

Factors influencing the media literacy on community health behaviour practices in Kota Belud Sabah Malaysia

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Abstract

The perceived importance of media literacy in health discussions has increased significantly. The critical understanding of information is crucial to this role as it has the potential to impact people's overall well-being and shape individual and societal behaviors. Media literacy involves the ability to access, understand, interpret, and apply information conveyed through various media for the betterment of individuals and communities. However, obtaining health-related information in today's context can be challenging due to technological advancements. While people may be aware of health issues, translating this awareness into practical behavioral changes for effective health management often remains inconsistent. This study investigates the media literacy level influencing health behavior practices among the Kota Belud community during the COVID-19 pandemic. Through online surveys done on a random sampling of 375 respondents, the study reveals that media literacy directly influences 46.2% of health behaviors related to COVID-19. These behaviors include regular handwashing, mask-wearing, maintaining physical distance, and following recommended health guidelines. The findings show that public comprehension, practical application, and information transmission help match health behaviors with changing social norms.

Keywords: compliance, information, new norms, practice, technology

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Abstrakt

Pentingnya literasi media dalam perbincangan kesihatan telah meningkat dengan ketara. Pemahaman kritis terhadap maklumat amat penting dalam peranan ini kerana ia berpotensi mempengaruhi kesejahteraan keseluruhan masyarakat dan membentuk tingkah laku individu serta masyarakat. Literasi media melibatkan keupayaan untuk mengakses, memahami, mentafsir, dan menerapkan maklumat yang disampaikan melalui pelbagai media demi kebaikan individu dan komuniti. Walau bagaimanapun, memperoleh maklumat berkaitan kesihatan dalam konteks masa kini boleh menjadi cabaran disebabkan oleh kemajuan teknologi. Walaupun orang ramai mungkin sedar akan isu kesihatan, menerjemahkan kesedaran ini kepada perubahan tingkah laku yang praktikal untuk pengurusan kesihatan yang berkesan sering kali tidak konsisten. Kajian ini menyiasat tahap literasi media yang mempengaruhi amalan tingkah laku kesihatan dalam kalangan komuniti Kota Belud semasa pandemik COVID-19. Melalui tinjauan dalam talian yang dilakukan secara persampelan rawak terhadap 375 responden, kajian ini mendedahkan bahawa literasi media secara langsung mempengaruhi 46.2% tingkah laku kesihatan yang berkaitan dengan COVID-19. Tingkah laku ini termasuk amalan mencuci tangan secara berkala, memakai pelitup muka, mengekalkan jarak fizikal, dan mematuhi garis panduan kesihatan yang disarankan. Hasil kajian menunjukkan bahawa pemahaman awam, aplikasi praktikal, dan penyebaran maklumat membantu menyesuaikan tingkah laku kesihatan dengan norma sosial yang berubah-ubah.

Kata kunci: pematuhan, maklumat, norma baharu, amalan, teknologi

Introduction

Media literacy is seen as increasingly important in promoting the general public's health and has become increasingly relevant in discussions about healthcare. This study was conducted to identify the influence of health media literacy about the spread of the COVID-19 disease among the Kota Belud community in Malaysia. The spread of the disease was quick—it only took three weeks from the initial confirmed cases on January 7, 2020 in Wuhan, Hubei, China for the disease to spread to 13 countries by March 20, 2020, which made the World Health Organization (WHO) declare a worldwide pandemic (World Health Organization, 2020).

Both directly and indirectly, the pandemic has impacted the health of the Malaysian community and the community worldwide. Physical distancing and mask-wearing rules resulted in movement constraints within and across communities, altering daily activities in compliance with the new way of life to be followed. But even the implementation of the Movement Control Order (MCO) could not eliminate the virus as a whole, and communities must be prepared for the long-term virus (MOH, 2020). Therefore, the active involvement of the community in controlling the spread of the COVID-19 virus is crucial.

The objective of this research is to know the level of media literacy among Malaysians, specifically in the state of Sabah, and how media literacy changes their ways of thinking, perception, practice, and social behaviour related to any public health issue. According to Mazna Dahlui et al. (2020), coastal areas in Sabah, Malaysia, play a substantial role in the livelihoods and health of local communities. Efforts by the Malaysian government to develop and improve the landscape and ecosystem have long been planned, but progress has been relatively slow due to relative inaccessibility. Coastal communities in Sabah also face various challenges concerning their health, healthcare access, and overall quality of life. While public healthcare facilities are available in these areas, resources are limited, and various obstacles prevent them from reaching those in need, including factors such as poverty, insufficient health awareness, and a lack of adequate infrastructure for healthcare access (Harris et al., 2009). Notably, Sabah holds the highest poverty rate in Malaysia, with coastal regions like Kudat, Kota Marudu, Pitas, Kunak, and Semporna reporting nearly as high as 50% (Department of Statistics Malaysia [DOSM], 2012). Additionally, Sabah's coastal areas also grapple with a significant population of stateless and undocumented individuals (Allerton, 2019). Given these critical factors, Sabah is the most pertinent region for in-depth research, particularly in healthcare.

