The Nexus Between Media Transparency and Attitude for Risk Management During a Disaster

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ABSTRACT

The government has taken drastic measures to control the spread of virus transmission during the Covid-19 disaster. In a Movement Control Order, the public was advised to stay at home and practice social imprisonment of infected persons for risk management purposes. The government has spread public awareness and encouraged the public to stay safe and healthy from infectious viruses using media channels. The mass media plays a significant role in providing information and understanding about the disease and helps protect the elderly and those with basic health problems from being infected. This research examined: (1) the role of media transparency on public awareness and knowledge of the infected virus, which in turn influences their attitudes; (2) to determine the influence of media transparency on the attitudes of the people. A survey method was applied to 338 respondents consisting of young people living in Johor. Data were analysed using SmartPLS, and the findings indicated that the role of media transparency has a significant impact on the attitudes of this generation Z. In addition, it was also found that awareness and knowledge mediated the role of media and their attitudes. These findings can guide policymakers to promote greater awareness to reduce and manage possible risks during disasters. Moreover, the media plays an important role not only in channeling news but can influence human awareness, knowledge, and attitudes.

Keywords: media transparency, risk management, disaster, attitude, covid-19

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INTRODUCTION

The Covid-19 pandemic is believed to have exploded in China and has become a global health catastrophe with no signs of coming to an end. Excessive routine activities caused many people to become infected with the virus. As a result, governments worldwide have taken drastic measures to monitor most human activities to control the spread of the virus. Almost all governments have strategies for people to isolate themselves and encourage people to stay healthy by using masks and sanitisers for infectious viruses and help protect the elderly and those with fundamental health problems from becoming infected. The Malaysian government had announced the first Movement Control Order (MCO), which started on 18th March 2020 for two weeks and continued for subsequent phases. Measures are aimed at how to handle people suspected or infected, social control measures, and public responsibility in taking action to prevent widespread infection. People stay at home and practice social imprisonment while only visiting places for necessities.

Prevention and risk management strategies to combat the transmission of Covid-19 infection are taken seriously. Media channels are critical to disseminate information to the public. The Malaysian government used the media to share information on pandemic updates such as the policies and standard operating procedures via the Ministry of Health Malaysia (MOH) and the National Security Council (MKN) through various channels, including television and telegram, and Facebook. A smartphone application known as MySejahtera is used to help the community report detailed information of their location and health and provide information on the vaccination program. Around the world, governments are leveraging public communications to stabilise misinformation and support policies. The effectiveness of this action depends on placing it within the principle of an open government with key transparency to build trust in public institutions.

On the other hand, facts are often manipulated, and unproven theories are still exhibited as breakthrough discoveries. According to the Reuters Institute's analysis of false Covid-19 news content, 59% were based on the level of accurate information that had been manipulated, while 38% were utterly untrue (Brennen et al., 2020). Non-compliance with the rules drives Corona cases to increase every day, which is influenced by the public

ignoring the information made by the authorities. In fact, on July 12, 2021, the coronavirus outbreak in Malaysia is growing, with new confirmed cases rising to 8,574 and increasing tremendously in the same month, with new cases in Selangor and Kuala Lumpur among the highest (Hirschmann, 2021; and Ahmad, 2021). Therefore, the media is in a solid position to help curb this pandemic by conveying information to everyone, warnings and practical safety measures. The role of the media influences public awareness and knowledge from nothing to almost everything they read while indoctrinating vigilance and belief. Therefore, media transparency is at stake, especially in the young adult community, as they have yet to experience significant health problems. The clarity and reliability of the information brought by the media to the public are essential for further decision-making and planning while implementing safety procedures among underprivileged family members or anyone around them.

The key questions posed by this research were: (i) Is there a significant mediating part in awareness between media transparency and generation Z attitudes? (ii) Is there a significant mediating part in knowledge between media transparency and generation Z attitudes? (iii) Does media transparency influence the attitude of generation Z during disasters? The main goal of this research was to identify the role of media transparency on public awareness and knowledge about the infected virus, which in turn influences the attitudes of generation Z. At the same time, the second objective was to determine the influence of media transparency on the attitude of the people, while the third objective was to study the influence of media transparency on the attitudes of generation Z during disasters. The results could guide policymakers to take appropriate steps to promote a greater understanding of the coronavirus pandemic using the mass media. The growth of the internet and media channels worldwide has created new ways to communicate information effectively.

