

COVID-19 Social Media Infodemic: The New Media Literacy Level and the Ability to Recognize Fake News Among Cebu City Young Adults

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ABSTRACT

The downside of the integrative aspect of the digital space is how easily fake news can propagate which jeopardized the regulation and control measures of the COVID-19 pandemic. While existing literature expounds on the nature of infodemic phenomenon, recent curiosities lack the exploration of the contributing factors that led to the inability to recognize fake news on social media as it corresponds to the New Media Literacy (NML) levels. NML allows adaptation to technological advancement as it constantly evolves with great sophistication. Anchored from this gap, the study employs a quantitative research design where 385 respondents from Cebu City—a highly urbanized city in the Philippines—were asked to answer a three-part survey questionnaire. The findings purport that a high percentage of respondents can distinguish legitimate from fake news and take proactive measures in reporting or resharing the posts. Moreover, the study reveals that the respondents have high NML levels, particularly in functional prosuming and consuming aspects, which the study probed according to the demographic factors. The salient discussion then revolves around the low critical outcomes of prosuming and consuming NML aspects to push for educational policy formulation methods with interpretive social-scientific approaches. This reinforces the post-truth lens in expanding the fields of concerns arising from the infodemic phenomenon. Furthermore, recommendatory measures are provided in the Philippine educational system – that may be reintegrated into the dimensions of policy theories for educational policy evaluation to probe different areas of improvement in the Media and Information Literacy of the K-12 curriculum.

Keywords: COVID-19, fake news, infodemic, new media literacy, post-truths

INTRODUCTION

With the advent of the COVID-19 pandemic, people turned to social media to acquire vital information on preventive measures to curb its spread and from being infected with the virus. It became an information tank to know the nature of the viral outbreak and be wary of the relevant updates and timely statistics. Ironically, along with these prevalent communication tools, volumes of COVID-19-related fake news, misinformation, and conspiracy theories have skyrocketed across nations, resulting in the phenomenal global infodemic. The technology that people depend on to stay updated fuels and augments such phenomena, crippling global response efforts and jeopardizing the pandemic's control measures. As people refuted one erroneous claim about the pandemic after another, the real impact of the infodemic became very evident – that it creates confusion, spreads fear, and causes distrust towards authorities. Infodemic, according to the World Health Organization (2020), is an “overabundance of information – some accurate and some not– occurring during an epidemic” and “just as pathogens in epidemics, misinformation spreads further and faster and adds complexity to health emergency responses.” (WHO, 2020).

The Philippines, despite its status as a developing country, is adept at leveraging digital technology for social communication (Toquero, 2021). According to a report released by Digital 2021, the Philippines had 89 million social media users in January 2021, accounting for 80.8 % of the total population. Furthermore, the 18-24 age group (university to early career) makes up the most significant social media users in the country, accounting for 33% or 21 million active users (Estares, 2019). Backing this report is the report of We Are Social and Hootsuite, which provided insights into worldwide social media usage and digital trends for the preceding year. They approximated that Filipinos spend an average of 4 hours and 15 minutes each day on social media and further disclosed that when searching for news online, 57.2% of Filipinos admit that they are concerned about misinformation and “fake news,” which is only a notch above the global average of 56.4% (Chua, 2021). On top of this, the Philippines rank seventh globally in the number of fake news proliferated. In Asia alone, the country ranks first (Macaraeg, 2021). Further, Statcounter's social media statistics in the Philippines from March 2020-to 2021 recognized Facebook (84.13%) as the critical platform proponent of the spread of misinformation.

These data and statistics glean the idea that Filipino online consumers need to understand better the mechanisms of exchanging ideas and information in the digital world. This could be a step towards combating the dire predicament of fake news proliferation in the Philippines as well as the alarming rate of COVID-19 cases. Considering this, a relevant inquiry in the infodemic phenomenon may lead us to explore the contributors to the complications arising in the digital age, including the assessment of NML levels responsible for people's media interactions. By expounding this juncture of curiosity, we understand how people manage and harness technological skills to utilize any form of media securely and efficiently. Chen, Wu, and Wang (2011) defined new media literacy as involving the “combination of information skills, conventional literacy skills, and communication skills (or multiple literacies), and it plays a critical role for media consumers in this 21st-century society.” Critical to combating fake news, such skill is necessary for this

age of heightened technological developments where individuals are swamped with data and information in social media environments. This is where the contemporary role of education vis-a-vis the proliferation of fake news becomes a substantial addition to the discourse, especially in the case of the education system in the Philippines, whose internal systems are outdated and underdeveloped (Brillantes, 2018, pp. 1-4). These inadequacies of strategic approaches to a flexible and adjustable media literacy system or other progressive educational policies render the learning institutions not fully capable of honing and nurturing minds. After all, it is only through instilling critical thinking that we can fully utilize this century's onset of technological development. As we are all media consumers, the educational system must hone the cognitive skills responsible for examining online sources before trusting and making crucial decisions.

Several studies have focused on the global bearing of the COVID-19 pandemic. For instance, the pervasiveness of misinformation by Jeyasushama Veeriah that investigates the ability of young adults in Malaysia to detect fake news along with their NML level during the COVID-19 pandemic. Her results described the possible relationships between these two interests and highlighted the need to prioritize and strengthen Malaysia's media literacy education to reduce the fake news susceptibility of Malaysian youths (Veeriah, 2021, pp. 379-380). However, her study and other existing efforts and curiosities lack the exploration of possible contributing factors that led to the inability to recognize fake news on social media as it corresponds to NML levels. Hence such results did not yield to the policy approach needed to raise and improve literacy systems. This has been demanded in the study of Tugtekin and Koc (2019) when they concluded that literacy is an evolving term thus, there must be a new media literacy system that will equip individuals with a wide range of flexible skills and abilities in the growing digital world (Tugtekin & Koc, 2019, pp. 838-843). The lapse of the answer to "how" to reduce fake news susceptibility needs thorough exposition. And in this regard, the approach must always start with the educational mechanisms that mold comprehensibility to which an individual with greater literacy is among those who will easily recognize fake news (Jones-Jang, 2021, pp. 103-113).