The availability of media literacy skills and knowledge facilitates the adoption of behavioral practices, especially health-related ones, in community activities (Bergsma & Carney, 2008). In other words, a good media literacy level will determine healthy behavior and shape public awareness of health issues. In order to lower the rate of COVID-19 infection, especially in Malaysia, the employment of media literacy is seen to increase awareness among the community and thus encourage them to change their health behavior (Marzo et al., 2022). Thus, this study incorporates a media literacy model in understanding behavioral health practices and identifying its influences in the adoption of activities to ensure health and freedom from COVID-19.

Literature Review

Media literacy refers to the ability to access, analyze, evaluate, and create media in various forms. It involves understanding how media operates and influences society, and it is developed through concepts, research, and education (Potter & Thai, 2019). This understanding serves as a guide that can be embraced by all levels of society. The ability to access, analyse, organise, evaluate, and generate messages shows the importance of media literacy in enabling people to take the correct and accurate health behaviors. With media literacy knowledge and skills available, society can adopt positive behavior in any activity. The extensive influence of the media on people's health is undeniable, primarily due to the substantial amount of time individuals dedicate to media consumption (Tehrani, 2016). Media platforms serve as valuable sources of information that individuals leverage to enhance their health literacy and foster healthier behaviors (Ahmadi et al., 2018). Therefore, media literacy encompasses the critical components of research, analysis, education, and fostering awareness regarding media's impact on individuals and communities, spanning various mediums like radio, television, film, music, journals, and the internet. Some direct results of media literacy are the promotion of health, the cultivation of healthier lifestyles, and the establishment of health-promoting norms (Mozafar & Shahin, 2012). This assertion supports the research conducted by Peiman Afshar et al., (2020) who determined that media literacy constitutes a pivotal determinant of health literacy. Consequently, cultivating and enhancing media literacy are effective strategies to bolster health literacy levels.

Unlike information literacy, which encompasses a broader scope that includes general evaluation and use of information, media literacy focuses on understanding and critically engaging with media messages across various platforms. In this context, media literacy is chosen as the focal point because of its direct relevance to the promotion of health and the cultivation

of healthier lifestyles through an understanding of how media influences individuals' behaviors and perceptions, as highlighted in the cited studies (Ahmadi et al., 2018; Tehrani, 2016; Mozafar & Shahin, 2012). Ma. Theresa Angelina Q. Tabada (2019) provides insightful information on the symbiotic relationship between media literacy and media self-regulation (MSR), especially in the context of the Cebu Citizens-Press Council (CCPC) in the southern Philippines. The CPCC, led by civil society leaders and editors-in-chief, is crucial in supporting media literacy and MSR initiatives, acting through reactive and proactive methods to address complaints and promote media literacy among journalists and citizens. Cebu print newsrooms utilize accountability mechanisms like codes of conduct and internal ombudsman roles to demonstrate their dedication to maintaining journalistic standards and improving media literacy. This conversation focuses on promoting media literacy to tackle the modern media landscapes' difficulties and opportunities in influencing health-related information, attitudes, and behaviors. The study emphasizes that media literacy increases participation by transforming citizens and internet users into vigilant monitors of the media and protectors of freedom of speech. It ultimately helps promote health, encourage healthier lifestyles, and establish norms that support health (Mozafar & Shahin, 2012).

The rapid pace of technological developments needs to be taken into account in discussions about media literacy skills. Mass media and other technological innovations in disseminating health information influence the community's social life development. Media literacy educates various categories of society both formally or informally, covering various skills such as critical thinking, problem-solving, autonomy, communication, and participation (Ciurel, 2016). Therefore, media literacy skills can help users take a critical attitude in interpreting every element and message the media conveys. There are many reasons to understand the practice of community health behavior. Health information's effectiveness must be understood and accepted by all societies to improve their quality of life.

When applied to health, these skills enable people to critically assess healthcare information. As Mark Conner and Norman Paul (2006) note, social cognitive behaviour is driven by factors such as healthcare accessibility, attitudes towards treatment, and the influence of social networks, which are increasingly shaped by social media (Sannusi et al., 2019). Understanding health information, supported by media literacy, is crucial for empowering communities to improve their quality of life. Therefore, effective strategies must consider the role of media literacy in enhancing community health behaviour and self-care (Abd Karim, 2020).

The role of media and communication in the field of healthcare is to convey information and apply it to address public health issues. For instance, to address health problems during the pandemic, disseminating information through media and communication increased public awareness. Additionally, it is important to recognize that health literacy is not a separate construction and needs to be seen in relation to socio-economic factors, the broader individual's living conditions, and the quality of health information disseminated in the media (Abd Karim, 2020). Media literacy and health capabilities can reach individuals who have access and in different relationship contexts to promote the self-resilience of society (Cooke-Jackson, 2018). The role of media and communication in healthcare extends to conveying vital information, particularly in addressing public health crises. For example, during the pandemic, media dissemination increased public awareness. Health literacy should not be viewed in isolation but rather in relation to socio-economic factors, including education, which is a key part of individuals' broader living conditions. Media literacy programmes and education inclusion in school curricula are essential for fostering self-resilience (Cooke-Jackson, 2018). Guidelines must also support rural communities in developing media literacy and access to quality health information (Ibrahim & Ab Rashid, 2018; Li et al., 2023; Markom et al., 2019; Shinta et al., 2019).

