



Comparison of News Literacy, Media Consumption, and Trust between Indonesia and Malaysia

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Abstract. News literacy and trust are essential factors to consider in how individuals navigate their media environments. However, studies on news literacy and trust have focused primarily on Western and English-speaking populations. The current study evaluates and compares news literacy, media consumption, and trust among Indonesian and Malaysian samples. Our data was collected in July 2021 via a telephone survey. We did not find any significant differences in self-reported news literacy between countries, but we found that participants lower in age, college education, and living in an urban area score higher on news literacy across both populations. We also found that our Malaysian participants reported spending more time on social media, but Indonesian participants spent more time watching television. We did not find any significant differences between countries for trust in institutional media, but Indonesian participants reported higher trust in online media. These findings highlight the importance of considering cultural differences in designing and evaluating media literacy interventions.

Keywords: news literacy; media literacy; media consumption; trust.

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1. Introduction

Media literacy skills are crucial for successfully navigating rapidly evolving online information ecosystems (UNESCO, 2023). While digital technologies such as the internet and mobile phones provide many benefits, they also facilitate the spread of misinformation, hate speech, and extremist ideologies. Additionally, the internet provides an accessible avenue to intentionally spread false or misleading information (disinformation) around the globe. Disinformation campaigns have been tracked in various countries from Chinese and Russian campaigns polluting the discourse surrounding COVID-19 (Barnes & Sanger, 2020; Molter & DiResta, 2020), Russian propaganda about Ukraine (Idris, 2023; Greenberg, 2023), to government attacking progressive and activist groups in the Philippines (Hapal & Serafica, 2021), Uganda (Okot, 2023), and across Asia (Amnesty International, 2020). Disinformation campaigns aimed at sowing doubt in the electoral process can undermine the credibility of democracy itself (Moore & Colley, 2022).

Information and media literacy skills can protect individuals against the sea of online misinformation and disinformation (Austin et al., 2021; Jones-Jang, Mortensen & Liu, 2021). Current research in media literacy mainly focuses on English-speaking, Western countries (Blair et al., 2023) that also tend to have wider internet access and score high on democracy ratings and civil liberties (Democracy Index, 2022). In developing countries, especially those that have issues with fair and free elections, media literacy is even more crucial. In order to develop effective media literacy strategies for developing countries in the Global South, it is important to consider the idiosyncrasies of their media environments and how their citizens interact with their media environments.

To investigate media literacy in the Global South, we conducted this study in two of the largest countries in Southeast Asia that are in close proximity to each other: Indonesia and Malaysia. Despite the geographic proximity, Indonesia and Malaysia differ significantly in their economic development, education levels, political stability, internet penetration, and media environments. It is unclear how these differences between the two countries impact their citizen's media behaviors. Indonesia is the world's largest social media user after China, India, and the United States (Ruby, 2023). According to the World Bank Index (2022), Indonesia is behind in its digital development compared to other large countries. In early 2023, it was estimated that 77% of Indonesians had access to the Internet compared to 96.8% of Malaysians (DataReportal, 2023). In economic terms, Malaysia's GDP per capita in 2021 was \$11,371 and Indonesia's GDP was only \$4,292. This places Malaysia as one of the strongest economies in the region (Adilla, 2023) and categorizes Indonesia as a developing country (The World Bank, 2022). Finally, the 2021 United Nations' Human Development Index ranked Malaysia 62nd worldwide and Indonesia ranked 114th (UNDP, 2022).

The spread of disinformation and misinformation in both countries has led to socio-political divisions and mass protests. Both Malaysia and Indonesia have state-sponsored media contributing to information ecosystems (Hopkins, 2014; Jalli & Idris, 2019; Idris, 2022). For example, Indonesia and Malaysia have 'cybertroopers' that post pro-government information on social media (Hopkins, 2014; Jalli & Idris, 2019). These actions may influence the trust of online citizens in each country. Fact-checking websites and media literacy programs have been implemented in both countries, but have yielded mixed results. For example, Indonesia's most extensive digital literacy program was initiated by their national government but had serious limitations, and may have even strengthened the state's power (Idris, 2022). Thus, not only do Western countries have greater access to online media compared to the Global South, but political influences and media landscapes may differ substantially.

Malaysia and Indonesia have different levels of internet penetration and education, varying socio-political dynamics, and different media environments. It is unclear if such differences contribute to a divergence in news literacy and media habits between these two Southeast countries. Applying the theory of planned behavior can provide guidelines for how differences between the two countries may impact media literacy levels. According to the theory of planned behavior, behavioral intentions are influenced by attitudes towards the behavior, social norms, and perceived behavioral control regarding the behavior (Ajzen, 1991; Ajzen, 2011). Because Malaysia and Indonesia have significant differences in their education systems and digital access, this may influence changes in the social norms surrounding how they evaluate information online. News literacy could be viewed as a civic social norm, which inspires individuals to be more news literate (Vraga et al., 2021). However, it is unclear if country level differences of education and digital access creates social norms which inspire

different levels of news literacy and media consumption. Both countries having disinformation campaigns as well as media literacy programs may inspire equal amounts of news literacy throughout the public. The present study addresses this gap by directly comparing news literacy, media consumption, and trust among the participant samples from each country.

