The Influence of Perceived Health Messages on Trust in Government During Covid-19 and Source Credibility as the Mediating Effect: A Conceptual Paper

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Abstract. In the situation of any health crises like Covid-19, trust in government is paramount in shaping public behaviour in the right direction. However, the trust can be diminished if the health messages provided are unclear, inconsistent and lack of transparency, or delivered by untrustworthy source. In line with this view, this paper was proposed to find empirical evidence about the influence of perceived health messages on public trust in the Malaysian government during Covid-19 through the mediation effect of source credibility. The study is significant to fill in theoretical gaps by utilising Elaboration Likelihood Model to understand the the persuasion process of online health messages and how source credibility can influence the effect of the messages on public trust. This research will be carried out using quantitative approaches, and a vast amount of data will be obtained via online survey involving estimated and then investigated empirically. The researcher will use questionnaires as the primary tool for collecting crucial data/information, and the questionnaire will be distributed to the intended respondents of 384 people via Google Forms. T results can be used to help the government and public health authorities to understand the importance of providing clear, consistent, and transparent Covid-19 messages to the public in order to gain public trust and subsequently persuade them to comply with the recommended preventive measures like social distancing, handwashing, getting vaccinations etc. The outcomes of the study can also be a useful reference to understand the importance of selecting trustworthy officials as Covid-19 spokespersons to enhance the persuasion effect of the Covid-19 messages.

Keywords: Health messages · Source Credibility · Trust · COVID-19 · Malaysian Government

1 Introduction

The emergence of newly discovered coronavirus (SARS-CoV-2) in Wuhan, China since December 2019 has spread the Covid-19 disease to many countries around the world. The disease is severely infectious and can cause respiratory problems like cough, flu,

fever, breathing difficulty and even can lead to death. It was declared a Public Health Emergency of International Concern (PHOIC) by World Health Organisation (WHO) on 30 January 2020 and subsequently declared as Pandemic on 11 March 2020 [1] in its Covid-19 Situation Report had also provided several strategies to guide all countries in public health response [1].

In Malaysia, the first case of Covid-19 was first detected on January 23, 2020 involving three tourists from China who had entered the country via Johor Bahru. Since then, the number of positive cases had risen from 22 in February 2020 to more than 600 cases in the middle of March 2020 and went over 2,500 confirmed cases by the end of March 2020. Until April 2022, more than four million positive and confirmed cases had been detected in Malaysia with more than 35,000 deaths reported [2]. During any crises specifically health crises, it is paramount for any organization to employ communication strategies that can galvanize public to act and respond appropriately. The strength of the messages communicated by the relevant parties to disseminate information can result either in life or death [3].

However, the effectiveness of these measures depends on the compliance and support of the public [4] which can be influenced by their trust in government's handling of the matter [4–6]. In several vaccination studies, trust in government and public health authorities has been identified as a predictor of vaccination behaviour and has been shown to influence perceptions of the effectiveness of protective measures. [7–11]. In other words, public trust is an important matter for public health efforts that seek to rapidly mobilize desirable self-protective behaviours across a population in order to reduce the spread of infectious disease and protect vulnerable populations.

Extensive literature has shown that trust in government can be influenced by how the public perceive information disseminated to the public during crises. The perceived messages, in terms of its timeliness, honesty, accuracy and trustworthiness of the communicator, can either foster or damage public trust in government during emergency situations like bioterrorist, swine flu outbreak, ebola virus epidemic and H1N1 pandemic[12–16].

2   Problem Statement

In the event of any emergency situations, effective communication from government and public health officials is essential to ensure public trust in government's recommendations and facilitate the adoption of behaviours necessary to reduce risks [17]. The communication when executed should contain accurate, timely and transparent information to maintain public trust [18, 19] and persuade them to comply with the recommended measures [3, 13, 18, 19].

However, it is challenging for many governments to ensure the right health information is communicated to the public, especially during a pandemic like Covid-19 where people tend to rely so much on social media platforms as their primary source of information. In addition, even though medical journals are efficient in making new Covid-19 discoveries accessible, it does not mean much for the general public [20].