So, in light of understanding how the NML level entangles with the fake news susceptibility and the factors that led to a lack of adeptness in identifying fake news, this study attempts to challenge and provide critical insight to empower existing educational policies that will be beneficial in nurturing criticality and cognitive skills of individuals. In such a way, it engages the broader academic field of educational policy research and caters to the foundational basis of assessing the existing educational approach in the Philippines, particularly the K-12 curriculum. Furthermore, this will examine the ability of young adults to recognize fake news on social media as well as their new media literacy level according to its four components: functional consumption (FC), critical consumption (CC), and functional prosumption (FP). From the demographics, the study will attempt to understand the possible factors that contributed to the low or high level of new media literacy among young adults. The study also aims to provide recommendatory insights needed to enhance new media literacy by citing relevant literature and studies. Furthermore, it should also be noted that the study focuses on the infodemic phenomenon, and the scope set for the conduct of the research is delimited solely to

the examples of fake news proliferated in the start of the COVID-19 pandemic up to the present and covered the broad scope of misinformation, disinformation, and other communication and information disorders. Through bridging the gaps from the existing studies and exploring the contributing factors that led to NML results and the ability to detect fake news, it is possible to accentuate the importance of building new media literacy skills to push for a more flexible and adaptive curriculum on ever-evolving digital media amidst the faltering and conventional media literacy systems.

LITERATURE REVIEW

As significant issues concerning fake news and infodemic, information and credibility, the new media literacy, and the ability to detect fake news were delineated and expounded, these two gaps which the study wishes to address came to light. First is the lack of application of the research method of acquiring the NML level and the ability to detect fake news in the Philippine setting and second, the inadequacy of exploration of possible contributing factors that led to the inability to recognize fake news on social media as it corresponds to NML levels. These two lapses are crucial addendums in formulating a practical policy approach in the Philippine setting and dissolving the problem of fake news susceptibility, especially in the advent of the COVID-19 pandemic. Thus, the following discussions provide a thorough understanding of the aspects to which the study anchors itself.

Understanding fake news and infodemic

In the study, "Defining "Fake News": A Typology of Scholarly Definitions (2017)", it was observed that the phenomenon of fake news is not new and was observed even way back in 1938 (Tandoc, 2017, p. 2). In the present day, where new things are discovered, and technology is constantly upgrading, the prevalence of fake news is also evolving and has developed into great complexity to provide a platform for diverse and facile means of spreading fictitious news where malintent is present from its source and not necessarily from the sharers of the news. The pervasiveness of the phenomenon identified in this case has been the center of discourse in the study. Further, fake news proliferation was also recognized as an identified lapse in the ever-emerging dissemination process in the information age. While fake news was already an identified ever-existing disease of the digital age, it is undeniable that with the current resurgence of the positive and confirmed cases of the COVID-19 pandemic in the 21st century, the COVID-19 information is crucial to be forewarned and to take precautionary measures to mitigate its impact. The term "infodemic" gained greater focus and significance as it often draws the line between truth and post-truth, of facts-based information and falsity. Bluntly, infodemic is an "overabundance of information," both good and bad online and offline. Hence, amidst the COVID-19 pandemic, information is a sort of a mixed blessing (Siebenhaar et al., 2020).

On the one hand, effective communication of accurate information allows people to build appropriate risk assessments and develop adaptive health choices to protect themselves and their peers. On the other hand, massive volumes of information can put additional pressure on managing the present crisis (Garfin et al., 2020, pg. 355) as they elicit negative emotions with unforeseen implications

(Sweeney et al., 2020, pg. 344). It all adds up to a virtual tsunami of information, making it more difficult for people from all walks of life to locate precise information, reliable sources, and guidance whenever they need it (World Health Organization, 2020). Some are just perplexing, but some are deliberately perilous to one's health. Responding to an infodemic is a new but crucial obstacle in dealing with all epidemic outbreaks. Furthermore, the term infodemic has been coined in the context of the COVID-19 pandemic to delineate the dangers of fake news phenomena during the outbreak management, which propagates from a fundamentally integrated manner of dispersing and disbursing information is through social media platforms and other outlets received and influences citizens (World Health Organization, 2020). Infodemic constitutes fake news which covers misinformation, rumors, conspiracy theories, spam, hate speech, and crowdturfing, among others, that have become prevalent in the era of social media and have increased dramatically since the genesis of the COVID-19 pandemic (Seibenhaar et al., 2020).

Relevance of information and social media amidst public health crisis

Despite the onslaught of infodemic, social media remains relevant in the face of a public health crisis. The World Health Organization, the academe, and health institutions must utilize social media to spread awareness and precautions to the general population (Tang et al., 2020). In doing so, the quality of information must not be compromised and must always be checked and monitored for updates and potential conduct of misinformation. Moreover, for global institutions, such as the WHO, the dissemination of correct information in different languages could be considered, especially in developing countries (Tang et al., 2020). Hence, it would be facile to accept that social media plays one of the crucial roles in the pandemic in terms of information dissemination, which alleviates the burden of the public health crisis that the world is currently facing. For instance, it has been argued that social media could gather large amounts of data from the people and act as surveillance that can help detect future outbreaks and consecutive waves of the pandemic (Cuello-Garcia et al., 2020). Social media can be crucial in gathering research participants that are hard to reach or specific to the research needs, such as teenagers, pregnant women, senior citizens, and the like. In this case, social acts to properly monitor, filter, and share the research. Correspondingly, the critical role of social media in informing people, especially during disasters and crises since it can quickly spread information to many individuals (Malecki et al., 2020, p. 699). For example, in health crises, clinicians can spread and support the new information if it becomes available and address the public's concerns. It is also important to note that the clinicians and public health experts need to be the first in establishing facts to shape the public's preference and be the trusted source on social media. Further, it has been underscored that the online video-sharing website YouTube when used to search keywords about the COVID-19 pandemic such as "coronavirus China," "coronavirus conspiracy," and "coronavirus symptoms," mainly presents news from channels such as professional news organizations, independent content creators, and independent healthcare providers (Marchal et al., 2020, pp. 1-2). The search suggested videos that primarily provide health and well-being information that are neutral and factual and have fewer untrue or junk science videos.