The present study compares news literacy, media consumptions, and trust ratings among sampled participants from Indonesia and Malaysia. These two countries have unique media environments and have attempted to combat misinformation through different techniques. While Malaysia has had greater internet penetration for longer as well as a more robust education system, it is unclear if this translates into higher news literacy, different media habits, and different levels of trust in media. The present study makes several predictions about potential differences in the media habits between the two countries. Our first hypothesis is *H1: Malaysian participants will score higher on self-reported news literacy*. This prediction is primarily based on Malaysia having higher education levels and greater digital access compared to Indonesia, which may create a civic social norm to apply more caution when evaluating information from news sources and media. Additionally, Malaysia's earlier exposure to the internet may improve the average Malaysian's literacy of the modern information and media ecosystem. Even when controlling for education level in our analyses, the social norms of promoting education across the country may inspire a more educated public according to the theory of planned behavior. Because Malaysia has enjoyed higher education levels, more highly ranked universities, and broad internet access for much longer than Indonesia, we predict that this will help improve users' news literacy skills.

In parallel with our prediction of Malaysia having higher news literacy, we also predict that *H2: Younger, urban, and educated participants will have higher news literacy in both Malaysia and Indonesia*. We predict this outcome because younger, urban, and educated participants have enjoyed greater access to the internet for longer and because they have had greater access to media literacy programs and resources. Furthermore, educated individuals who live in more diverse areas may have more positive attitudes towards carefully evaluating information and may also feel they have more behavioral control regarding their news consumption. Education has been found to reduce the tendency to believe simple solutions to complex problems and reduce feelings of powerlessness (van Prooijen, 2017). These positive attitudes and higher perceived behavioral control for one's ability to analyze information may also predict higher news literacy behaviors according to the theory of planned behavior.

Considering media consumption, we predict that *H3: Malaysian participants will spend more time on social media*. We make this prediction as Malaysia has incorporated online activities earlier than Indonesia and their social media ecosystem has had more time to become incorporated into their daily lives. Because we predict Indonesia will report spending less time on social media, we also predict that *H4: Indonesian participants will spend more time on television, print, and radio than Malaysians*. Finally, we introduce an exploratory investigation regarding trust levels of television, radio, print, and online media in each country. Both countries have reasons to distrust their media environments due to government influence, so we are interested in understanding if participants from one country self-report more distrust than the other.

2. Methods

We collected data from 1045 Indonesian participants (48.2% female, mean age = 31.57 (SD=10.86), 37.8% reported some college or higher, and 55.9% urban) and 535 Malaysian participants (46.6% female, mean age = 30.72 (SD=11.59), 64.8% reported some college or higher, and 74.3% urban). We collected data through our survey partner GeoPoll in July 2021. They conducted telephone-based surveys by native Bahasa-Indonesian and Malay-speaking survey enumerators. Participants were selected using random digit dialing (RDD) and they were asked about their media consumption behaviors, news literacy, and trust in institutional and online media. Finally, participants were asked a few demographic questions and reported their age (in years), gender, education (highest level of degree completed), and location (urban vs rural). Participants were paid approximately 0.50 USD for completing our brief phone survey.

News literacy was measured by a combined score of three questions that measured how much of an article one reads before sharing, how often one verifies news online, and how often one challenges the legitimacy of what others share online. Participants were also asked how frequently they used social media, watched television, listened to the radio, or consumed print media. Trust was measured by asking participants if they had trust in online press, print press, radio, and television.

We used Ordinal Logistic Regression (OLR) to test our hypotheses. In these analyses, our country variable was coded as 1 for Indonesia and 0 for Malaysia. News literacy was coded as a single variable that combined the score of how much of an article one reads before sharing, how often one verifies news online, and how often one challenges the legitimacy of what others share online. Each question ranged from 1-4 and generated a total news literacy score of 3-12. Our trust questions were binary for each media source (trusting the source was coded as 1 and not trusting the source was coded as 0). For each analysis, we controlled for age, gender, education, and urban vs rural location. Age was measured continuously in years. Gender was coded as a binary variable, (male = 0, female = 1), education was coded as a binary variable (1 = some college or higher, 0 = less than some college), and urban versus rural location was also coded with a binary variable (1 = urban and 0 = rural).