Unfortunately, these messages are not necessarily accurate, could be unreliable or misleading, and worse, had negative impacts on public responses. According to Depoux et al. (2020), numerous misleading and misinformation about Covid-19 could escalate

fear and anxiety among the public [21].Unproven claims against Covid-19 threat could also have a negative influence on public risk perception [22], which consequently could affect their trust in government [17] and ultimately negative behavioral responses like vaccination hesitancy [23, 24].

In Malaysia, social media has also become one of the main sources to acquire Covid-19 information. According to the Medical Mythbusters Malaysia's Facebook page, the average reach for a Covid-19 themed post was 53,574 which implies the high demand for Covid-19 in social media [25]. Other than that, the Malaysians also primarily used television and Internet news portals to access information on Covid-19 [26]. However, in a study conducted in Malaysia, more than 50 percent of the Malaysian adults who participated in the survey had poor knowledge about Covid-19 vaccine, particularly among low education levels, low income and not living with high-risk groups [27]. More than half were worried about the vaccine's adverse effects based on the scary information about Covid-19 vaccine that was rampant on social media, and there are only 64.5 percent of them were willing to get vaccinated.

In another study, it was found that the Malaysians who referred to credible sources like Ministry of Health and Malaysian National Security Council for information were more likely to trust in government's handling of the crisis than those who used other information sources like Youtube, friends, family etc. [26]. The results supported previous studies that have shown a significant link between source credibility and trust in government's actions in pandemic situation [24, 28].

However, despite the wide availability of literature on health information, studies on the impact of perceived health messages on trust in government are still lacking in Malaysia. This is especially missing in the settings of pandemic situation and online communication. In addition, little is known about the influence of source credibility on the persuasion effect of health messages on trust in government's handling a pandemic situation. This indicates the need to further explore the relationship between perceived health messages, source credibility and trust in the context of Covid-19 control in Malaysia.

3   Research Objectives

Generally, the main objective of this research is to investigate the influence of perceived health messages on trust in Malaysian government in Covid-19 control through the mediation effect of source credibility. The specific objectives of this research are:

1) To determine Malaysian public perception towards health messages during Covid-19 pandemic
2) To determine the Malaysian public perception towards source credibility during Covid-19 pandemic
3) To determine Malaysian public perception towards trust in government in Covid-19 control
4) To examine the influence of perceived health messages on trust in government in Covid-19 control
5) To examine the mediation effect of source credibility on the relationship between perceived health messages and trust in government in Covid-19 control

6) To investigate the differences in the level of public trust in government in Covid-19 control based on social demographic factors (gender, age, education)

4 Literature Review

Persuasion involves the usage of verbal or non-verbal messages communicated to the recipients and designed to influence and change their attitudes, beliefs and values or adopt certain behaviours. Persuasive messages exert the force of the contained arguments to influence message recipients in their process of reasoning [29]. Previous studies have shown that persuasive messages are related to different kinds of variables such as source credibility, recipients' emotional state, number of arguments and the context in which the message is presented [30]. However, researchers have different opinions about the process and impact of persuasive messages on recipients. Several scholars in early research suggested that one variable of persuasion had a single impact on audiences via single process [31, 32]. However, subsequent researchers found that the credibility of the message sources could reduce persuasion under certain conditions [33].

In order to organize these past disagreements, Petty and Cacioppo (1986) had developed the Elaboration Likelihood Model or ELM to further explain the persuasive information process by message recipients [34]. The model suggests that the variations of persuasive message produce the likelihood that the recipients will engage in elaboration (thinking about) of the information in the communication [35]. Depending on the degree of elaboration, the persuasion process may involve systematic thinking (central route) or cognitive shortcuts (peripheral route), and different factors may produce different outcomes depending on which process is activated by the message recipients [35].

Central route is engaged when elaboration is relatively high where the recipients need to make extensive issue-relevant thinking, careful examination of the information conveyed in the message and close scrutiny of the arguments presented in the message [35]. Meanwhile, peripheral route is likely to be engaged when elaboration is relatively low where the recipients employ some simple decision (heuristic) rules to evaluate the message [35]. For example, the recipients might be guided by various peripheral cues such as source credibility, reviews of others, popularity etc. rather than engaging in extensive issue-relevant thinking [36, 37].