The Z category's increased awareness and knowledge may have affected their attitudes towards risk management. They are a young generation with a large workforce, and most of them adhere to the rules set by the institutions where they study. Their attitude toward disease prevention is essential to ensure that they and their families are free from infectious diseases. Therefore, a better understanding of today's media transparency and the effects of Covid-19 are crucial to adhere to government regulations

and information provided by governments. Hence, this study aimed to determine the extent to which attitudes among generation Z through the role of media transparency can address risk management during disasters.

LITERATURE REVIEW

Theoretical Foundation

This study integrated the role of media transparency and the mediating effect of awareness and knowledge towards generation Z attitudes. It attempted to extend the Theory of Planned Behavior (TPB). The TPB discusses the various situation-specific cognition that influences an individual's initial intention to behave specifically. The TPB hypothesises that one's behaviour could be determined by behavioural intentions that can be predicted by certain socio-cognitive factors, such as attitudes, subjective norms, and perceived behaviour control (Ajzen, 1991). The positive and negative beliefs are influential on the intention and behaviour in certain actions, which provide a favourable direction to strengthen consumer commitment (Yadav & Pathak, 2017).

The Nexus between Media Transparency, Awareness, Knowledge, and Attitude

During the Covid-19 disease outbreak, the mass media played an essential role in disseminating information on Covid-19 conditions and reporting government plans and strategies and most of the issues related to the country. The media has the potential to represent and deliver a piece of important educational information for the community and improve their understanding (Corbett & Durfee, 2004). The other medium to provide news is the social media such as Facebook, Twitter, and blogs, as it is the most widely used and is a fast communication tool for disseminating information to a broader community (Hamid et al., 2017; Irwin et al., 2012; Kimmons, 2014). It has proliferated as an online communication tool where users can comment and post videos photos on social networks at an incredible rate.

In Malaysia, the media is under the Malaysian Communications and Multimedia Commission (MCMC). MKN also monitors all content and news made through social media because the public widely uses the media.

Sumaedi et al. (2020) found that intention to use official Covid-19 websites is significantly and positively affected by the website's quality, attitude, and subjective norm. The study indicated that if someone has a favourable evaluation of the website, they would more likely use it. Brailovskaia et al. (2020) found that most participants frequently used official government sites, followed by news reports on television and social media. The printed media were the least used media to get information on Covid-19.

Therefore, the power of media transparency could be further harnessed to benefit the public to meet the regulatory requirements and measures recommended by the government during the disaster. A study conducted in Iraq found that most respondents like to use the like button frequently, sometimes using comments and notes but rarely using the share button to share additional information about awareness. They also feel that social media has little impact on their understanding, while some do not seem to be affected by the increase in awareness.

In addition, higher education institutions are essential in shaping healthcare awareness of this infectious disease among students, academics, and other staff through various means, including the media. Universities have great power in developing students 'knowledge and awareness (Okereke, 2014; Zakaria et al., 2021). In raising awareness of MCO compliance, the behaviour can be changed due to increased public awareness of a problem and by cultivating appropriate attitudes (McKenzie-Mohr, 2000). Hence the first hypothesis to be tested was:

H1: There is a significant influence of media on attitudes through the role of awareness.

Media also helps students develop crucial social knowledge and social skills and become active citizens by creating and sharing content (Wang et al., 2011). On the one hand, the positive aspect of the online community is that youths can use it for academic assistance and support (Lusk, 2010). Students who may be reluctant to speak in the class participate in a book discussion blog and write for actual audiences. New web tools emerge all the time that enhance learning (Brydolf, 2007). It is our responsibility to address the media as an effective communication medium. Previous studies have reported some information that was not known mainly among university

students, such as knowledge about protection from disease, the symptoms, and the fatality rate (Almutairi, 2016).

Most students and young learners seek knowledge from traditional media and social media settings rather than their institutional programs (Al-Hazmi et al., 2016). In addition, Zhong et al. (2020) noted that knowledge scores were associated with a low likelihood of preventive practice against Covid-19. This contributes to the issue that the level of awareness and knowledge can encourage disease prevention measures. Haushofer and Metcalf (2020) found that the transmission process can be used to maximise information dissemination and protective behaviour. Xie et al. (2020) found that the Covid-19 information from mainstream Chinese media and overseas had a significant effect on college students' online knowledge acquisition. The result showed that the more positive students' response towards the pandemic situation, the stronger their willingness to obtain such knowledge through online means. Hence the second hypothesis to be tested was:

H2: There is a significant influence of media on attitudes through the role of knowledge.