3. Literature review

3.1. Media environments of Indonesia and Malaysia

Malaysia and Indonesia differ in their cultural dynamics, digital development, media environment, and media literacy programming. Digital access in Indonesia has been rapidly increasing, with 68% of its citizens being online in 2020, and with nearly 90% of Indonesians estimated to be online by 2025. In early 2023, the number of internet users reached 212.9 million out of the total population of Indonesia of 276.4 million (77%). Malaysia is a much smaller country with 34.13 million people but has an estimated 33.03 million internet users (96.8%). With greater internet usage also comes greater social media use as 78.5% of Malaysians used some form of social media in 2023, compared to only 60.4% of Indonesians. The most popular social media websites in Indonesia are Facebook (43% of the population use the platform), YouTube (50%), Instagram (32%), and TikTok (40%). The same social media websites were very popular in Malaysia with an even greater percentage of use by the population: Facebook (59%), YouTube (70%), Instagram (41%), and TikTok (57%)

(DataReportal, 2023). In short, although Malaysia has a significantly higher proportion of its citizens online, Indonesia has been catching up with internet and social media use.

Racial and gender dynamics of each country also contribute to the broader information and media landscape. Malaysia is a multiracial country where Malay, Chinese, and Indian populations have lived together for a long time. However, online news periodically contributes to tension along racial lines in Malaysia (Smeltzer & Lepawsky, 2010). Similarly, social media have spread racist sentiment toward Papuans in Indonesia (Kusumaryati, 2021). Racial tension is a common tactic for disinformation campaigns and can fuel polarization and mistrust (Reddi, Kuo & Kreiss, 2021). When evaluating gender dynamics, both countries struggle with gender equality. The World Economic Forum's 2022 Global Gender Gap study ranked Malaysia 103rd out of 146 countries while Indonesia ranked 92nd. These scores are a culmination of women's economic participation, education, health, and political empowerment (World Economic Forum, 2022). In Indonesia, women are less likely to use the internet compared to men, which could create a digital divide in their media and information literacy (Suwana, 2017). Even though Malaysia has greater internet access, women still shown reduced media literacy skills compared to men, especially in rural areas (Ahmad, Ayub & Khambari, 2019). While younger demographics are more likely to be online, recent studies have found that both Indonesian (Syam & Nurrahmi, 2020) and Malaysian students (Veeriah, 2021) have struggled to identify real versus fake news as well.

Both Malaysian and Indonesian media are vulnerable to political influence and economic incentives that bias their reporting. In Malaysia, one of the main component parties of the National Front (BN) is *United Malays National Organization* (UMNO). UMNO influences mainstream media by funding major news outlets such as *Utusan Malaysia*. Additionally, *The Star* newspaper has been influenced by another component party of BN. The *Malaysian Chinese Association* (MCA) and the *Malaysian Indian Congress* (MIC) control Tamil mainstream media content, such as *Tamil Nesan* and *Tamil Osai* (Idid & Safar, 1993). Finally, the major newspaper *Harakah* is controlled by the *Parti Islam Se-Malaysia* (PAS) and *Suara Keadilan* by *Parti Keadilan Rakyat* (PKR). Social media in Malaysia also have significant exposure to political propaganda as there have been consistent cases of 'cybertroopers' who post pro-government comments on Facebook, Twitter, and blogging websites (Hopkins, 2014).

While Indonesians nowadays live in an era of greater media freedom than existed under the rule of President Suharto from 1965 to 1998 (Haryanto, 2011; Lim, 2012; Tapsell, 2012) they still deal with media driven by capital interest and a concentration of ownership. Until 2002, there was an outbreak of 1500 new print media titles, and more than 900 new commercial radio and TV licenses were issued by the government (Haryanto, 2011). Now, there are only 12 large media groups that control almost all of Indonesia's print, broadcast, and online media channels. These groups also own five of the six newspapers with the highest circulation and the four most popular online news media websites, and only five companies control most of the TV market (Lim, 2012). Furthermore, much of the information ecosystem is 'Jakarta-centric' due to the fact that the Indonesian Broadcasting Commission, the Press Council, and the Ministry of Information are all based in the capital city (Haryanto, 2011; Tapsell, 2012). Because of this, Jakarta is where most decisions are made for Indonesia's national media, and furthermore Jakarta elites with business and political interests can directly influence media decisions. Finally, Indonesia's social media landscape has been subjected to several disinformation campaigns. Like Malaysia, Indonesia also has 'cybertroopers' who flood social media with pro-government content. McRae and colleagues

(2022) have documented thousands of scheduled and organized pro-government Tweets regarding Indonesian governance in Papua. The government heavily influences news media in Malaysia, while in Indonesia the news is heavily influenced by the media owners who are also often leaders of political parties. Thus, citizens of each country are subjected to substantial political and corporate influences in their media environments.

3.2. Media literacy programs in Indonesia and Malaysia

As noted above, Malaysia has scored considerably higher on the 2021 United Nations' Human Development Index (UNDP, 2022). This measure includes life expectancy, economic prosperity, and education levels. When looking specifically at education, Malaysians average 10.6 years of schooling while Indonesians average 8.6 years in 2021 (UNDP, 2022). Furthermore, universities in Malaysia are ranked significantly higher on academic and employer reputation than Indonesian universities. These differences in education between the two countries are crucial for potential media literacy levels because previous studies have found a clear positive association between higher education and lower susceptibility to falling for misinformation (Kricorian, Civen & Equils, 2022) and conspiracy theories (van Prooijen, 2017). Education's role in reducing belief in conspiracy theories may be due to the role of education in reducing the tendency to believe simple solutions to complex problems, as well as reducing feelings of powerlessness (van Prooijen, 2017).