Fake news as a threat to information credibility

Access to information is closely associated with the idea of social media dissemination. The World Health Organization (WHO) has forewarned that the COVID-19 virus outbreak can be a potentially severe global threat and has further clarified in 2017's global risk report released by the World Economic Forum. The means to combat these risks is through credible sources and information disseminated to the public. However, the COVID-19 epidemic (the infectious disease caused by the most recently discovered human coronavirus) shows information diffusion's critical role in a disintermediated news cycle (Cinelli et al., 2020). Similar ideas analyze the incapability of acquiring reliable information from the internet. The use of the internet in finding information for educational purposes has also been the focus of some studies (Kriscautzky and Ferreiro, 2014). However, there is a lurking threat behind this advantage as there could hardly be means to address the validity and credibility of the internet-retrieved information. Educators have expressed their concern about how young students perform such searches, and they said students are just typing a term in Google, clicking the top result, duplicating the original text without even reading, and considering if the information acquired is valid (Kriscautzky & Ferreiro, 2014). Correspondingly, Westerman and his colleagues point out how information is presented in social media and how it directly affects the way credibility is perceived. The study asserts that recency does not merely give us a fresh viewpoint on the source credibility but also its relationship to "cognitive elaboration", where various perceptions could align their notion of credibility (Westerman et.al, 2014, pp 171-183). Facing the current public health crisis, it is without a doubt that news updates are rampant, and it is indicative that people immediately perceive what they recently see on social media platforms as credible without checking the validity or reliability of the sources. This gleans to the point that misinformation as stimuli underlie an obstacle to how global public health institutions combat the COVID-19 pandemic. As such, authorities enforce order and safety towards social media users to evaluate the credibility and reliability of sources before taking steps that suggest decisions on matters relating to health (Barua et al., 2020). Interestingly, Ingrid Volkmer revealed that awareness of fake news within millennials is high, but so is apathy. 60% of the respondents from the present generation answered that they are very aware of the fake news surrounding the coronavirus outbreak, but 35% ignore it instead of actively countering and reporting it (Volkmer, 2021). Hence, eradicating the spread of fake news requires ignoring it and involves the process of reporting and correcting it.

What is further alarming in fake news proliferation is the relative involvement of young adults belonging to the age group of 18 to 30 years of age (Perez-Escoda et al., 2021). They have concluded that the immediacy and convenience of the functions and access of social media made more young adults use it. The approach improves these young adults' literacy levels [like NML]. However, there is a rich literature that tackles the broad category of literacy concerning the ability to detect fake news, and there is only a handful that explores the new media literacy. The study of Jones-Jang and his colleagues posited that an individual with greater literacy is amongst those who will easily recognize fake news. Their findings have revealed that while it is valid for information literacy, there is much more to explore in other literacies, particularly media, news, and digital literacies (Jones-Jang et al.,

2019). They also raised important questions on the basis and competencies of widely used scales to measure literacy.

The digital era's new media literacy

Understanding literacy is a broad and sophisticated topic that constitutes various forms, classifications, and scopes. Media literacy, after all, is a terminology used to refer to a curriculum that teaches the application of critical thinking on information obtained in media sources and creating its messages. It also pertains to decoding information, assessing the messages on feelings, behaviors, and thoughts, and creating media conscientiously and thoughtfully. Traditional media literacy hones the ability to process media advertising and marketing strategies in non-digital spaces. This includes radio and TV advertising, print advertising (magazines and newspapers), cold calling, direct mail, door-to-door sales, billboards, and banner advertising. However, as technology evolves in great sophistication, traditional literacy becomes inadequate to cater to the new media era. New media have dominated the social space as individuals spend more time looking at their gadgets than going out to see billboards and banners. Hence, strategies formulated to adapt, especially in the advertising sector, to pave the way for new media, including Search Engine Optimizations (SEO), content marketing, email marketing, social media, and advertising through pay-per-click.

Literacy is an evolving term; hence, there must be a new media literacy that will equip individuals with a range of skills and abilities that is flexible enough in the growing digital world (Tugtekin and Koc, 2019). However, it has been pointed out that the growing misperceiving of new media literacy among researchers being "a combination of information skills, conventional literacy skills, and social skills' or multiliteracies." (Chen et al., 2011, pp. 84-88) While this remains relevant, it overlooks the significance of socio-cultural characteristics and the technical definition of new media to shape what new media literacy can and must be. They introduced a substantive framework that divides NML into continuums from functional to critical literacy to the prosuming to its consuming counterparts. The capacity to access and use media messages on different levels is the consuming element, whereas the prosuming element refers to the generation of media content. They outlined that the consuming must go first because an individual must first process and comprehend media before creating one.

Meanwhile, critical literacy is the ability to evaluate and critique content, while functional literacy entails utilizing media tools and content and "textual meaning-making." The basis is the functional aspect before the critical one because an individual must first be equipped with technical knowledge of new media language and tools before grasping socio-cultural context. There are four aspects of New Media Literacy that have been recognized, namely: critical consuming (CC), functional consuming (FC), critical prosuming (CP), and functional prosuming (FP). Critical consuming involves interpreting media content under specified economic, social, cultural, and political contexts. Functional consuming is concerned with the ability to understand media's textual meanings and access the content of the said media. Critical prosuming is underlining the ability to contextualize the interpretation of media content as they participate in activities, and lastly, functional prosuming refers to the ability to create media content. Among the four, they

emphasize critical prosuming because they believe that it is the most crucial in the digital information society of the 21st century. (Chen et al., 2011, pp. 84-88)

New digital media literacy in correspondence to recognizing fake news

The study draws an underlying foundation from the study of Veeriah (2021), which explored the rich discourse of new media literacy and the ability to detect fake news. She provided the reliability and validity of the measurements of the ability to identify fake news related to the NML levels. Her findings understood how the Malaysian young adult's media literacy level has something to do with the extent of their ability to spot fake news. The result showcased that Malaysian young adults have moderate levels of media literacy. She further proposed that they must deconstruct their new media literacy curriculum to eradicate the problem of susceptibility to fake news in social media channels (Veeriah, 2021, pp. 372-383). Her findings set the basis of overall direction and the means to measure the ability to detect fake news and the NML level in the study.

