the results to other youth populations in Indonesia and Taiwan. Second, data collection was limited to a single point in time, making it challenging to understand how digital resilience evolves over time or in response to fluctuating events such as election cycles or platform updates. Third, although the study included both qualitative data and secondary empirical evidence, it lacked observational or behavioral data, which could have provided richer insights into how verification occurs in real-world settings.

Future research should address these limitations through several approaches, such as conducting large-scale representative surveys to verify whether current patterns are consistent across more diverse youth groups. Longitudinal studies are valuable for observing the evolution of digital resilience, particularly during critical events such as elections or information crises. Moreover, employing mixed-methods strategies, such as combining surveys, interviews, and digital ethnography, would offer a more comprehensive view of how youth encounter and counter misinformation in real time. Exploring cross-national comparisons beyond East Asia could also determine whether these findings apply to other democratic settings with different media landscapes and civic infrastructures.

In conclusion, this study highlights an important point: digital literacy alone is insufficient. Combating misinformation requires not only skills and confidence but also systems that support and normalize verification. For young people to respond effectively to misinformation, they need to believe in their ability to make informed decisions and be in environments that turn those decisions into regular, actionable habits.

Acknowledge

This study was supported by a grant from the Ministry of Foreign Affairs, Taiwan, as part of the Taiwan Fellowship 2025. This work was conducted at the host institution, the Institute for Advanced Studies in Humanities and Social Sciences, National Taiwan University. The author was also supported by her home institution, the Department of Communication Science, Faculty of Information Technology and Communication, Universitas Semarang, Indonesia.

The author sincerely appreciates the expert and anonymous respondents for their time and expertise in this study. Additionally, the researcher extends gratitude to the Chinese Center for Studies for its support throughout the project.

Ethical Compliance

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institution.

Conflict of interest

The authors declare that they have no affiliations or involvement with any organization or entity with any financial interest in the subject matter of the materials discussed in this manuscript.

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