In their fight against misinformation and disinformation, Malaysia and Indonesia have both created government agencies focused on promoting digital and media literacy. Media literacy has been broadly defined as the ability to critically analyze information that one encounters in their environment (Aufderheide, 1993). One of the agencies aimed at promoting media literacy in Malaysia was the Malaysia Digital Economy Blueprint (MyDigital), which launched in February 2021. MyDigital aims to develop digital literacy, create high-income employment opportunities, and make business and banking more organized and accessible. MyDigital also aims to provide virtual education access to children in the country. However, Ahsan and colleagues (2021) showed that this Malaysian digital literacy program mainly targets groups from schools and universities. Other groups, such as older adults, families, and rural communities, may be particularly vulnerable to misinformation and require additional outreach.

In Indonesia, the Ministry of Communication and Information built a national digital literacy program called Siberkreasi, which is divided into programs of digital literacy and scholarships for digital talent. In its first running, the literacy program reached 125,000 people in 350 locations. In their latest report, this digital literacy program reached about 12 million people through 20,000 online literacy classes (Idris, 2022). Siberkreasi is the largest in the country and even more significant than programs in schools, universities, community service organizations, and digital companies. Indonesia's Minister of Information and Communication has publicly called for the program to reach 50 million people by the end of 2024. However, Siberkreasi could improve by focusing more resources explicitly on media and news literacy in its broader digital literacy curriculum (Idris, 2022).

Malaysian and Indonesian agencies have both created broad and up-to-date fact-checking websites to assist with media literacy as well. The Malaysian Communication and Multimedia Commission (MCMC), developed and maintained a fact-checking website called *Sebenarnya.my*. In 2017, the government reported that digital literacy programs had reached about 1.5 million Malaysians (Ahmad et al., 2018). However, MCMC could benefit by inviting

collaborations with additional parties, including non-governmental organizations (NGOs) and journalists, to invoke a broader sense of trust among participants. In Indonesia, the fact-checking organization and website CekFakta was created in 2018 in collaboration with the Indonesian Cyber Media Association (AMSI), the Indonesian Anti-Defamation Society (Mafindo), and the Alliance of Independent Journalists (AJI), along with academics, journalists, and citizens. It continues to be the largest fact-checking website in the country (Thorn & Curnow, 2021).

Beyond fact-checking websites and digital literacy enhancement programs, both countries have written laws in an attempt to curb misinformation. Malaysia has also passed the controversial Anti-Fake News Act, a law to deal with fake news and related matters. The Anti-Fake News Act, passed through Parliament just in time for the General Election of 2019. It was criticized as a tool to stifle free speech, particularly during the 1MDB scandal, an embezzlement of the Malaysian sovereign wealth fund 1Malaysia Development Berhad (1MDB) by then-Prime Minister Najib Razak and associates (Beech, 2018). The law states that ‘fake news’ includes ‘any news, information, data, and reports, which is wholly or partly false, whether in the form of features, visuals or audio recordings or in any other form capable of suggesting words or ideas.’ Although well-intended, the Anti-Fake News Act may influence how comfortable people are sharing online information in general and potentially stifle the spread of factual information. After substantial criticism, the Anti-Fake News Act was repealed just a year later (Schuldt, 2021). However, Malaysia introduced another controversial act that attempted to outlaw misinformation surrounding COVID-19 (Balakrishnan, Ng & Rahim, 2021). In 2022, Indonesia passed legislation that ‘regulates the criminal act of broadcasting or disseminating false news or notifications’ and even bans insulting institutions (Nugraha & Bhwana, 2022). Such regulation has also received backlash as it could silence dissent and limit freedom of speech (Lamb & Teresia, 2022). While both Indonesia and Malaysia have made attempts to curb misinformation, empowering citizens with greater media and news literacy could have more sustainable outcomes.

3.3. Media literacy, news literacy, and trust

We have described how media literacy broadly considers the ability to critically analyze information in one’s environment (Aufderheide, 1993). Media literacy is often an umbrella term as there are other types of literacies that describe more specific abilities and competencies. The concept of news literacy refers to one’s ability to understand the news content and its context, including how the news is framed and produced to serve the audience, media agenda, and owner’s interest (Ashley et al., 2013). News and media literacy offer crucial protection against misinformation. Studies have shown that news and media literacy predict the ability to recognize misinformation and also one’s intention to share misinformation (Khan & Idris, 2019; Jones-Jang, Mortensen & Liu, 2021).