To recapitulate, the known gap from the aforementioned existing literature and studies is the lack of application of the method of Veeriah (2021) study in the Philippine setting and the inadequacy of exploration of possible contributing factors that led to its overall result (Veeriah, 2021, pp. 372-383). Without fulfilling these gaps, it is difficult to challenge and provide critical insights to empower existing educational policies that will be beneficial in nurturing the criticality and cognitive skills of individuals. In order to provide elucidation and exposition to these gaps, the study curiously wants to fulfill the following objectives:

- to draw from the low level of criticality of NML levels from the study of Veeriah (2021) to determine whether it is consistent with the Cebu City, Philippines' young adult case;
- to know the ability of the young adults in Cebu City in identifying fake news on social media and their level of new media literacy according to aspects of functional consumption (FC), critical consumption (CC), functional prosumption (FP), critical prosumption (CP);
- to expound on the possible factors that contribute to the low or high level of new media literacy among Cebu City young adults;
- and lastly, to formulate recommendatory measures from existing literature and studies to improve new media literacy among Cebu City young adults.

METHODOLOGY

The study charted a descriptive quantitative research design and employed a survey research method which involves "the collection of information from a sample of individuals through their responses to questions" (Check & Schutt, 2012, p. 160; Ponto, 2015, p. 168). In a study by Veeriah (2021), from which this study was anchored, a survey method is deemed very useful in collecting data involving NML levels and the ability to detect fake news, which this study adopts in gathering the data. The research locale was Cebu City, a highly urbanized and the oldest city in the country. Reports suggested that Cebu City comes in second place for the most Facebook users in the country, with 216.78% to 270.97% of the population actively

utilizing social media monthly (Chua, 2021). It lies in the heart of Cebu Island and has an estimated population of 923,000 according to the 2015 census conducted by the Philippine Statistics Authority, which makes it the most populous city in the region.

Of the research respondents, 385 young adults were the subjects of the study. They were assumed to be active users of the most popular social media platforms used by the public to read, consume, and participate in spreading and creating information. The study determined the specified number of respondents using the Cochran formula (Cochran, 1977). They also belong to the age group of 18 to 30, delimiting to young adults or individuals in the late adolescent age group and only to those who reside in Cebu City. In choosing this age group, the researchers put their basis from the study of Perez-Escoda et al. (2021), which concluded that the immediacy of social media made more young adults use it; however, due to its diverse contents, the massive consumption made them more vulnerable to fake news. We have selected the respondents through nonprobability sampling, specifically the convenience sampling method, to develop a specific measure of describing the phenomenon. Convenience sampling frequently suits quantitative studies where members of the target population meet specific practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate (Alkassim et al., 2016, pp 1-2). The study uses an open period of recruitment, selecting the nearest individuals to serve as participants of the research and continuing the process until the required sample size is acquired.

Meanwhile, the study utilized questionnaires as its research instruments. It involved three significant parts of an approximate 10 mins timeframe to answer. The first part is the demographics, including age, gender, highest educational attainment, frequency of social media use, preference of social media platform, and whether they are confident of identifying fake from legitimate news. It was followed by a questionnaire that assesses the respondent's ability to detect fake news by showing ten (10) news reports and identifying which reports are legitimate or fake. The same method was used and verified by Veeriah's study (2021) in her assessment of the Malaysian young adult's ability to detect fake news. The third part constitutes the NML Scale. It was also previously adopted from Veeriah's (2021) study and validated in Koc and Barut (2016). The latter part of the research questionnaire utilized a 5-point agreement Likert scale that measures respondents' agreement or disagreement with a statement. Before conducting the study, Veeriah (2021) consented to the use of the questionnaire. The data gathering procedure was performed using Google Forms to acquire results from respondents. With utmost ethical considerations, the researchers asked for the respondents' consent before gathering the data, which was attached in the introduction of each Google Forms questionnaire. The researchers have also considered utmost confidentiality and ethical considerations in handling the data and responses from the respondents. With the heightened community quarantine protocols in the country, the data collection through Google forms was the most convenient and preferred method, especially in ensuring participant and researcher's well-being.

The raw data are summarized and described through descriptive statistical treatment according to their demographic profiles. The analysis covered the mean scores through the descriptive statistics test. The study utilized descriptive statistics to provide information on the basic features of the data collated. The study unveils

quantitative interpretations by providing simple summaries and graphical analyses (Trochim, 2021). The composite mean score of the participants is then categorized into three equal levels of intervals to give it an interpretation. The mean score should be categorized and classified into three to have detailed data that is easier to interpret. These levels include high (3.68-5.00), moderate (2.36-3.67), and low (1.00-2.33) (Pallant, 2021). The study based the level of new media literacy on the mean of the data acquired where it is directly proportional, indicating that the higher the mean value, the higher would be the NML level.

RESULTS

The table presented below summarizes the demographic profiles of the respondents and categorizes them by their gender and age. The study acquired more female respondents: 231 (60%) than male respondents: 150 (38.96%), and four respondents have preferred not to disclose their sex (1.04%). The age distribution presented that more than half of the respondents were aged 21-22 years old at 214 or (55.58%) of the respondents, followed by the 124 respondents aged 18-20 years old (32.21%). Then, 24 respondents were aged 23-24 (6.23%), while 12 respondents, or 3.12% of the total respondents, were aged 29-30. Lastly, four respondents aged 27-28 years old constitute 1.03% of the overall population. The study of Balaban-Sali (2012) found that females have significantly higher NML levels than males, supporting this study's findings. This validates the profile of the respondents, where the majority of them are females. Furthermore, the results of the study also revealed that young adults have higher NML levels than respondents beyond the age of 32 (Balaban-Sali, 2012, p 269). The study focuses on Cebu City young adults ranging from 18-30 years old, which probably drew respondents' familiarity with the new media literacy skills and exposure to fake news propagation in social media outlets.

Table 1. Demographic profile of the respondents.

