

Influence of Media on Risk Perception During the COVID 19 Pandemic: Qualitative Case Study from Thailand

William J. Jones

*Assistant Professor, Mahidol University International College
999 Buddhamonthon 4 Road, Salaya Nakorn Pathom Thailand 73170*

Original article

OPEN ACCESS

Citation: Jones, W. J. (2025).

Influence of Media on Risk Perception During the COVID 19 Pandemic: Qualitative Case Study from Thailand. Public Health Policy and Laws Journal, 11(3), 713–729. retrieved from https://so05.tci-thaijo.org/index.php/journal_law/article/view/280884

Received: 14 May 2025

Revised: 12 July 2025

Accepted: 1 August 2025

Abstract

This empirical study of the effects of media on risk perception during the Covid 19 pandemic in Thailand was carried out during the first 9 months of the Covid pandemic from March-December 2020. Media as a tool and medium for public consumption of information is becoming more complex with more diverse outlets and mediums. However, during the Covid pandemic, especially the early phase, media was in conformity with government sources to get fast, accurate and up to date information to the public. The study sought to identify channels of communication during emergencies, perceived trustworthiness of sources, emotional connotation and how this impacted perceptions and degree of risk among the case study population. Coding was used to evaluate participants level of perception towards trust and risk in media during the pandemic and how this impacted behavior among the participant population. This study finds that during the pandemic people's consumption of information were similar. Their perception of the trustworthiness of the source did influence their behaviors in order to mitigate risk associated with Covid as a deadly pathogen. Lastly, while sources of information were similar, the occupation of the consumer had a marked impact on their risk mitigation behavior. Research findings can be utilized by researchers and policy makers in fine tuning their approaches public perception in future crisis events as well as refine different approaches for varying media platforms which have different consumption patterns.

Keywords: *Risk Perception; Media and Risk; Covid 19; Covid Pandemic; Health Crisis and Risk*

Introduction

According to WHO (2013), an emerging infectious disease outbreak is considered as the appearance of disease that is not generally expected to exist in a particular community, geographical area, or time period. Emerging infectious diseases can be either diseases that were previously unknown such as Ebola, or existing diseases that spread to new areas/regions such as West Nile Virus (Holmes, 2008). On December 31, 2019, the Wuhan Municipal Health Commission of China announced that they have found a cluster of suspected cases of pneumonia in the Wuhan city, Hubei Province. These suspected cases eventually turned out to be the novel coronavirus. Coronavirus Disease-19 (Covid-19) has significantly and completely altered the life of people around the world. On March 11, 2020, the World Health Organization officially declared the COVID-19 disease as a global pandemic. As of January 2021, there were more than 100 million confirmed cases, and more than 2 million people died from effects of Covid infection around the world.

COVID-19 also rapidly spread in Thailand. In March 2020, the report from the Department of Disease Control in Thailand revealed that there were more than 20,000 confirmed cases, and around 80 people had died from the disease. Starting from January 2020, Thailand was considered a hotspot for the virus. Due to the high number of infections both in Thailand and around the world Covid-19 raised considerable anxiety and panic among the population. The Thai government employed many policies to combat the virus.

The Thai government utilized a containment strategy which was adopted at the beginning of the pandemics' spread. The government intensified its control measures by

declaring a nationwide "State of Emergency" to mitigate the spread of Covid-19. Within 2 months, Thailand reduced its global infection rate. However, the government did not relax restrictions. Social distancing policies remained strictly enforced and practiced throughout the country. Free alcohol cleansing gel was available throughout all public areas. Facial masks are worn by most all when in public.

When any public health issue emerges, it is necessary to communicate the health information to the public so that they can understand and respond effectively. The media disseminated information has played a significant role in affecting the risk perception and anxiety of the public during the spreading of this pandemic (Brug et al., 2004). There is evidence that people have a tendency to interpret information depending on their information processing mode (Kosicki & McLeod, 1990; Eveland, 2005). Thus, the way people process all information is likely to influence their perception and cognition, such as perception of risk of particular issues (Lee & Oh, 2013). It is important for individuals in the case of public health issues to feel or believe that they can confidently cope with public health conditions. This belief can influence how people form and their perception of risk.

There are extensive debates discussing risk perception during the Covid-19 situation globally, but when it comes to Thailand, there are few studies. This study then attempts to fill the gap by examining the influence of the media on Thai people's risk perception during the Covid-19 outbreak in Thailand. This study is beneficial in that it can help improve people's understanding of the influence/impact of the media on the formation of risk perceptions during an infectious disease outbreak.