One of the few direct comparison studies of media literacy among Southeast Asian countries was conducted by Kusumastuti and Nuryani in 2020. Kusumastuti and Nuryani analyzed compiled media literacy scores from the 2018 Inclusive Internet Index across eight Southeastern countries, including Malaysia and Indonesia. They found no significant difference between any of the countries. Importantly, Kusumastuti and Nuryani focused on broad digital and media literacy measures, such as how well individuals can search and produce digital content online (Kusumastuti & Nuryani, 2020). Participant’s knowledge of how the news is framed and produced to serve the audience (news literacy) was not measured at all. Despite its importance in our ever-changing news environment, news literacy has been

understudied compared to other types of media literacy (Tamboer et al., 2022). The complex and changing dynamics of the media environment make a country’s news literacy crucial to explore.

To be news literate, one must possess personal goal and motivation in consuming the news, sufficient knowledge, and skills to analyze and critically evaluate the media content. According to Ashley (2019), news literacy skills are related to the ability to apply evidence in analyzing news content to identify misinformation and bias and to consume and share news responsibly. When reading a piece of news, a person can act as an active reader who goes through the whole article before engaging in the following action, such as liking, sharing, or doing a critical evaluation and challenging the legitimacy of the news. In contrast, a passive reader will only read the title or only the first lines of a news article (Glenski et al., 2017). Although reading behaviors vary based on demographic backgrounds, people generally rarely read a news article thoroughly; instead, they mostly scan information based on their needs and interests (Tamboer et al., 2022). A study in the Indonesian context showed that an information verification attitude is likely to lead to the ability to recognize misinformation on social media (Khan & Idris, 2019).

Another major component of news literacy is knowing how the media works to judge news’ reliability. Ashley (2019) argues that someone with a high level of news literacy will know how the news is produced, media agenda setting, and intervention from the media owners. Therefore, a person with a high level of news literacy may have more skepticism and less trust in the media. According to Reuters Institute, Digital News Report of 2022, trust in media is relatively low in both countries, with Malaysian trust in media at 36% and Indonesian trust in media at 39%. Even fewer, 20% and 28% of Malaysians and Indonesians respectively, trust that media is free from political influence. While some skepticism of the news can be helpful, when skepticism morphs into cynicism about the media it can cause problems. Research has shown that being skeptical of the news does not predict holding inaccurate beliefs, but cynicism, a broad lack of faith in people and institutions, can increase vulnerability to believing false information (Bensley et al., 2022). Thus, a healthy balance must be reached where citizens feel like they have some trust for their news outlets while also possessing news literacy skills to properly vet the information themselves.

4. Results

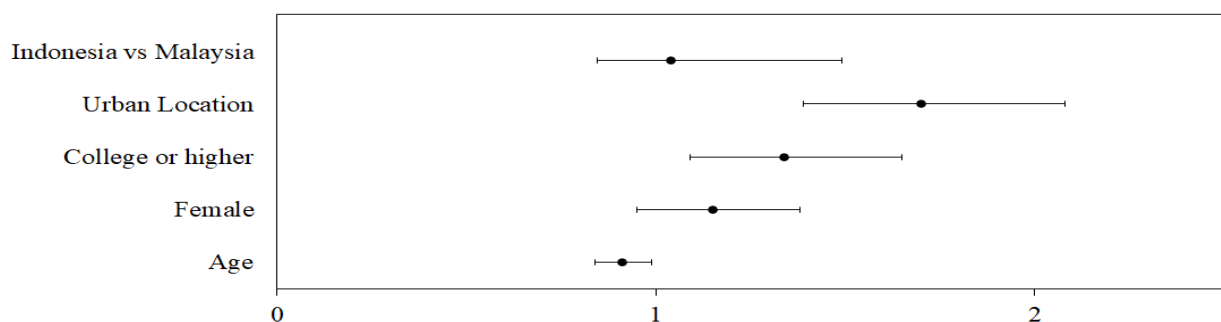


Figure 1. Odds ratio of increased news literacy rating by demographics

Note: Age transformed into quartiles to help visualize the odds ratio on the figure. No significance values changed in this model and the model is available upon request. Urban location, higher education, and lower age all predicted higher literacy scores.

Table 1. News literacy by demographics and country

	News Literacy Score
Age	-0.0155*** (0.00464)
Gender	0.142 (0.0932)
Education	0.290*** (0.107)
Urban vs Rural	0.532*** (0.102)
Indonesia vs Malaysia	0.0301 (0.107)
/cut1	-3.355*** (0.241)
/cut2	-2.352*** (0.213)
/cut3	-1.651*** (0.203)
/cut4	-0.955*** (0.198)
/cut5	-0.352* (0.196)
/cut6	0.192 (0.195)
/cut7	0.804*** (0.196)
/cut8	1.502*** (0.200)
/cut9	2.078*** (0.206)
Observations	1,415