Demographics	Characteristics	Frequency	Percentage (%)
Gender	Male	150	38.96
	Female	231	60.00
	Prefer Not to Say	4	1.04
	Total	385	100
Age	18-20	124	32.21
	21-22	214	55.58
	23-24	24	06.23
	25-26	7	1.80
	27-28	4	1.03
	29-30	12	3.12
	Total	385	100%

Table 2 displays the highest educational attainment of the respondents, where 249 respondents (64.48%) or more than half were college undergraduates, while 55 respondents (14.29%) were still in high school. Fifty respondents (12.99%) claimed that they were high school graduates, and 25 respondents (6.49%) were college graduates. Six respondents currently have their post-graduate studies accounting for 1.56% of the total respondents. There were no respondents who were in elementary level or vocational studies. Another factor that might have contributed to the high level of new media literacy of Cebu City young adults is their educational attainment. The data indicated that the majority of the respondents had high educational attainment, where more than half of the respondents were college undergraduates. This is in line with the findings from Balaban-Sali (2012), Xiao et al. (2021), and Park et al. (2011).

Table 2. Respondent's highest educational attainment.

Educational attainment	Frequency	Percentage (%)
Elementary	0	0%
High School Level	55	14.29%
High School Graduate	50	12.99%
College Undergraduate	249	64.68%
College Graduate	25	6.49%
Vocational Studies	0	0%
Post-Graduate Studies	6	1.56%
Total	385	100%

Regarding the young adults who frequently used social media platforms (refer to Table 3), the majority of the respondents ranked Facebook as frequently (number 1) used social media platforms. On the other hand, Youtube placed on the second rank while Instagram on the third. Twitter is the least frequently used among social media platforms. Some respondents indicated that their social media preference is not on the list.

Table 3. Rank of frequently used social media platforms.

Rank	Social media platforms
1	Facebook
2	Youtube
3	Instagram
4	Twitter
5	Others

The result implies Facebook as the social media site with the majority of the respondents congruent with the Foundation for Media Alternatives statistics. While in other contexts prefer a different variety of platforms, such as the study of Veeriah (2021), Facebook emerged as the most preferred social networking site in some

studies (Melton et.al, & Melton, 2016; Sendurur et.al, 2015, pp 188-194) due to contextual and popular-cultural difference. This is also consistent in the study of Sacramento (2021), which unveiled that Cebu City participants are most likely to spend time in web activities, much more with Facebook, as it has embedded in their lifestyle where it revealed that Cebuanos spend an average of 2.47 hours daily. Boukouvidis (2021) provided the reason to why Facebook retained its popularity is due to its digital interface being integrative of the interpersonal element, which entertains its users through video games, memes, and other applications, and the common web surfing entangled with the informative content generators ranging from local to global information and issues. Moreover, the result of Facebook's prominence among users was affirmed by past studies and they also forewarns its underlying mechanisms that swiftly generate easier integration of fake news articles in the manner of web consumption of data, making it a robust social network that plays a significant role in malicious social transmission, particularly in social sharing. (Guess et al., 2018, pp 1-5)

The hours spent in a day on social media platforms of the respondents encompass their exposure to fake news and their probable response upon reading the fake news. (refer to Table 4) The majority of the respondents (41.8% or 161), use social media platforms for four to six hours a day. Following, 90 respondents (23.37%) use their social media platforms for 8-10 hours a day, while 80 respondents (20.78%) use their social media platforms for 1-3 hours a day. Meanwhile, 54 respondents or 14.02% of the total respondents confessed to spending more than 10 hours each day on social media. The results on hours of exposure to social media further coincide with the inoculation theory, which asserts that gaining an immunity or being inoculated of the possible dangers that lurk in the social media environment can be achieved through constant exposure to the dangerous case, the fake news. According Xiao et al. (2021), individuals who frequently used social media were more critical to consuming new media content and had higher digital and media literacy than those with lower hours spent on social media (Alkan & Meinck, 2016; Ye et al., 2018). This theory further strengthened the study's claim that hours spent on social media could be one of the many factors contributing to the high level of new media literacy among Cebu City young adults.

Table 4. Hours spent on social media in a day.

Hours	Frequency	Percentage (%)
1-3	80	20.78%
4-6	161	41.8%
8-10	90	23.37%
Exceeding 10	54	14.02%
Total	385	100%

The study has asked the respondents about their ability to identify fake news. The majority of 269 respondents (69.87%) were confident in identifying fake news, while 116 respondents (30.13%) of the total respondents were not confident in their ability to identify fake news. On the other hand, when asked to identify fake news,

the majority (74.44%) of the average responses turned out correct, emphasizing that the majority could differentiate the fake news from real news presented. The assessment of the respondent's ability to detect fake news discloses that when given several fake news articles, most of the respondents managed to distinguish them correctly. It can then be inferred that there is a direct proportion to the respondent's conviction of identifying fake news to their ability to detect them thoroughly. This finding contradicts the study of Veeriah (2021), where her culmination concerning young adults' ability to detect fake news does not correspond to their confidence in doing such. (Veeriah, 2021, p. 377) It can be inferred that young adults in Cebu City have already achieved a high NML level that made them capable of validating false information and questionable sources.

Further, this corresponds to the studies of Corbu et al. (2020) and Rand and Pennycook (2021), who found that people are relatively good at distinguishing legitimate news from false and misleading news in many cases. Moreso, the individuals who attain literacy gain more confidence as they can pinpoint which news they encounter in social media outlets daily, are fake ones. Thus, it makes them headstrong to not easily be swayed by it. Additionally, it supports the inoculation theory, which is among the study frameworks that assert that attitude and belief play a critical role against the influences of fake news through gaining an immunity or being inoculated.

Table 5. Respondent's ability in identifying fake news.