A number of factors have been found to influence the degree of elaboration. A scholar [35] states that recipients' motivation for engaging in elaboration depends on the relevance of the message content or topic especially if the message is relevant to their personal interest, or if they have high involvement in the topic, then they are likely to engage in central-route process. The notion is also significant with another finding that people are more likely to elaborate persuasive messages through central route when they are relatively involved in the topic advocated by the message [37]. People who are highly cognitive, or with the personality to enjoy thinking, also generally has higher tendency to elaborate messages [34]. Other than that, the degree of elaboration can also be influenced by other factors like prior knowledge of the topic and level of distraction. It is notable that when the recipients do not like thinking hard, have little information about the topic and highly distracted, the elaboration is low thus they are more likely to activate peripheral persuasion process [35].

ELM posits that under conditions of relatively high elaboration, the outcomes of persuasive messages largely depends on the recipients' thoughtful consideration of the issue-relevant arguments [35]. If they have predominantly favourable thoughts, the message is likely to elicit attitude change in the desired direction. On the other hand, if they have predominantly unfavourable thoughts, the message is likely to be unsuccessful. There are two factors that can influence the outcomes of persuasive messages in central route The second factor is the quality of the arguments [35]. Regardless of source credibility, if the message is backed up with powerful arguments, good evidence and sound reasoning, the recipients might react positively and more likely to elicit attitude change in the desired direction [35]. On the other hand, if the message has weak evidence and poor reasoning, the recipients might react negatively and reject the message [35, 36].

Under conditions of relatively low elaboration, the outcomes of persuasive messages largely depend on several heuristics or characteristics of the communicator [35]. One of the heuristics is the credibility of the source, i.e. communicator, in which the recipients' evaluation of the message is guided based on the communicator's expertise [35]. The recipients are more likely to be persuaded by the views and opinions of a communicator who is believed to be an expert rather than non-expert communicator. Based on this notion, it is suggested that source credibility is important to enhance the impact of persuasion when the messages are comparatively irrelevant, difficult for recipients to analyse and understand, and have high distraction [36].

Another heuristic is the communicator's likeability. The recipients are more likely to be persuaded by a communicator who they like than the one they dislike. Other than that, the outcomes of persuasive message in peripheral route may also depend on consensus heuristic or the reactions of others [35]. On the other hand, the recipients are more likely to be persuaded by the message that receives approving reactions rather than disapproving reactions [35]. However, the influence tends to diminish once the recipients begin to engage in close scrutiny or start thinking about the message [35]. In such cases, these heuristics only play smaller role to influence the outcomes of the persuasive message. This is consistent with research by scholar [37] who claimed that attitude change via the central route tends to be more stable and predictable in the long run since it is based on evaluative and factual judgments. On the other hand, perception change via the peripheral route tends to be less enduring and more prone to unmethodical change in the long run especially when the recipients encounter other messages [37].

It is also emphasized that any given variable in ELM might play multiple roles in the persuasion process. First, it might influence the degree of elaboration, thus influence the extent to which central route or peripheral route processes are engaged [35]. Second. it might serve as a peripheral cue, thus influence the outcomes of persuasive message when peripheral-route persuasion is occurring [35]. Third, it might influence the valence of elaboration, thus influence the outcomes of persuasive message when central-route persuasion is occurring [35].

In terms of source attractiveness in the context of online environment, websites' interface components such as information accessibility, online reviews, website interactivity and system security are some of the factors that can influence the outcomes of persuasive message when the recipients engage in peripheral persuasion process [38-41].

A number of researchers have considered ELM as a framework to examine the persuasion effect of health information. For example, study by Jones, Sinclair and Courneya [42] had utilized ELM to examine the effects of source credibility and message framing on exercise intentions, behaviours, and attitudes. Yi et al. [43] had used ELM to study the roles of argument quality, source expertise, and user perceptions of information quality and risk on initial trust in web-based health information. Petty, Barden, and Wheeler [44] had used the model to develop health promotions for sustained behavioral change. Despite this, there are relatively few studies that have utilized ELM to understand the persuasion process of online health messages information in the context of pandemic situations.