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

We will describe our results focusing on our hypotheses. We first evaluated if either Malaysian or Indonesian participants scored differently on our self-reported news literacy scale (see Table 1 and Figure 1). We found that both Malaysian and Indonesian participants scored relatively high on self-reported news literacy with means of 8.39 (SD=2.18) and 8.10 (SD=2.62) respectively on a scale of 1-12. Our OLR model revealed that neither country had higher news literacy while controlling for age, gender, education, and urban vs rural location. When looking at our covariates, we found that higher news literacy is predicted by younger age (Odds Ratio=0.984, 95% CI= [0.975, 0.993], p=0.001), college education (Odds Ratio=1.33, 95% CI= [1.08, 1.64], p=0.007), and living in an urban area (Odds Ratio=1.70, 95% CI= [1.39, 2.08], p<0.001). Thus, younger, urban, and educated participants have higher

news literacy, but there was no significant difference between Indonesia and Malaysia. We plot these results by the odds ratio of our news literacy variable in Figure 1 for clarity. These findings suggest that both countries have similar levels of news literacy overall, but certain demographic factors predict how high one will score on this measure. Thus, we fail to find support for *H1: Malaysian participants will score higher on self-reported news literacy than Indonesia*, but do find support for *H2: Younger, urban, and educated participants will have higher news literacy*.

Table 2. Frequency of time spent on social media, print, and radio by demographics and country

	Television Frequency	Radio Frequency	Print Media Frequency	Social Media Frequency
Age	0.0491*** (0.00550)	0.0216*** (0.00493)	0.00761 (0.00484)	-0.0667*** (0.00681)
Gender	0.442*** (0.100)	-0.110 (0.0978)	-0.373*** (0.0986)	0.202 (0.166)
Education	-0.0432 (0.113)	0.0804 (0.112)	0.158 (0.114)	0.943*** (0.225)
Urban vs Rural	-0.191* (0.109)	0.197* (0.106)	0.0363 (0.108)	0.683*** (0.171)
Indonesia vs Malaysia	0.231** (0.114)	-1.101*** (0.113)	-0.439*** (0.113)	-0.479** (0.216)
/cut1	-0.486** (0.217)	-0.0861 (0.203)	-0.0970 (0.204)	-5.281*** (0.379)
/cut2	-0.000855 (0.213)	0.337* (0.203)	0.636*** (0.205)	-5.127*** (0.374)
/cut3	0.361* (0.212)	0.655*** (0.203)	1.159*** (0.207)	-4.827*** (0.367)
/cut4	1.693*** (0.216)	1.856*** (0.210)	2.496*** (0.222)	-3.897*** (0.351)
Observations	1,492	1,484	1,478	1,556

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

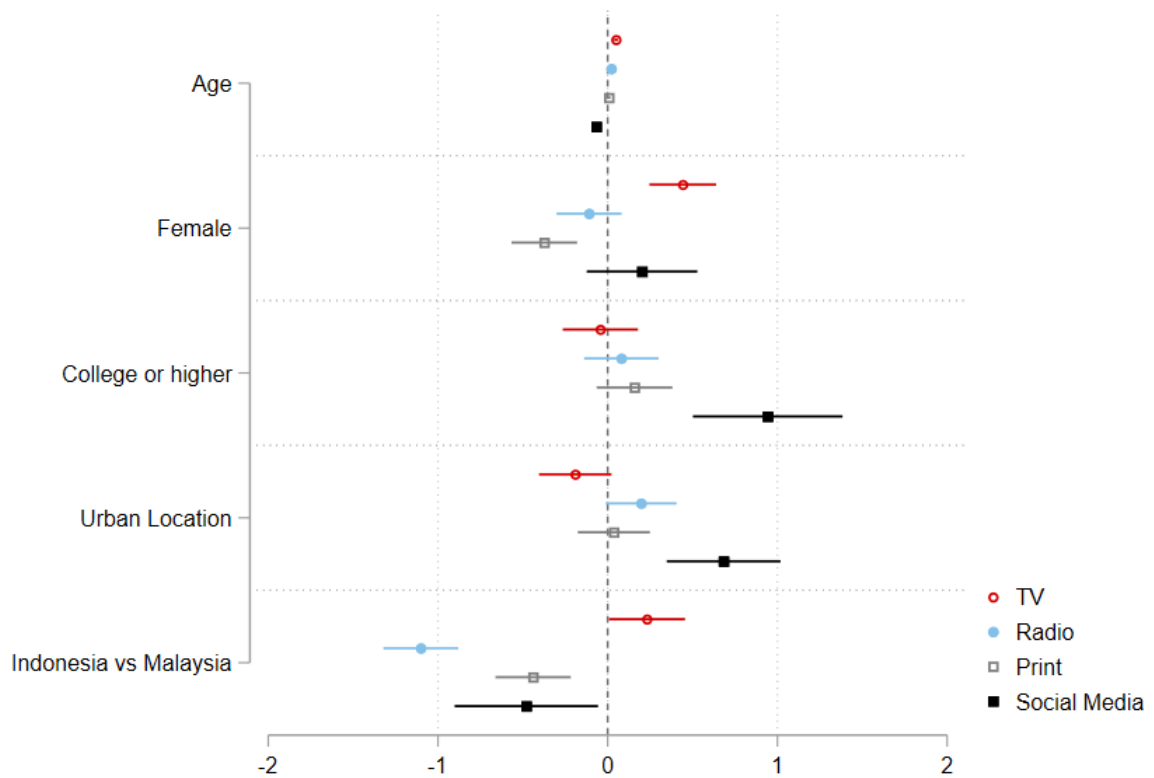


Figure 2. Coefficient plot illustrating Indonesia’s higher TV frequency and Malaysia’s higher radio, print, and social media frequency