	Frequency	Percentage (%)
I am confident in identifying fake news	269	69.87%
I am not confident in identifying fake news	116	30.13%
Total	385	100%

Regarding what actions respondents considered upon encountering fake news on social media sites, Table 6 shows that 52.99% of the respondents chose to report the post, 51.95% of the respondents chose to ignore the post, and 33.77% chose to reshare the post to warn others. This shows that most of the respondents, depending on the circumstances, either report or ignore the post. This action taken by Cebu City young adults responding to receiving fake news is considered both a proactive or inactive stance depending on their circumstances. While the majority is proactive in dealing with fake news, there are still many respondents who are inactive in dealing with it, which leads to more people ignoring the post rather than resharing or reporting it. This is akin to what Veeriah (2021) found that respondents are more proactive in their responses when receiving fake news by mostly resharing and or reposting it to warn others. However, this study reveals that respondents would either report the post or ignore it depending on the circumstances (Veeriah, 2021, p. 377)

A minority of people propagate fake news, and the majority of them do not wish to disseminate inaccurate information (Buchanan, 2020). However, Rand & Pennycook (2021) elucidate the matter by asserting that the rise of misinformation online is not so much about the issue of people's attitudes towards the truth; instead, it is about the subtle shift of people's attention to the truth where it is not partisan

motivations that leads the people to fail in distinguishing factual from false information and news content. Instead, it is a case of simple old lazy thinking in which they fall prey to fake news by relying on intuitions and emotions. Further, people usually tend to see social media without deep thought and understanding of what they are reading or even swiftly scrolling because they are being distracted by an overabundance of information and coming across news with emotionally-engaging content (Rand & Pennycook, 2021). The results also conform to Volkmer et al. (2021), which reveals that awareness of fake news among millennials is high, but so is apathy, in which an estimation of 60% of their respondents of the present generation is fully aware of the fake news surrounding Coronavirus pandemic, but 35% of them are ignoring them instead of actively countering and reporting it. These factors of old lazy thinking and apathy correspond to the result as the probable reason why many respondents ignore posts about fake news on social media.

Furthermore, the results can be implied from the theory presented by Festinger (1957) called “cognitive dissonance theory,” which explained that “pairs of cognitions (elements of knowledge) can be relevant or irrelevant to each other. If relevant, they can be either consonant or dissonant with the former if one pair follows the other and the latter when the obverse of one cognition follows from the other. The existence of dissonance is psychologically uncomfortable, and it motivates the person to reduce it by avoiding the information that causes dissonance. The greater the magnitude, the greater the pressure to reduce dissonance (Harmon-Jones & Mills, 2019, pp. 1-4). With the results that show a considerable number of proactive and inactive actions in response to fake news, cognitive dissonance may be one of the factors that can correspond to the term “depending on circumstances” that the respondents answered. It is dangerous because their awareness of fake news may be high, but because of cognitive dissonance, they intend to ignore it, which in the end, does not solve the root of the problem. Further, to recapitulate the results, the study revealed that Cebu City young adults are indeed capable of identifying and detecting fake news. Their confidence was directly proportional to their abilities in seeing fake news and the actions they took about it were either proactive, by reporting, or inactive, by ignoring, depending on the circumstances.

Table 6. Respondents’ action upon receiving fake news.

Respondent’s action upon receiving fake news	Frequency	Total population of respondents	Percentage per total population of respondents(%)
Report the post.	204	385	52.99%
Ignore the post.	200	385	51.95%
Reshare the post to warn others.	130	385	33.77%

Table 7 presents the outcome of the NML level assessment of Cebu City young adults. The overall mean value suggests that the respondents’ NML levels are high ($M = 3.81$, $SD = 0.16$), implying that the Cebu City young adults have an excellent level of new media literacy awareness and knowledge. Meanwhile, the mean value of the four NML levels ranges from 3.57 to 4.00, which is moderate to high levels. Among the four, the functional consuming garnered the highest mean value ($M = 4.00$, $SD = 0.16$), which aligns with Veeriah’s (2021) evaluation of Malaysian young

adults. The respondents have also shown a high level of functional presuming ($M=3.88$, $SD=0.13$), which refers to the participation and ability to craft and create media content. This is also the same in their critical consuming ($M=3.79$, $SD=0.26$), which interprets media contents in terms of structure, authorship, and purposes under specified economic, social, cultural, and political contexts. However, apparent in the result findings is the sole NML level with moderate value, the critical prosuming ($M=3.57$, $SD=0.29$), which refers to the application of the contextual understanding of media content when they participate in media activities.

This revealed that the respondents excel in the functional consuming aspect. This big score purports that the Cebu City young adults have high competencies in terms of the technical skills involving the software and hardware systems and comprehending contextual messages. The study also revealed a critical finding that deviates from the preconceived notion expressed by Veeriah (2021) in her evaluation of Malaysian young adults. The result falls short of being inclusive to all young adults since the Malaysian young adults possess a moderate level of new media literacy, contrasting to what the study reveals that the Cebu City young adults had a higher level of new media literacy. Despite the disparity in results, there was a striking resemblance in the four components of new media literacy. The Cebu City young adults have shown a high level of new media literacy, notably in functional consuming and functional prosuming, similar to the findings of Veeriah's study.

Furthermore, Chen et al. (2011) have placed a great emphasis on the population composed of functional media consumers, claiming that they are the only ones who can understand media contents in terms of the meaning they convey and can assess such content. He also provided the set of skills of people who are functional prosumers. They are individuals capable of creating new media content and have engaged in new media spaces in the form of blogs, news feed postings, and the like. In the digital age where individuals immerse themselves in technological advancements, it is viable to lead young adults to produce media content while simultaneously acquiring technical skills. Thus, they are capable of navigating technological devices on their own. While these two new media literacy skills are crucial, Chen et al. (2011) provided a more thorough analysis by indicating that criticality is still necessary for consuming and prosuming, and excellence in mere functional consuming and prosuming is inefficient. Criticality is crucial as it allows an individual to analyze, evaluate, and criticize media.

Table 7. Respondent's new media literacy levels.

New media literacy component	Mean	Standard deviation	Level
Functional Consuming	4.00	0.16	High
Critical Consuming	3.79	0.26	High
Functional Prosuming	3.88	0.13	High
Critical Prosuming	3.57	0.29	Moderate
Overall	3.81	0.16	High

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

To sum up, the salient findings revealed that the possible factors involved in the study which yielded the overall high level of new media literacy of the respondents are drawn from their demographic profiles, specifically the gender, age, educational attainment, and hours of exposure on social media sites. Additionally, the results have shown that most Cebu City young adults could correctly distinguish fake from legitimate news, which coincides with their confidence in doing so. It should also be noted that the dominating skills are the functional prosuming and consuming, which are the abilities involved in accessing new media and creating media content. The critical prosuming has been the least garnering NML skill which pertains to the ability to contextually interpret the media contents when an individual participates or engages in media activities. This has been consistent with Veeriah's (2021) findings where the least skill is always the critical aspect of prosuming and consuming. From this similarity of trend, we draw out these two points of discussion.