There is the question of whether the media can change one's attitude. Wang et al. (2011) found that there was a negative attitude towards social media when college students used it. For example, a student spends more than six hours checking social media sites, which could be detrimental to student performance. However, for developing countries, the impact of the media is significant on attitudes change (Firouzeh, 2004). It can shape the spread of new attitudes as well as new life insights and they will also distance themselves from society. As such, it can be said that media shapes one's attitude and it is our responsibility to use the media as an effective communication tool for the betterment of life and benefit the community. Social media use is positively associated with stress symptoms and experience burden (Brailovskaia et al., 2020). A study found social media platform features are a significant motivation that influences attitude towards online donation related to Covid-19 response (Nashwan & Daihani, 2020). Hence the third hypothesis to be tested was:

H3: There is a significant relationship between media transparency on people's attitudes.
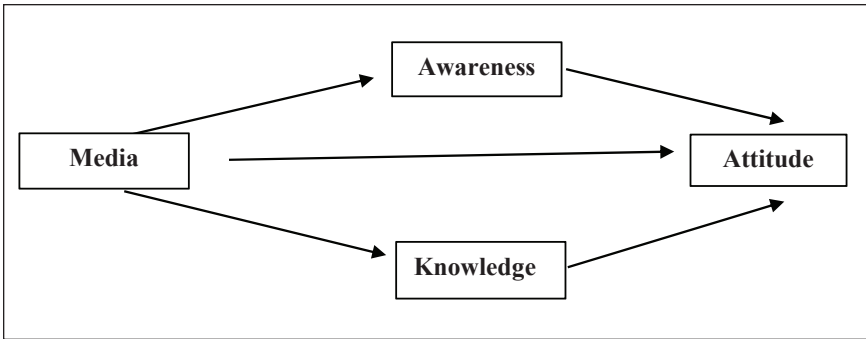
Figure 1: Research Framework

Therefore, this study aimeds to examine the relationship between media transparency, awareness, knowledge, and attitudes for risk management during disasters as discussed in past studies. Figure 1 shows the framework for this research.

METHODOLOGY

This study applied a quantitative method through a questionnaire survey using the convenient sampling technique. This approach indicates that all elements in the population are considered and each element has an equal chance of being chosen as the subject (Sekaran & Bougie, 2016). An online questionnaire with a Likert scale of 1-5 was distributed to 338 participants among the younger generation in Johor and it took about a month to complete the data collection process which was distributed in March 2020. A total of 21 questions were used to measure awareness, knowledge, media transparency, and attitude. The questions used to measure the role of media were adapted from Rahim and Jalaladeen (2016), with slight modifications. In addition, the questions used to measure awareness, knowledge, and attitudes were adapted from Mohiuddin et al. (2018) and Junsheng et al. (2019) with slight modifications. Participants had to complete the survey online via a google form.

Selected respondents were subject to government instructions to sit at home during the Covid-19 outbreak. To achieve this goal, a description of the issues involved was attached to the questionnaire as practised in the work of Dillman (2011). This was to ensure the validity of the findings

based on the questionnaires distributed among the respondents. As noted earlier, this research needed to identify the relationship between media transparency, awareness, knowledge, and attitudes of generation Z to risk management in combating pandemics. In addition, the results will provide a better understanding of their fundamental position with the influence of media transparency.

This research employed structural equation modeling to examine the relationship between the studied variables. The Partial least squares (PLS) model analysis was used to evaluate data. Ngah (2014), and Akter et al. (2011) indicated that PLS is useful for evaluating empirical validation and theoretical conceptualization. Evaluation of the measurement model was based on appropriate statistical analysis of indicator reliability (Cronbach's alpha), convergent validity, and discriminant validity analysis. The data was analysed using the following steps; first, model measurement was assessed using confirmatory factor analysis. Secondly, the standard path coefficient and t-statistics (t > 1.96) were examined for measurement of the structural model. The findings generated from this research phase will benefit all media networks, universities, and authorities in managing the risks during the Covid-19 outbreak in Malaysia.

FINDINGS

The sociodemographic characteristics of the respondents are as reported in Table 1.