Next, we used a series of OLR models to determine if there were any differences in media consumption between Indonesia and Malaysia (see Table 2 and Figure 2). Indonesia was coded as 1 and Malaysia was coded as 0 in these analyses, and we controlled for age, gender, education, and urban vs rural location. We found that Indonesian participants were more likely to watch television (Odds Ratio=1.26, 95% CI= [1.00,1.57], $p=.043$) and that Malaysian participants were more likely to listen to the radio (Odds Ratio=0.33, 95% CI= [0.26,0.41], $p<.001$), consume print media (Odds Ratio=0.64, 95% CI= [0.51,0.80], $p<.001$), and spend time on social media (Odds Ratio=.61, 95% CI= [0.40,0.94], $p=.026$). Thus, we found support for *H3: Malaysian participants will spend more time on social media*, but we found mixed support for *H4: Indonesian participants will spend more time on television, print, and radio than Malaysians*.

Table 3. Trust in print, television, radio, and online by demographics and country

	Print Trust	Television Trust	Radio Trust	Online Trust
Age	-0.0105*	0.00334	-0.00971*	0.00130
	(0.00536)	(0.00557)	(0.00565)	(0.00502)
Gender	0.311**	0.124	0.269**	0.0420
	(0.121)	(0.121)	(0.126)	(0.106)
Education	0.237*	-0.0641	0.0260	0.0455
	(0.139)	(0.139)	(0.145)	(0.122)
Urban vs Rural	-0.176	-0.00978	0.0240	-0.0922
	(0.131)	(0.130)	(0.136)	(0.114)
Indonesia vs Malaysia	0.0765	-0.222	0.233	0.795***
	(0.138)	(0.142)	(0.143)	(0.124)
Constant	1.151***	1.166***	1.096***	-0.575***
	(0.242)	(0.247)	(0.253)	(0.218)
Observations	1,435	1,521	1,376	1,481

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

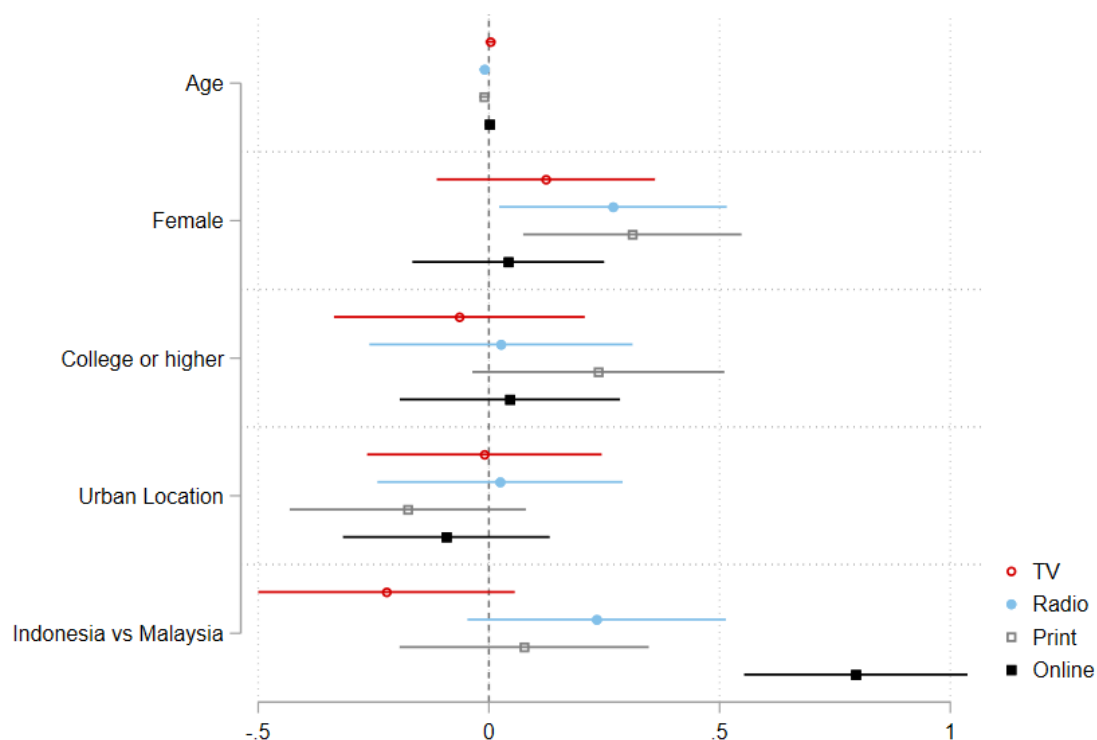


Figure 3. Coefficient plot illustrating Indonesia’s significantly higher trust in online media