DISCUSSIONS

The points of contention where this study roots from the existing literature and studies includes the lack of application of Veeriah's method (2021) in the Philippine setting and the inadequacy of exploration of possible contributing factors that led to its overall result. Anchoring from the study's objectives dedicated to fulfilling these gaps, we can now provide critical insights to empower existing Philippine educational policies that will be beneficial in nurturing the criticality and cognitive skills of individuals and reconstructing the relevant educational policy approach in the national context. It would then be crucial to draw out from the research result that garnered the salient relevant findings, specifically, the low critical outcome, leading to the policy approach that substantiates the strengthening of NML levels specifically, through interpretive social-scientific policy approach.

The low critical outcomes

Despite garnering a high outcome from the respondents, critical levels are still lower than their two functional counterparts. For the critical prosuming, the probable reason for the moderate value is that most of the study's respondents are undergraduate students who have less time to produce videos or content because of existing academic responsibilities. This is similar to the study of Veeriah (2021), which also garnered the critical prosuming as the least in NML level. Her result yielded low, and this study affirmed it as the sole NML skill with moderate levels. She asserted that such skill is a crucial component of new media literacy as it is "exclusively linked to the constructive participation and common intelligence of Web 2.0 technologies" (Veeriah, 2021, pp. 372-383). With this saying, this result from the study is a crucial uncovering and a possible indicator of the missing gap in the media literacy education of these two countries. It is relevant to formulate educational policy reforms that address the inadequacies of this specific aspect of NML skill. After all, being a critical prosumer allows a user to recognize its position and identity in media creation, participation, and publication. Hence, the incapability to acquire critical prosuming follows that one cannot understand the textual meaning of media contents as there is an inadequacy of experience in the

participation of media creation (Chen et al., 2011, pp. 84-88). The same can be said in the result of the aspect of critical consuming which is the second least garnering NML score. Furthermore, critical consuming is one of the pillars of new media literacy as it integrates with the deeper political, cultural, economic, and social contexts of media content. Hence, the inability to reintegrate factual news into specified contexts only yields to incapability to deeply discern factual information on the internet, thus, augmenting fake news susceptibility (Chen et al., 2011, pp. 84-88).

With the lapse of a thorough understanding of the critical approaches to information prosumed and consumed online, it corresponds to the supplementary argument raised by Fisher (2021) in the truth and post-truth discourse. He provided an exposition of the standard response in combating the prevalence of the rampant proliferation of fake news information. It is not to directly ask for strengthening the factual information systems but to examine the elements in terms of the social meanings attached to disseminated information. He elaborated on the danger of post-truth denial of facts, especially amidst the COVID-19 pandemic and the public health crisis, then used it to understand the political world's gestures to push for an interpretative public policy. His findings then relate to the findings of this study as it validates the cruciality of having approaches centered not solely to hone the ability of individuals to comprehend epistemological meanings but also to include the social contexts that it poses (Fischer, 2021, pp 15). The findings touch on the political implication of the result as it challenges the positivist comprehension of information because in reality, the complex issues of normative and political discourses are strongly intertwined and sometimes indistinguishable from the factual evidence.

To revisit the main argument of Veeriah (2021), without critical and prosuming skills, there is a weak understanding of the varieties of dynamics involved in media production and consumption, making it a challenge to exercise social contextualization and criticality while consuming media. The overall study concludes that there is a necessity to augment the level of new media literacy skills. It complements and further extends previous findings, which confirms the presupposition that certain types of the educational program, gender, engagement in Web 2.0 services, and exposure to media, have significant effects on NML skills ; and that fake news countermeasures would need critical thinking for judgment and evaluation in order to not to fall prey to misleading information. (Chin and Zanuddin, 2019, pp. 469-474)

Strengthening NML levels through interpretive social-scientific policy approach

Among the study's objectives is to identify recommendatory measures from existing literature and studies to improve not only the low critical aspects but also the overall new media literacy levels in both local and national contexts. To provide a well-defined response, we must go back to the institutional system that inculcates the critical values in integrating with digital spaces, which is the existing educational system. Media literacy education essentially complements and incorporates the basic education curriculum in the Philippines. It is taught in tertiary institutions and is an integral core subject for Grade 11 and Grade 12 students (Bautista, 2021, pp. 1-15). This coincides with the number of respondents who participated in the study, mainly at college level or those who have already undergone media literacy subjects.

The study's findings also correspond to the Message Interpretation Process theory, which contends that education facilitates the interaction between being exposed to harmful messages and decision making (Austin, 2007, pp 535-536). Therefore, those with the highest level of education will most likely have a high level of new media literacy, as reflected in the study's results. However, the findings still follow the trend of low level of criticality in prosuming and consuming aspects of NML levels. So, to address this concern in the Philippine educational framework, it is crucial to understand the gaps in the implementation of the K-12 program, specifically in how it handles its mandate of instilling basic competencies in youths. After all, fake news proliferation could only be combated if there is a high literacy level from exposed constituents in social media environments.

Thus, it is crucial to frame the educational approaches in teaching and policy formulation methods with interpretive social-scientific techniques, which reinforces the post-truth lens in expanding the fields of concerns arising from fake news proliferation. This covers the complete understanding of the epistemological and factual meaning of information acquired in social media environments and its underlying social and political consequences (Fischer, 2019, pp 1-5). This lens can diminish the problem of the least-gotten scores of the critical aspect of NML levels that transpired both in Cebu City and Malaysian young adults. While it is known that interpretive forms of analysis are capable of evaluating the complex issues of interrelated psychological aspects of problems, some educational approaches are still prone to overreliance on quantifiable systems of positivism in policy formulation. This lapse became evident as she concluded that there was "confusion and misunderstanding" on the teachers' competencies in teaching MIL in the early years of the course's implementation (Bautista, 2021, pp. 1-15). One of the lapses roots from inadequate preparations. Only the surface-knowledge level of media literacy was taught as those were easily quantified, but there is a lesser understanding of the post-truths. With the teachers being inadequately prepared or lacking deep knowledge in the subject, the subject cannot be adequately taught, leading to students' confusion or having the questions about the subject unanswered, providing ineffective or less to no feedback. As evinced in the findings, there has been a less critical prosuming aspect among the respondents. Hence, educational support for new media literacy is necessary to ensure that they can integrate the students' ability to discern and contextualize the interpretation of media content into the MIL curriculum which are the critical notions purported in NML skills. This will make the younger generation attain high new media literacy levels to be further inoculated on fake news content on the internet. The social scientific approach to educational policy will also ensure that the comprehension of youths to the ever-evolving technology and digital environment will not be oversimplified. This is a valuable take since it sees issues like infodemic from its more complex and diverse social implications (Lees, 2007, p. 48). Thus, this approach will demand a more thorough assessment and evaluative efforts in forming educational policies that are crucial in discerning belief systems and teaching and training interpretive approaches (Sandra, 2001, p. 7).