Table 1: Respondents' Demographic Profile

Characteristics	Percentage (100 percent)
Gender	
Male	21.6
Female	78.4
Age	
18 and 20	53.6
21-23	40.2
24-26	5.60
26 years and above	0.60

Which medium of media/information do you like the most?	
Other people	5.60
Newspapers	4.70
Social media	68.9
Formal circular	5.00
Government webpage	15.7
Which medium of media/information do you trust the most?	1.80
Other people	15.1
Newspapers	7.70
Social media	17.8
Formal circular	57.7
Government webpage	
Which media/information is the most confident to convey to others?	0.00
News from other people	7.70
Newspapers	43.2
Social media	9.80
Formal circular	39.8
Government webpage	

Sample profiles revealed that 78.7 percent of the respondents in this study were primarily female and only 21.3 percent of the total respondents were male. It showed that 53.6 percent of respondents were 18 and 20 years of age. Besides, 40.2 percent of respondents were 21-23 years of age. About 5.6 percent of respondents were between the ages of 24 and 26. Nonetheless, respondents over 26 years of age contributed to 0.6 percent.

The majority of the young cohort (68.9%) preferred social media as their medium of information. Their keen interest in information and technology is undoubted. In addition, formal circulars became the last choice of information medium (5%). Despite their preference for social media, when it came to the trustworthiness of the medium of information, government webpage led the choices (57.7%) yet social media was the last (7.70%). These results imply that their choices of information medium preferential and trustworthy were contradicted. And again social media (43.2%) and government webpage (39.8%) became the top two most confident mediums to confidently convey information among the respondents.

Measurement Model

As indicated by Fornell and Larcker (1981), convergent validity is computed by assessing item reliability, internal consistency, and Average

Variance Extracted (AVE). Item reliability is used to calculate the loadings for each item. Table 2 summarises the considerable item loadings. The loadings show how the items are linked to their corresponding constructs. Chin (2010) stated that if all items are greater than 0.7, they can be accepted. All of the AVE values were more than 0.5. Conferring to the AVE, the highest value for knowledge was 0.795, while the lowest value for attitude was 0.711. As a result, Internal Consistency passed the 0.7 minimum value criteria. The lowest internal consistency was 0.709 for knowledge, while the highest was 0.901 for awareness. The measurement model's reliability ensured that all constructs had high internal consistency values. Hence, the measurement model met all three of the required criteria and had convergent validity. Therefore, these findings clearly showed that the items in each construct were highly connected and trustworthy.

Table 2: Measurement Model

Construct	Item	Loading	AVE	Internal Consistency
Attitude	ATT1	0.859	0.711	0.863
	ATT2	0.723		
	ATT3	0.882		
	ATT4	0.898		
Awareness	AWR1	0.897	0.718	0.901
	AWR2	0.746		
	AWR3	0.874		
	AWR4	0.857		
	AWR5	0.855		
Knowledge	KNW1	0.846	0.795	0.709
	KNW2	0.816		
	KNW3	0.864		
Media Transparency	ROM1	0.938	0.770	0.807
	ROM2	0.857		

The square root of the AVE was used to examine the first criteria of discriminant validity. The inter construct correlation was then compared to this value. The square roots of the AVE were calculated and represented in the major diagonal of Table 3 to meet the discriminant validity criteria. The correlations among the latent variables were represented by the off-diagonal elements. Discriminant validity is attained when the square root of a construct's AVE is more significant than its correlation with other constructs,

according to Barclay, Higgins, and Thompson (1995). Discriminant validity was attained, as shown in Table 3.

On the other hand, the cross-loading matrix explained that all elements were loaded higher on the construct they measured than on any other construct in the model. As a result, both discriminant validity criteria were met. The implication is that the measurement model constructs were all distinct.

Table 3: Discriminant Validity

Construct	Attitude	Awareness	Knowledge	Media Transparency
Attitude	0.843			
Awareness	0.665	**0.847**		
Knowledge	0.568	0.660	**0.842**	
Media Transparency	0.493	0.534	0.450	0.899

Bootstrapping of the leading models is shown in Table 4. The standardised path coefficient determines if the direction is positive or negative, whereas the t-value determines whether or not the association is significant. The results showed that H_1, H_2, and H_3 that looked into the impact, and all the directions were positive. In particular, the standard path coefficient for H1 was 0.230, and the t-value was 5.192. At t > 1.96, and the outcome was approved.

In the case of H2, the standard path coefficient was 0.104, and the t-value was 2.354. At t > 1.96, the results were accepted. While for H3, it revealed that the standard path coefficient was 0.164 and the t-value was 3.022. At t > 1.96, the results were accepted.

As a final point, the hypotheses H1, H2, and H3 were statistically significant. As a result of the findings, it addressed all the objectives of the study. In conclusion, it was found that the role of media transparency on awareness and knowledge, influences the attitude of generation Z during MCO.