Finally, we used a series of logistic regressions to evaluate if either country scored higher on trust in print media, online media, television, or radio (see Table 3 and Figure 3). Again, Indonesia was coded as 1 and Malaysia was coded as 0 and we controlled for age, gender, education, and urban vs rural location. Trust in the media source was coded as 1 and lack of trust was coded as 0. We found no significant differences between the two countries in trust in print media, radio, or television. However, Indonesian participants were about twice as likely to trust online press compared to Malaysian participants (Odds Ratio=2.21, 95% CI=[1.73,2.82], $p<.001$). This difference in online trust is another factor to consider when developing media literacy interventions and also how each country navigates its online environments.

5. Discussion

Our study investigated differences in news literacy, media consumption, and trust in media between Indonesian and Malaysian participants. We found that both countries scored fairly high on self-reported news literacy and there was no significant difference in news literacy between them. We predicted that Malaysia may score higher on news literacy due to having greater educational resources and more time with widespread internet access than Indonesia, but this hypothesis was not supported. We theorized that these country wide differences may have inspired a civic social norm to be more careful when consuming news and media. However, this was not supported in our data and it may be that education and digital access do not inspire such specific social norms regarding news literacy. We did find support for our prediction that younger, urban, and educated participants would score higher on news literacy, which is consistent with previous literature. This is also consistent within the framework of the theory of planned behavior since educated individuals may feel more positive attitudes and more perceived behavioral control towards their literacy behaviors (Vraga et al., 2021).

When analyzing media consumption habits, we found that Malaysian participants did report spending more time on social media than Indonesian participants. This supported our third hypothesis, which was based on Malaysia having widespread internet access for a longer period of time. We also predicted that Indonesian participants would report spending more time on other forms of media (television, print, and radio). However, we only found that Indonesian participants spent more time watching television. Malaysian participants spent more time engaging with print and radio media, which provided mixed support to this hypothesis. Finally, we analyzed trust in each media source between countries as part of an exploratory analysis. We did not find any significant differences at the country level for trust in television, radio, or print media. However, we did find that Indonesian participants were significantly more likely to trust online press compared to Malaysian participants.

Our study has several implications for promoting news and media literacy in Southeast Asia. Because older, rural, and less educated participants spend less time online and have less access to media literacy training, it will be important for literacy programs to reach these more vulnerable demographics. Media literacy interventions could be better designed to reach those demographics as well. Since we found that Malaysia spends more time on social media and Indonesia spends more time watching television, media literacy scholars should also take these results into account when developing media literacy programs. Developing media literacy tools that approximate the media environment of the population of interest (Ford et al., 2023) may yield more success. Both countries have government sponsored media literacy

programs, which may inspire equal news literacy skills, but further research will need to dive into this relationship because any causal claim can be made. Finally, trust is a major factor to consider when trying to understand media literacy and susceptibility to misinformation. We find that Indonesian participants score significantly lower on trust towards the online press. Identifying why this lack of trust persists in Indonesia will be crucial in order to start rebuilding it.

6. Conclusion

We investigated differences in news literacy, media consumption, and trust levels for Indonesian and Malaysian participants. We did not find either country scored significantly higher on news literacy, but we did find that younger, urban, and educated participants scored higher on news literacy. Additionally, we found several significant differences in media consumption with Malaysian participants reporting more time spent on social media and Indonesian participants reporting more time spent watching television. Finally, we found that Indonesian participants reported higher trust in online press than Malaysian participants. These findings reveal significant differences in media habits between the two countries, and potential media literacy interventions should be considered.

The use of a self-report measure of news literacy is the first limitation of our study. Previous research has shown that self-report measures of media literacy may not predict performance in identifying misinformation (Jones-Jang, Mortensen & Liu, 2021). Using an objective measure of news or media literacy may increase confidence in any country-level differences. Our study was also designed to be brief and accessible for those who answered their phones in order to complete the survey. This meant several of the questions were designed to be answered in a quick fashion (such as binary responses regarding trust levels) and may have limited who could respond to our survey (the average age of our participants was about 30 years old).

A future study could administer an online survey and provide additional room for granularity as well as follow-up questions. Additionally, we could have measured cultural dynamics and social norms that may offer further insight into differences in media consumption. It would also be interesting to see if online survey data was comparable to phone survey data. Finally, future surveys could gather more detail about particular types of media. Our study used general terms such as 'online press', but participants may feel very differently about online press that is government-sponsored or independent for example. Broader questions could also address the psychological motives that drive people to share misinformation beyond their media and literacy (Balakrishnan, Ng & Rahim, 2021). Overall, we believe this study offers a useful starting point for future research to investigate news literacy between two neighboring Southeastern countries.

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