Policy evaluation reintegrated in philippine educational framework

Now that the pattern of low criticality in online information consumption is evident, it is probable that the existing educational policy in the Philippines, especially concerning the implementation of the K-12 curriculum, must be reintegrated into these four dimensions of policy theories for the educational policy evaluation by: ideological, which is concerned with underlying assumptions that have shaped educational policies; organizational, which examines the existing structures and organizational levels in the institution; political, which relates to the political organizations and how they link to one another; and lastly practical, which specify the processes involved in constructing educational policies. These four dimensions incorporate a holistic policy evaluation of the following areas of improvement. (Edwards, 2017)

For policy evaluation on improving assessments, evaluations assessments prove critical in the implementation processes in the Philippine K-12 curriculum like inadequate preparation and pinpointing the underdeveloped internal systems, which is substantial in the points of improvement in the educational policy (Brillantes, 2018, pp. 1-4). The process can be improved by strengthening the support and cooperation among multiple stakeholders, especially young adults among the age groups with the most fake news exposure. It is essential to embody a holistic vision of the educational policies, and this is doable by including the assessment of students, parents, and even other community members for much thorough and accurate fairness. Effective accountability systems must also accompany policy evaluations in assessing the overall organizational dimensions to create a supportive and effective community which is integral in nurturing inclusive learning opportunities.

For policy evaluation on improving instructions, some of the existing educational policies are inconsistent among organizations of instructors, e.g., their unions and the standardized professional teaching (Edwards, 2017). There are also conflicts on site-management approaches that differ in addressing school district concerns, and these are challenges in reforming educational policies and reaching the teacher's demands for improving their instruction autonomy (Bolman & Deal, 2003). This is also consistent with the predetermined problems Brillantes (2018) identified in the K-12 implementation in the Philippines, where there is a lack of absorptive capacities. The assigned institution, PMU, failed to align the inconsistencies in the implementation policies of the K-12 program, resulting in uneven distribution of tasks and compromises among instructors, especially in updating their teaching manuals to the ever-emerging technology.

For policy evaluation on improving curriculum, there is a necessity to clearly define the objective and goals of the educational institution regarding their methods of assessment, instruction, and curriculum to be specific on the directions of the policies. Failure to do so will cause resistance among faculties (Diamond, 1997). There is also a necessity to align state regulation and laws with imposing educational policies to evade similar problems in the United States. A misalignment caused a disappointing and mixed result in complex administrative, legal, and educational environments among leaders (Cooper, Fusarelli, & Randall, 2004). Also, we can have an educational policy garnered through a collection of data from a broad range of sources that can be compared and contrasted to improve the

curriculum. There is also a probability that learning outcomes in colleges and university curricula are not reached due to the superficiality of desired goals and incapability to apply them in teaching practices. Most importantly, the curriculum must be updated according to the ever-improving technological development to have an educational policy centered on improving the overall NML levels, which is essential in combating the rampant fake news proliferation.

CONCLUSION

In the onslaught of the COVID 19 pandemic, social media functioned not solely to provide the quarantined individuals an entertainment to virtually socialize but also to provide day-to-day information on precautions and updates on the state of the public health crisis. However, this facile dissemination process offered by social media intertwines with the threat of fake news propagation, which created the phenomenon of “infodemic,” where there has been an alarming increase of fake news amidst the pandemic. This can be coped with thorough literacy measures, to where the study posits that through bridging the gaps from the existing studies and exploring the contributing factors that led to NML results and the ability to detect fake news, it is possible to accentuate the importance of building new media literacy skills to push for a more flexible and adaptive curriculum on ever-evolving digital media amidst the faltering and conventional media literacy. Doing so will engage the broader academic field of educational policy research and cater to the foundational basis of assessing the existing educational approach in the Philippines, particularly the K-12 curriculum.

The study’s findings revealed that Cebu City young adults could distinguish fake news from legitimate news, coinciding with their confidence of doing so. The results were contrary to Veeriah’s (2021) assessment of Malaysian young adults, which shows that despite being confident in fake news recognition, they still have difficulties distinguishing fake from legitimate news. The ability to determine fake news also varies and is affected by significant factors from contexts of economic, social, and political realities. The respondents have also showcased a high level of overall new media literacy, particularly, the dominating skills are functional prosuming and consuming. These are the abilities involved in accessing new media and creating media content. However, if the four NML skills are arranged according to values, the least-garnering skills are critical prosuming and consuming. This concerns the ability to contextually interpret the media content when individuals participate or engage in media activities.

With the inadequacy of critical outcomes, the study heads to the argument of making the discourse on NML relevantly responsive to countering the alarming rate of fake news proliferation as it demands careful consideration of the epistemological underpinnings of the phenomenon. Having the truth and post-truth discourse at the center of the interest of both the infodemic phenomenon and the need to elevate the NML abilities among the young adult population certainly demands a more interpretive take over the concern; thus, veering beyond the positivist approach that most scholars have been delving and dwelling on. Crucial to putting infodemic, fake news, and the NML abilities in one frame requires an assessment of socioeconomic, cultural, and political considerations that can establish the ground to explain the

phenomenon further. It is also worth noting that the study bears implications for current and future studies as it affirms former results and opens opportunity for further exploration of the infodemic phenomenon, especially on the much deeper statistical correlation treatment which is among the limitations in the conduct of the study. This will undoubtedly strengthen the assertion indicated in the results of the descriptive analysis and presentation of the study.

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