Based on the discussion above, ELM will be utilized in this study to explain how the quality of arguments in the online health messages related to Covid-19 pandemic and the credibility of the source can persuade the Malaysian public to trust the government in handling the crisis and subsequently adopt the new norms to mitigate the outbreak. It is assumed that the higher the level of perceived health messages, the higher the level of trust among public in the government regarding Covid-19 control. The ELM is also utilised to explain the mediation effect of source credibility to enhance the influence of perceived health messages on trust in government.

4.1 Trust

4.1.1 Definition and Concept of Trust

There are three types of public trust in government: benevolence, integrity and competence [45]. Benevolence-based trust refers to the extent to which the organization is believed to want to do good to the public, beyond the profit motive [46]. It is characterized by a strong emotional attachment, affective commitment, and expressions of genuine care and consideration for the government. Integrity-based trust refers to the public perception that the government is adhering to a set of principles the public finds at least acceptable [46, 47]. Meanwhile competence-based trust refers to the public perception that the government possesses the requisite skills and knowledge necessary to deliver its services to the public. It is also one of the most important qualities when determining the government's trustworthiness because they indicate whether the government acts according to institutionally derived beliefs [46, 47].

4.1.2 Measures of Trust

Researchers have various views and opinions on how trust can be operationalized. While there is no generally accepted theory, some have identified elements such as perceived competence, objectivity, fairness, consistency, faith, commitment, and caring as core components of trust [12, 48, 49] as well as accountability and transparency [13].

In the literature of risk communication and public response to emergencies, there is also growing consensus that trust in the action of government officials does not necessarily rely on 'what is communicated', but 'who is communicating' and 'how it is communicated'. Based on this view, Quinn et al. [50] developed a quantitative trust scale that includes items to measure the level of public trust regarding the government's

openness, honesty, commitment, caring and concern, and competence in addressing H1N1.

Trust in government has been identified as is a critical factor that can determine the success of any policy. Historically, trust in government has played a crucial role in shaping public behaviour during crises – specifically, people's willingness to comply. Trust in government also influences people's support for government policies during crises, specifically health policies [51, 52]. The higher the level of trust will minimize conflicts between the public and the government officials enforcing the rules [53]. For example, if the public does not trust their government during a health crisis – there will be a high degree of non-compliance and conflict between the public and the government institutes and their policies. Another scholar seen in his study that trust in government would decrease if the public viewed their government as abusing its power and being dishonest [54].

On the other hand, trust in government produces spontaneous sociability, which in turn leads to cooperative, altruistic, and extraterritorial behaviors in social activities. Several studies have shown that the higher level of trust in government was associated with greater willingness to follow a range of government recommendations and prosocial behavior [55, 56].

In the aspect of communication, accuracy, transparency, and timeliness are vital in gaining public trust during emergency situations [18]. The communication when executed should be able to guide the public in responding appropriately and complying with public health measures [3, 18, 58]. Because of the high uncertainty, nearly impossible time constraints, and public anxiety in the early phase of the crises, negative outcomes can be minimized by disseminating accurate information in a timely and transparent way, describing what is known and unknown, and providing recommended behaviours to adopt. In other words, effective communication from government and public health officials is essential to ensure trust in government's recommendations and facilitate the adoption of behaviours necessary to reduce infection risks..

Based on the discussion above, despite the extensive literature on the determinants of public trust in pandemic situations, not much has been done by local scholars to explore the influence of these factors in the context of local settings. This implies the need to conduct this study to better understand in what way and to what extent trust in the Malaysian government in handling the Covid-19 pandemic can be influenced by the public perception of health messages and source credibility.

4.2   Perceived Health Messages – Trust

Perceived health messages in this study is defined as the public perception of the quality of information related to Covid-19 in health messages which have been provided by government authorities on online media platforms to educate the public about the pandemic and the recommended preventive measures to mitigate the outbreak. In the context of Covid-19 pandemic, the amount of health-related information grew exponentially, and people tend to acquire this information from many different sources. As highlighted in the ELM, if the public is provided with clear and consistent information about Covid-19 and its preventive measures, they are more likely to trust and accept the government

health measures to combat the pandemic. This trust will consequently persuade them to cooperate with government agencies, adopt the new social norms and get vaccinated.