Hence, there should be increased media literacy programmes and media education inclusion in the basic education school curriculum. In addition, guidelines must be proposed to develop media literacy and adequate information training for rural communities.

The importance of media literacy through critical analysis strengthens society's resilience to advertising that affects their actions. If society does not fully understand media literacy, they believe in the defaced message (Putri et al., 2020). Hence, it is essential to highlight a media literacy action plan that distinguishes emotions from reactions when responding to the information contained on social media and the internet. In the meantime, adapting literacy that focuses on health is needed to develop a more effective national health system, as problems and solutions are different for different national and regional contexts (Azlan, 2019). Individuals need to be properly equipped to seek and evaluate the health information available to them. Digital health literacy, or eHealth literacy, refers to an array of skills required to properly seek, access, understand and apply health information on the Internet. To date, a number of different models and instruments have been developed to measure eHealth literacy, including the eHealth Literacy Scale (eHEALS). Furthermore, it is necessary to ensure that the method of delivering information is communicated in the native language

that the community understands to digest and comprehend the health message. Consistently convincing can also help reduce public anxiety and the circulation of false information and promote correct preventive health behaviors (Mohamad & Azlan, 2020)

As demonstrated by critical media content analysis, the relevance of media literacy fortifies the public's resistance to advertisements that influence their self-health behaviors (Angeliqa & Sarwono, 2019). It also provides skills and knowledge of the high level of media literacy to the first-class community's thinking in addressing self-health issues for the advancement of the individual and the country (Abdullah et al., 2020).

The MOH and the Malaysian government regularly spread information on social media regarding COVID-19 health and prevention campaigns. However, it does not emphasize proactive actions to encourage individuals who independently take the initiative to seek health information without external prompting. As a result, some Malaysians still have not changed their lifestyles, considering the disease has effectively spread into the community. According to the World Health Organization (WHO) COVID-19 statistics in 2021, Malaysia was ranked 80th out of 216 countries. This phenomenon illustrates that health behavior in the community is very worrying, but these concerns can be mitigated if their level of media literacy development is properly assessed. The subsequent section explains the media literacy cognitive model, which highlights how different levels of media literacy directly influence individuals' ability to interpret and apply health-related information, thereby shaping their health behaviours.

Media literacy cognitive model

The Media Literacy Cognitive Model presented in this section integrates key theoretical contributions from two leading scholars: W. James Potter (2021) and Don Nutbeam (1998). Potter's framework emphasizes the multi-dimensional nature of media literacy, including cognitive, emotional, aesthetic, and moral dimensions. These dimensions are essential for understanding how individuals critically engage with media content and form their own interpretations (Potter, 2021; Silverblatt & Eliceiri, 1997). Nutbeam's health literacy model complements Potter's approach by focusing on how literacy skills, particularly in health contexts, influence behavior change and decision-making (Nutbeam, 1998).

Nutbeam (1998) categorizes health literacy into three levels: **functional literacy**, which involves basic reading and comprehension skills; **communicative literacy**, which enables individuals to apply health information in specific contexts; and **critical literacy**, which allows for the critical evaluation of health messages. This model provides a foundational

understanding of how literacy impacts health behavior and serves as the initial framework for examining the role of media literacy in public health (Nutbeam, 1998).

Building on Nutbeam’s work, Potter (2021) offers a more recent and detailed analysis of media literacy. His model outlines eight progressive stages of media literacy development, each representing a higher level of engagement with media content. These stages range from **Acquiring Fundamentals**, where individuals grasp basic media concepts, to **Social Responsibility**, where they use media literacy to contribute positively to society. The eight stages of development are described in **Table 1**, illustrating the evolving nature of media literacy skills and their relevance to health behaviors (Potter, 2021).

Table 1

Level of Media Literacy Development

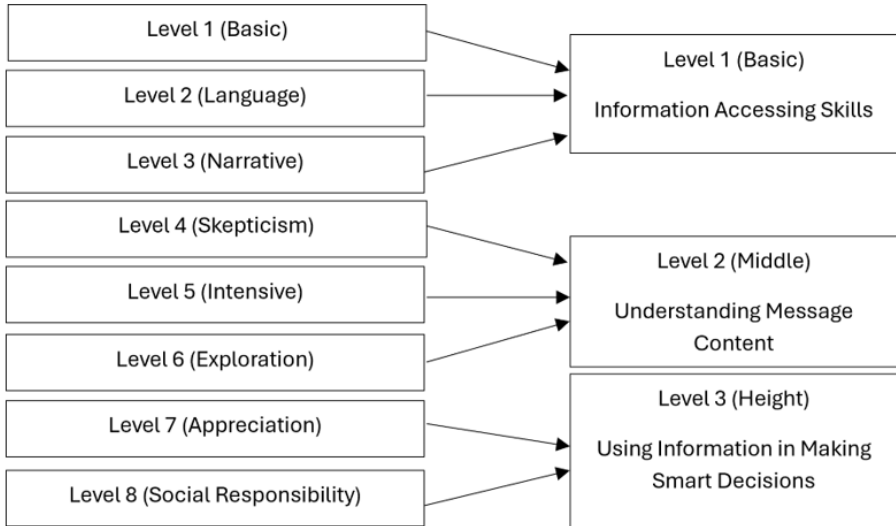
Level	Description	Features
1	Acquiring Fundamentals	Know the basic concepts of media
2	Language Acquisition	Recognize and generate delivered messages
3	Narrative Acquisition	Develop an understanding of similarities and differences in media literacy elements
4	Developing Skepticism	Create a high sense of skepticism towards the differences that arise.
5	Intensive Development	Develop motivation to find information on specific topics
6	Experiential Exploring	Find different content and narratives focusing on emotional reactions, morals and aesthetic values
7	Critical Appreciation	Assess the strengths and weaknesses of the entire message
8	Social Responsibility	Know that there are actions that can be taken to have a constructive impact on society