Table 4: Bootstrapping

Relationship	Standard Path Coefficients	T-stat	p-value	Results
H_1: Media Transparency -> Awareness -> Attitude	0.230	5.192	0.000	Supported
H_2: Media Transparency -> Knowledge -> Attitude	0.104	2.354	0.019	Supported
H_3: Media Transparency -> Attitude	0.164	3.022	0.003	Supported

*p< 0.05 or **p<0.01

DISCUSSION

The Covid-19 disease has caused anxiety and concern among all parties. Hence the authorities are dealing with a heavy task in raising public awareness and knowledge. Awareness and knowledge are essential aspects that can influence a society's attitude that is affected by the role of the media. Generation Z, who represents the mass community, quickly adapted the information they get through the mass media. Positive relationships between media transparency, awareness, knowledge, and attitudes were supported in this study. These findings show a pattern of outcomes similar to Xie et al. (2020), Delpont et al. (2020), and Abd Aziz et al. (2020) when they emphasised the potential role of the media in increasing people's awareness, knowledge, and attitudes.

We can learn from the results that when people get news from the media, their level of awareness and knowledge increases. Moreover, we also found that the press positively affected attitudes, which is in line with findings in the previous literature that showed that it positively influenced their attitudes. In this regard, media enhances pandemic awareness and knowledge to drive individuals' attitudes due to information spread through media every day. It helps them understand the news and issues happening in a country and worldwide. This positive relationship between the three dimensions of the variables supports Firouzeh (2004) and Brailovskaia et al. (2020).

However, the results of our study may differ from the study conducted by Wang et al. (2011). They found that students' use of social media had affected their grades and competencies when more time was spent on

the media, and it formed negative attitudes. Accordingly, more profound observations or more aspects of behaviour need to be studied in aligning the level of awareness and knowledge ownership with the role of the media when it involves a combination of learning and leisure. Thus, the part of media transparency between understanding and knowledge becomes prominent, especially during times of adversity. For example, during a pandemic, people will use many prevention methods against diseases and become aware of the dangers when they gain more knowledge (Ahmad et al., 2020).

The results confirm that people often use the media during a crisis because they spend most of their time at home. Thus, the results indicated that media use during the Covid-19 era increased public awareness and knowledge through dissemination of information. Media transparency plays a vital role in spreading information to the public concerning diseases, prevention, SOPs, and information to the outside world. This encourages people to continue to adhere to SOPs and be able to shape individual attitudes to minimise the adverse effects of the disease and slow down the spread of Covid-19. This is in line with Firouzeh (2004) which found that the media can be an attitude shaper and change people's attitudes and visions towards life.

CONCLUSION

This research identified the relationship between media transparency, awareness, knowledge, and attitudes of generation Z with risk management in combating the Pandemic. Moreover, it was found that media transparency had a significant impact on their moods.

Conclusion

Media has direct effects and indirect effects on attitude. The transparency of media has many direct effects on awareness, mood, and knowledge, and it also has an indirect impact on attitude. For social marketing activities, understanding how to influence generation Z's perspective is essential during a pandemic because they are the information gatherer and it is easy to share information via social media. And based on research, ways to change people's awareness, knowledge, and attitudes should figure out

how to manage social media to share government information and set up government websites to match their needs. But negative things can happen if the sources of information have differing interests. Social media can share the pros and cons of some issues that can cause audiences to be over informed.

Recommendation

For the Government, one of its responsibility is to change the societal attitude and behaviour. Social marketing is trying to influence the target audience to voluntarily accept, reject, modify, or abandon a behaviour for the benefit of society as a whole (Serrat, 2010). This research showed that one of the important ways to influence generation Z is using social media and government sites. Media transparency is needed to make the target audience change their attitude and behaviour.

For future research, the topic of information surplus can be beneficial in research on social media because there will be positives and negatives from the word of mouth about a subject. How audiences can accept and reject various information about an epidemic. Much experimental research can explore the types of endorsers or messages that an audience trusts. Further discussions on attitudes towards the media and beliefs have already been discussed by Tsfati and Cohen (2013).

Limitation

This research did not distinguish the type of media used. TSince there are so many types of media and social media; their effect may be different. Conventional media and social media such as Facebook, Youtube, Instagram, and so forth must have a different impact because of differentiation in their advantages and disadvantages. Future research could explore which kind of media has a more positive effect to share government information. This research chose to understand the attitude of generation Z, so further research could try to explore other generations since every generation has its characteristics and preferences of the media. So social marketers should understand how to influence many generations.

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