Meredith et al. [12] and Vaughan et al. [13] described the perceptions of health messages, in terms of its timeliness and honesty and the trustworthiness of the communicator, can either foster or damage public trust in government during emergency situations. This trust may also influence their compliance with the government recommended actions to mitigate the risks as shown in several studies [15, 59, 60].

In another research by Quinn et al. [61], perceived health messages was referred to as the public perceptions of the quality of communication during the H1N1 pandemic. This study revealed that the quality of communication especially in terms of clarity and consistency was associated with trust in government actions and spokespersons. The results were consistent with Freimuth et al. [9] that trust and quality of communication are significantly linked.

Based on the discussion above, it is evident that perceived health messages can play an important role in enhancing public trust in government during pandemic situations. However, most of the existing literature with regards to the relationship between perceived health messages and trust in government were carried out overseas. Although several studies related to health information had been conducted in Malaysia, only few papers had investigated the impact of online health information on trust in government in the context of Covid-19 pandemic situation [26][62]. This indicates the need to further explore the relationship between perceived health messages and trust in government's handling of Covid-19 in the context of local settings.

4.3   Source Credibility – Trust

Source credibility is defined as the degree of shared and generalized confidence in a person or institution based on their perceived performance record of trustworthiness [48].

There are a number of attributes which can explain why people put trust in a source. Among them are expertise, competence, objectivity, impartiality, trustworthiness, fairness and goodwill and completeness [48, 63]. Meanwhile Ranney et al. [64] claimed that there are five dimensions of perceived trustworthiness or credibility of an agency which has become an information source: integrity; competence; motive; media portrayal; and scepticism and mistrust about the agency [64].

5   Proposed Conceptual Framework

Based on ELM and previous literature on the dimensions, researcher proposed a conceptual framework for this which involves 'perceived health messages' as independent variable, 'source credibility' as mediating variable, and 'trust' as dependant variable (Fig. 1).
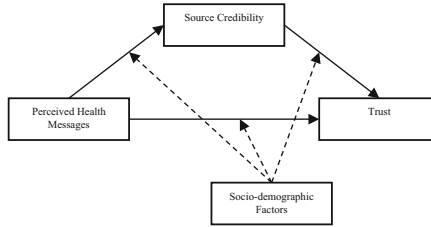
Fig. 1. Proposed conceptual framework

6   Research Methodology

This research will be conducted via quantitative methods. Researchers will utilise questionnaires as the main instrument to capture the key data/information.

A pilot study will be conducted with 30 volunteers to refine the data collection plan. The volunteers will be selected randomly among online media users who are not involved in the study. The main purpose of this study is to ensure the validity and reliability of the research instrument so that modifications of the questionnaire can be done before the actual research is carried out.

The questionnaires will be designed in perceived health messages, source credibility and trust. The number of respondents will be based on Krejcie and Morgan Sample Size and the intended respondents of 384 will be selected for the actual study within Malaysia [65].

7   Conclusion

Based on the literature discussed, it can be concluded that ELM are the most related framework to address the dimensions related to this research, Therefore, this study is proposed to investigate the influence of perceived health messages on trust in Malaysian government in dealing with the Covid-19 crisis. The study also aims to examine the mediation effect of source credibility on the relationship between perceived health messages and trust. As ELM will be used as the underpinning theory, it is hoped that this research can fulfil the gap that ELM is missing when it comes to persuasion effect.

It is expected that the study will help the Malaysian government and public health authorities to better understand the importance of delivering clear, consistent, and transparent Covid-19 information to the public to reduce public anxiety and gain public trust. Other than that, it is hoped that the study will provide a better understanding on the importance of selecting officials who are trustworthy and have the credibility to be the Covid-19 spokespersons in order to enhance the persuasion effect of the messages so that the public will comply with the government recommended actions to mitigate the risks like practicing social distance and getting vaccinated.

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