Note: Adapted from *Media Literacy*, by W. James Potter, 2021

Alongside Potter’s framework, Nutbeam’s (1998) health literacy model is highly relevant in discussions of media literacy, particularly in the context of public health. Nutbeam defines health literacy as the ability to access, understand, and use health information to make informed decisions about health and well-being. His model includes three levels: functional, communicative, and critical literacy. Functional literacy involves basic

skills, such as reading health information, while communicative literacy allows individuals to apply this information in specific contexts, and critical literacy enables them to evaluate the reliability and significance of health messages. The model merging these categorizations can be seen in Figure 1 below.

Figure 1
Media Literacy Development Levels



Note: Consolidation of Media Literacy Development Levels between W. James Potter (2021) and Health Literacy Don Nutbeam (1998)

Although Nutbeam’s (1998) framework predates Potter’s (2021) model, their concepts complement one another. Nutbeam’s health literacy framework can be aligned with Potter’s media literacy stages to offer a more comprehensive understanding of how individuals engage with media, particularly in the health domain. For example, Nutbeam’s functional literacy corresponds with Potter’s lower stages of acquiring fundamentals and narrative understanding, while Nutbeam’s communicative literacy aligns with Potter’s stages of skepticism and information seeking. Finally, Nutbeam’s critical literacy maps onto Potter’s highest stages of critical appreciation and social responsibility, where individuals critically engage with media content and apply their understanding for the common good.

In combining these two models, we can better understand how media literacy influences health-related behaviors. Potter’s eight-stage framework provides a step-by-step development of media literacy, while Nutbeam’s model contextualizes this development within health communication.

Importantly, although Potter's work is more recent, Nutbeam's foundational contributions to health literacy should be acknowledged first, as they provide the groundwork for understanding how literacy skills impact behavior change. By using both models in tandem, we can examine how media literacy equips individuals to critically engage with health information and make informed decisions that benefit both personal and public health (Nutbeam, 1998; Potter, 2021; Silverblatt & Eliceiri, 1997).

The explanations for these three stages of literacy, according to Perpustakaan Negara Malaysia (2021), are as follows:-

- a) Basic level: the ability to use the media, especially the internet, to obtain the necessary information
- b) Intermediate level: the ability to construct, analyse and understand the message's meaning in the media
- c) High level: the ability to interpret media content with a critical understanding and attribute that information to others for the common good.

The rise of false information and fake news has become a significant threat to public health, especially during the COVID-19 pandemic. These issues have been widely studied as they influence health-seeking behaviour by spreading misleading or incorrect information, which can hinder effective public health responses. Research shows that false narratives, particularly on social media, can lead to confusion, fear, and harmful behaviours. Therefore, having strong media literacy skills is essential for individuals to identify, challenge, and avoid disseminating such misinformation (Mohamad and Azlan, 2020). In Malaysia, managing COVID-19 information has been particularly challenging due to limited access to accurate information and the prevalence of fake news (Mohd Hanafiah and Wan, 2020). By critically evaluating the credibility of media sources, individuals can prevent the spread of misinformation, thereby mitigating the "infodemic" that accompanies health crises.

Nutbeam's (1998) three-level model of media literacy—functional, communicative, and critical literacy—provides a vital framework for addressing these issues. Functional literacy ensures that individuals can access and comprehend basic health information. Communicative literacy helps them apply this information within their communities, while critical literacy enables them to assess the trustworthiness of media sources. By adopting these levels of media literacy, individuals can make informed decisions and promote accurate, science-based health practices in an era dominated by rapid information exchange.

Shahrul Nazmi Sannusi (2020) identified two distinct categories of media literacy levels in individuals. The first group is conscious and active, engaging in reading, processing, and sharing information with others. The second group, while highly knowledgeable and interested in current events, does not share or disseminate information. Media literacy also varies between urban and rural areas, with urban communities generally exhibiting higher levels of media literacy than their rural counterparts (Salleh et al., 2020). However, this gap is influenced by factors such as media access and socioeconomic conditions, which require further investigation.

Yazid Ibrahim and Zuliana Ab Rashid (2018) argue that media and information literacy are essential catalysts for societal transformation, improving both economic value and social well-being. In today's context, merely teaching the terminology of media literacy is insufficient; it should be recognized as a dynamic discipline and a lifelong learning process that equips individuals to navigate an increasingly complex media environment (Stix and Jolls, 2020).

Moreover, media literacy plays a pivotal role in influencing health behaviors. Research highlights the need to develop media literacy skills through modern media technologies to better understand and utilize mass media for personal health management (Ngwu et al., 2020). Thus, media literacy is not only vital for general education but also serves as a critical tool for promoting healthier behaviors and enhancing well-being.

Moreover, media literacy plays a pivotal role in influencing health behaviors. The importance of media literacy in health cannot be overstated, as it equips individuals with the skills to navigate mass media as a personal health resource. Ukam Ivi Ngwu et al. (2020) highlight the need for research in modern media technologies to further develop media literacy skills, which can help individuals understand and use media as a tool for improving their health. Therefore, media literacy is critical in today's world, serving as a platform to foster healthier behaviors and change health practices for the better.

In the realm of cognitive behavior, Luisa Weiner et al. (2020) emphasized that internet-based interventions offer an advantage over traditional face-to-face approaches by providing greater flexibility and improving accessibility for healthcare workers. Online cognitive behavioral therapy (CBT) has been shown to effectively treat and prevent various stress-related disorders in diverse populations beyond healthcare workers.

Assuming the media literacy theories (Anderson, 1981; Potter, 2019, 2021; Silverblatt and Eliceiri, 1997), we hypothesize health behaviour, as measured by Potter's eight-stage model, will be positively correlated with

the ability of individuals to critically analyze media content and impart that knowledge to others for the benefit of society.

This ability, which includes cognitive, emotional, aesthetic, and moral aspects, is expected to enable people to create their own opinions on media, adjust to shifting social standards, and eventually enhance the adoption of behaviors that promote health. This hypothesis forms the basis of our investigation into the relationship between media literacy and health behavior practices within the Kota Belud community during the COVID-19 pandemic.

Methodology

The descriptive analysis method in terms of frequency and percentage was used to analyse the demographic background distribution of the respondents. In contrast, the inference analysis was used to test variables related to influence through a double linear regression test. This regression analysis examined the relationship between dependent variables/health behavior practices and independent variables/elements of media literacy levels.

A descriptive analysis was employed to characterise part A, which included respondents' demographics. This analysis used frequency and percentage values to provide insights into the respondents' demographic information.

The descriptive and inference analysis approach was employed to analyze the findings of this study. The study used descriptive analysis to characterize the community's media literacy level. On the other hand, inference analysis was used to see whether the elements of media literacy affected the practice of health behaviour in society. In this regard, quantitative methods were used to collect data, and collection was carried out using survey questionnaires, sent out to respondents through a random sampling technique. The instrument used for primary data collection included variables related to community health behavior. These variable was the practice of community health behavior, which served as the dependent variable. The independent variable under consideration was the level of media literacy.

This study aimed to discern how health behavior practices are forecasted or influenced by various elements of media literacy which is understanding, application and information sharing. The results of this regression analysis were used to determine whether a society with high levels of media literacy will result in good or positive health behavior practices or vice versa. All the information was analyzed using its descriptive and inferential statistics— data analysis using Special Package for the Social Statistics (SPSS) software version 22.0.

In this study, a double linear regression analysis was carried out to answer the study's objectives, thus answering whether the level of media literacy used in the COVID-19 pandemic can influence health behavior practices in society. According to Uyanık and Güler (2013), multiple linear regression analysis enables researchers to explore the combined influence of multiple independent variables on a dependent variable, offering insights into the strength and nature of these relationships.

Meanwhile, the study employed a simple random sampling technique to collect respondent data samples. Simple random sampling was used in this study because it offers an unbiased approach, where every individual in the population has an equal probability of being included in the sample. According to West (2016), this method ensures that all potential samples of specific size have the same likelihood of selection. When the exact representation of the population is not readily available, this method provides a reliable and effective means of identifying the target respondents within the population, ultimately yielding the required sample.

The study focused on the Kota Belud District of Sabah population, which has a population of 111,800 as of 2020 (DOSM, 2020). Participation in the survey requires internet access, as the survey is exclusively conducted online through a designated survey link. According to Ang Kean Hua (2016), the study's sample size represented roughly half of the total population, making it a sound representation of the population (Hua, 2016; Krejcie and Morgan, 1970).

Researchers conducted a rigorous analysis to establish the reliability of the instruments in this study. They employed a widely accepted statistical measure known as the alpha coefficient or Cronbach's alpha, which determines the internal consistency value and thus measures the reliability coefficient for each question under investigation. This discovery aligns with assertions made by prominent scholars in the field, including Julie Pallant (2020) and Mohd Syaubari Othman and Ahmad Yunus Kassim (2018). These scholars suggest that when an item scores above 0.60 on Cronbach's alpha scale, it attains a level of reliability that renders it suitable for administration. James H. McMillan and Sally Schumacher (2010) present even more substantial evidence supporting this assertion since their research shows that items scoring above 0.70 on Cronbach's alpha are highly dependable due to their exceptional levels of both consistency and reliability - making them ideal candidates for further examination within future studies exploring related areas within this domain.

Hence, the current study utilized an assessment tool that meticulously assessed the consistency of its inquiry items, following the guidance of

McMillan and Schumacher (2010). The results of this comprehensive analysis are outlined in Table 2 below.

Table 2.

Cronbach's Values of Alpha Instruments Study

Variable	Mean	Standard Deviation	Cronbach's Alpha Value
Media Literacy Level	4.26	0.62	0.82
Influence of Media Literacy on Health Behavioral Change	3.85	0.5	0.76

Note: The reliability of two variables: Media Literacy Level and Influence of Media Literacy on Health Behavioral Change.

Based on the table, all question items recorded a Cronbach's alpha value above 0.70, indicating good internal consistency. The mean value for the *Media Literacy Level* variables is 4.26, with a standard deviation of 0.62, and a Cronbach's alpha value of 0.82. For the *Influence of Media Literacy on Health Behavioral Change* variables, the mean value is 3.85, with a standard deviation of 0.50, and a Cronbach's alpha value of 0.76. According to the interpretation of the mean range (3.68 to 5.00), both sets of variables fall within a high range, indicating that most of the values in these groups are clustered close to the mean (Heo, Kim, and Faith, 2015). Any values much higher or lower than this range would be considered unusual. The Cronbach's alpha values fall between 0.70 and 0.89, as recommended by McMillan and Schumacher (2010), further confirming the reliability of the scales.

Findings

Based on Table 4, the findings showed the distribution of demographic analysis of the sample. 375 respondents, with the highest number of female respondents being 232, contributed to 61.9% of the sample. Male respondents were 143, contributing to 38.1% of the total sample.

In terms of age category, those in the age range of 31 to 51 are the first to be 133, followed by those in the age category of 18 to 30, with only one respondent less than the first 132. Both age categories contributed 35.5% and 35.2% for the entire sample. The findings show that most respondents are teenagers and adults more exposed to high social media usage. The lowest age category in this study was 12 years and below, with 7 respondents (1.9%). The age range between 51 and above, with 13 to 17 years old, contributed to 7.7% or 29 respondents and 19.7% or 74 total respondents.

In addition, it was found that those with single status comprised the highest number at 228, contributing 60.8%, followed by the married respondents at 116 or 30.9%. On the other hand, the number of respondents in the widow/widower group recorded the lowest number at 31, contributing 8.3% to the survey sample.

In this study, the researchers characterised the demographics of the respondents by looking at the highest level of education. The respondents were categorised into six levels. First, the SPM level category was the highest number, with 125 people contributing 33.3% of the total sample. It was followed by the Diploma level category of 81 people or 21.6%, STPM level of 69 people or 18.4% and Master/Bachelor level of 58 people or 15.5%. Next, the primary education level is the PMR/SRP level of 18 people, followed by the PHD level of 24 people whose education level contributed to 4.8% and 6.4%, respectively, through the overall sample percentage value.

The study also looked at the job categories of respondents by dividing them into five parts. Based on Table 4, the highest percentage, 28.0% or 105 people, was in the IPTA/IPTS students category. The self-employed category had 81 respondents (21.6%), while for the working group in the public and private sectors, 68 and 66 respondents contributed 18.1% and 17.6%, respectively. In the unemployed category, it was the lowest number, contributing 14.7% to 55 respondents who answered the questionnaire. The findings are because most respondents who are not working are full-time housewives.

The demographic divisions encompassed several key aspects, as seen in the following Table 3.

Table 3.
Media Literacy: Demographic Analysis of Sample Study

Demographic Background	Item	Frequency	Percentage (%)
Gender	Male	143	38.1
	Female	232	61.9
Age	12 years and under	7	1.9
	13-17 years old	74	19.7
	18-30 years old	132	35.2
	31-51 years old	133	35.5
	50 years and above	29	7.7
	Single	228	60.8
Status	Married	116	30.9
	Widow/Widower	31	8.3

Demographic Background	Item	Frequency	Percentage (%)
Highest Education	PMR/SRP	18	4.8
	SPM	125	33.3
	STPM	69	18.4
	Diploma	81	21.6
	Master/Bachelor	58	15.5
	PHD	24	6.4
Employment	Unemployed/ Retired	55	14.7
	Self-Employed	81	21.6
	Private Sector	66	17.6
	Public Sector	68	18.1
	IPTA/IPTS Students	105	28

Note: Number of respondents $N = 375$

Descriptive analysis measured through percentage values, mean, and standard deviation was used to explain the study's findings in identifying the community's level of media literacy development. To answer the research question regarding the level of media literacy development in the community, minimum values, standard deviations, and interpretations were analysed based on interpretations used in the studies by Sumarni Lapammu and Zamri Mahamod (2018) and Fatimah Abdul Rashid and Hasmadi Hassan (2019). The development of media literacy levels is divided into three elements: understanding, application, and information sharing. The research findings are also explained according to media literacy levels, which can be detailed in Table 4.

Table 4.

Descriptive Analysis Results of Media Literacy Level Elements

Variable	Mean	Standard Deviation	Interpretation
Information Access Skills	4.35	.70	High
Understanding Message Content	3.27	1.09	Moderate
Information Application	2.82	1.02	Moderate
Overall Score	3.46	.90	Moderate

Note: Number of respondents $N = 375$

Descriptive analysis of the data showed that the community's overall level of media literacy development recorded a minimum value of 3.46 and

a standard deviation of 0.90. Interpreting this minimum score based on previous studies (Abdul Rashid & Hassan, 2019; Lapammu & Mahamod, 2018) means that the data falls within the moderate range, indicating moderate media literacy development. Specifically, for information access skills, the minimum value recorded was 4.35, with a standard deviation of 0.60, indicating a high level of proficiency. However, understanding message content and information application recorded minimum values of 3.27 and 2.82, respectively, with standard deviations indicating a moderate level of proficiency. These findings suggest that while the community exhibits a high level of skill in accessing information, there is room for improvement in understanding and applying media literacy elements which is understanding, application and information sharing.

The findings of the descriptive analysis indicate that the level of media literacy development in the community remains moderate. It suggests that while individuals possess high skills in accessing health-related information, their understanding and utilisation remain moderate. This phenomenon highlights the need for further efforts to enhance media literacy skills within the community, as despite mastering the foundational aspects of media literacy, a significant portion remains at a moderate level.

Regression analysis was carried out to see the influence of media literacy levels on the practice of community health behavior. The analysis results of this study are explained in Table 5 below.

Table 5.
Double Linear Regression Analysis Results

Model	Unstandardised Coefficient		Standardized Coefficient	t	Significant
	B	Standard Error	Beta		
*(Constant)	2.409	0.13		18.57	0.000
Understanding of Information	0.078	0.028	0.109	2.78	0.005
Information Application	0.163	0.021	0.351	7.94	0.000
Information Sharing	0.203	0.021	0.410	9.47	0.000

Notes: $R^2 = 0.462$
Significant (ANOVA) = 0.000
F = 106.286

*Dependent Variable: Behavior Practices Compliance with New Norms
a. Predictors: (Constant), Information Understanding, Information Application, Information Sharing

Table 6 shows the R Square (R^2) value, which indicates how much of the variance in compliance with health behavior practices during the new norm is explained by the independent variables—comprehension, application, and information sharing in media literacy. The analysis revealed an R^2 value of 0.462, indicating that these media literacy elements collectively account for 46.2% of the variance in health behavior practices. It is important to note that other unmeasured independent variables influence 53.8% of the variation. These findings underscore the substantial impact of media literacy on fostering positive health behavior within the community. However, they also suggest the presence of additional contributors to changes in community health behavior beyond comprehension, application, and information sharing in media literacy.

In regression analysis, it is essential to ascertain the independence of the variable relationships and the statistical significance of the dependent variable. The results of the study point to the independence of the variable relationships, emphasizing that the dependent variable, i.e., compliance with health behavior practices, is significant if the p-value is less than 0.05 ($p < 0.05$). Notably, the analysis conducted in Table 6 includes an ANOVA (Analysis of Variance) to identify the relationships between the dependent variables (health behavior practices) and the independent variables (comprehension, application, and information sharing in media literacy). This analysis revealed a significant relationship, as demonstrated by an F-value of 106.28 and a p-value of less than 0.05 ($p < 0.05$). These findings signify a robust statistical relationship between media literacy and health behavior practices.

The strength and direction of the influence of independent variables on the dependent variable are encapsulated in the beta coefficients. In Table 6, the beta coefficients are as follows:

Information Sharing: This element exerts the most significant influence on behavioral health practices, with a beta coefficient of 0.410, accounting for 41% of the variance.

Information Application: Following closely, the beta coefficient for information application is 0.351, indicating a substantial influence of 35.1%.

Understanding of Information: This element contributes 10.9% to the dependent variable, with a beta coefficient 0.109.

These beta coefficients underscore the substantial influence of all independent variables on the practice of health behavior. Furthermore, it is essential to highlight that all independent variables demonstrate a significant relationship with health behavior practices with p-values less than 0.05. The multiple linear regression analysis results indicate a strong relationship between each media literacy element and health behavior practices, as

evidenced by the substantial 87% interval regression coefficient. This high coefficient aligns with the strong influence described in the Wufron scale (2020) discussed earlier. Consequently, these findings emphasize that the better the comprehension, application, and sharing of information within society, the more profound the impact on community health behavior, fostering positive health practices.

Discussion

The findings showed that the elements of media literacy (understanding, application and information sharing) influenced the practice of community health behavior (compliance with the new norm). However, other factors not measured in this study also contribute to changes in behavioral health practices. The double linear regression analysis findings show a significant relationship with $p < 0.05$ at the interval of the coefficient of regression very strongly between health behavior practices towards media literacy elements. In other words, these findings show that the higher the understanding, application, and sharing of information, the greater it affects the practice of compliance behavior to the new norm.

The findings from this study underscore the critical role that media literacy plays in shaping health behaviors, particularly during the COVID-19 pandemic. In line with previous studies highlighted in the literature review, media literacy directly impacts the ability of individuals to interpret, apply, and share health information, which is crucial during times of public health crises. This section discusses the study's results by focusing on the COVID-19 context and the specific conditions in Malaysia, as outlined in earlier research.

This study aligns with Bergsma and Carney's (2008) findings, which suggest that media literacy has a significant influence on health behavior. During the COVID-19 pandemic, this influence became more evident as individuals relied heavily on media for guidance on public health measures. The findings also support the conclusions drawn by Marzo et al. (2022), which highlighted that media literacy enhances awareness and encourages changes in health behavior, such as mask-wearing and physical distancing.

Our study confirms that individuals with higher media literacy were better able to navigate the information overload associated with the pandemic, particularly in distinguishing credible information from misinformation. As noted by Mozafar and Shahin (2012), media literacy promotes critical thinking, enabling individuals to make informed decisions about their health. In the context of Malaysia, where misinformation surrounding COVID-19 spread rapidly via social media (Mohd Hanafiah

& Wan, 2020), media literacy emerged as a crucial skill for filtering reliable health information.

The Malaysian context adds an important layer to these findings. As highlighted by Hazriani Harris et al. (2009) and Dahlui et al. (2020), rural areas in Malaysia, particularly in Sabah, face significant challenges in accessing health information due to limited infrastructure and digital connectivity. This study found that individuals in rural regions exhibited lower levels of media literacy, which corresponded with lower adherence to COVID-19 preventive measures. These findings echo those of Peiman Afshar et al. (2020), who noted that media literacy disparities often lead to unequal health outcomes, particularly in marginalized communities.

Furthermore, the findings also align with the work of Ibrahim and Ab Rashid (2018), who emphasized the need for targeted media literacy programs in rural areas to bridge the gap in access to reliable health information. This study supports their argument by demonstrating how lower media literacy levels in rural Malaysian communities contributed to slower adoption of health behaviors such as vaccination and compliance with the Movement Control Order (MCO).

Misinformation was a significant challenge during the pandemic, as noted by Mohamad and Azlan (2020), who discussed the critical role media played in the dissemination of COVID-19 information in Malaysia. Our findings highlight that individuals with stronger media literacy skills were more adept at identifying and avoiding misinformation, a point also raised by Ngwu et al. (2020). This ability was especially important given the overwhelming amount of false information circulating online, as noted in the World Health Organization's (WHO) reports on the COVID-19 "infodemic."

The ability to critically assess media content and differentiate between trustworthy and misleading sources was vital in promoting health behaviors such as vaccination. As reported by Del Riccio et al. (2022), the spread of misinformation negatively impacted vaccine uptake in many parts of the world, including Malaysia. This study supports those findings, demonstrating that individuals with higher media literacy were more likely to engage in positive health behaviors and trust reliable health information from official sources like the Ministry of Health (MOH).

The multicultural and multi-ethnic fabric of Malaysian society also played a role in how health messages were received. As highlighted in the literature, religious and cultural beliefs sometimes shaped public attitudes toward COVID-19 interventions, such as vaccination (Sannusi et al., 2019). Our findings suggest that media literacy enabled individuals to navigate these cultural complexities more effectively, allowing them to reconcile their

cultural and religious beliefs with health recommendations. This aligns with the work of Haryati Abd Karim (2020), who emphasized the importance of media literacy in enhancing public health understanding in Malaysia's diverse communities.

The findings of this study have important implications for public health policy, particularly in Malaysia. As noted by Tehrani (2016), media literacy is not just a theoretical framework but a practical tool for promoting public health. Our study underscores the need for enhanced media literacy programs, particularly in rural areas, to ensure that all segments of society can access, understand, and apply health information. This supports the recommendations by (Shinta et al., 2019) and Li et al. (2023), who advocated for the inclusion of media literacy education in rural communities to combat misinformation and improve health outcomes.

In Malaysia, where the digital divide still affects rural and underprivileged populations, targeted media literacy programs are essential. This study reinforces the conclusions drawn by Afshar et al. (2020) that improving media literacy can lead to better health outcomes, particularly during pandemics when rapid access to accurate information is crucial.

Conclusion

This study highlights the critical role that media literacy plays in shaping health behaviors, particularly during the COVID-19 pandemic. The findings confirm that individuals with higher levels of media literacy are better equipped to navigate the flood of information, distinguish credible sources from misinformation, and adopt health-promoting behaviors, such as mask-wearing, social distancing, and vaccination. In the Malaysian context, these effects are even more pronounced due to the digital divide, particularly in rural areas where access to reliable health information is limited.

The research objectives were achieved by demonstrating a clear relationship between media literacy and health behavior, particularly in the context of public health crises like COVID-19. The study found that media literacy directly influences the ability to critically assess health information, which in turn impacts compliance with preventive health measures. This reinforces the importance of media literacy as a tool for improving public health outcomes during pandemics.

The implications of these findings for public health policy are significant. Given the critical role of media literacy in promoting accurate health behaviors, public health strategies should include targeted media literacy education, especially in rural and underserved communities. This could involve integrating media literacy into school curricula, launching public awareness campaigns, and providing accessible digital literacy resources to

bridge the gap in health communication. By doing so, policymakers can ensure that all citizens, regardless of location or socioeconomic status, have the tools to make informed health decisions.

While this study offers valuable insights into the relationship between media literacy and health behavior, further research is needed to explore the long-term impacts of media literacy education on public health. Future studies could investigate how different media platforms influence health information dissemination, or examine the specific challenges faced by rural communities in accessing reliable health data. Additionally, there is a need for longitudinal studies to evaluate the sustained effects of media literacy on health behavior beyond the immediate context of the COVID-19 pandemic.

In conclusion, this study contributes to the growing body of research that underscores the importance of media literacy in public health. As the COVID-19 pandemic has shown, the ability to critically engage with media content is essential for promoting healthy behaviors and mitigating the spread of misinformation. By enhancing media literacy, especially in vulnerable populations, societies can better respond to future public health crises and improve overall health outcomes.

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