Theoretical Framework

During the Covid pandemic, people around the world including Thailand adopted the widespread practice of using hand sanitizer, social distancing and wearing face masks to prevent the spread of the virus. But while some individuals strictly follow the restrictions, others ignore or delay following the rules and regulations. The fact that some individuals act so differently indicates that the risk perception relating to this pandemic strongly differs between different individuals and other factors. The authors believe that this arises from risk perception which may be a strong determinant or modifier of human behavior.

Social Amplification of Risk Framework or SARF was developed to explore the implications of interactions between risk communications, media attention, and the public responses, this conceptual framework then was developed (Frewer, Miles, and Marsh 2002). In short, the media coverage has a tendency to increase the magnitude of their perceived risks if people are frequently exposed to news (Wahlberg & Sjoberg, 2000). Some studies about health risk-related have shown that there was a positive relationship between the frequency of media exposure and people's risk perceptions during the smoke haze in Singapore (Ng et al., 2018).

Protection Motivation Theory (PMT) assumes that adopting protective behavior against any health threats is largely dependent on personal motivation for self-protection. People are more likely to protect themselves when they encounter negative consequences, to have the desire to avoid those situations, and to feel that they have capabilities to adopt preventive measures. In PMT, fear is appraised to predict and encourage protective behaviors and explain the cognitive processes involved in threat and coping appraisals (Roger, 1975). Threat appraisals consist of 3 factors: perceived severity, perceived vulnerability, and

perceived rewards (belief in positive aspects of risky events) (Roger, 1975). Thus, if the perceived severity and vulnerability are high, and the perceived rewards are low, there is a stronger motivation for engagement in health-promoting behaviors. Coping appraisals involve 3 factors: response efficacy, self-efficacy, and the response costs (Roger, 1975). Previous research found that response efficacy and self-efficacy are expected to increase the coping appraisals, while response cost is expected to decrease it (Taheri et al., 2020). In general, fear acts as a mediator between vulnerability, severity, and threat appraisal. As a consequence, if people feel vulnerable to hazard events, their level of fear will increase and they tend to be motivated to adopt some preventive behaviors (Rad et al., 2021). The theory can be suggested that risk perception and adoption of personal protective behavior increase when people have reason for concern.

Dimensions of Risk Perception

Previous studies have shown that there are two main dimensions of perceived risks; the cognitive and emotional dimensions (Dohle, S., Keller, C., & Siegrist, M. 2010; Coleman, 1993; Dunwoody & Neuwirth, 1991). These two dimensions are significant in that they help contribute to shaping people's perception of risk characteristics (Coleman, 1993; Dunwoody & Neuwirth, 1991). The cognitive dimension is usually associated with the probability and severity of consequences which are evaluated based on available scientific information and objective assessment (Bonnet et al., 2012; Lee et al., 2010). The cognitive dimension includes knowledge, familiarity and controllability. Knowledge can be explained as perception of the public in regard to how well they know of a risk (Slovic, 1999). First, people are more likely to consider events to be risky if they are unknown or unfamiliar with those events (Chung & Yung,

2013). Second, familiarity can be defined as how people become accustomed to a risk (Slovic, 1999). Last, controllability is people's perception of how confident they are towards control of the hazard. If people believe that they are able to control the risky events, they will consider it as less dangerous (Renn, 2006).

Alternately, the emotional dimension expresses the feeling of worry, concern, and dread about a hazard (Coleman, 1993; Lee et al., 2010). The emotional dimension includes dread and immediacy. Dread is described as a fearful reaction that occurs when people perceive the consequences of encounter with a hazard to be extreme. People who experience more dread are more likely to perceive a hazard as having greater risk (Slovic, 1987). Immediacy is defined as the extent to which the effect is immediate or might occur at some later time (Marris et al., 1997, p. 303). It has been argued that immediacy should be grouped with cognitive or emotional dimension. Emerging infectious diseases are usually perceived to have more immediate consequences than ordinary diseases. It typically attracts widespread media coverage, which helps to make the public aware of the disease and its effects over a limited period of time (Reynolds & Seeger, 2005). Within this context, evaluating the immediate effects may not be part of a cognitive process. The previous study has suggested that immediacy is considered as the emotional dimension that is closely linked to the perception of a disease's possible harmfulness (Sandman, 1989).

Media and Risk Perception

Media is considered as a primary medium for delivering thematic and detailed explanations about risks and hazards. Information is argued to influence the cognitive dimension of perceived risk (Fung et al., 2011). Traditional media such as

television, radio, and newspapers are often chosen to be the primary sources of information when obtaining the details about the health hazard (Coleman, 1993; Morton & Duck, 2001; Dudo, Dahlstrom, & Brossard, 2007; Paek, Oh, & Hove, 2016). As people rely on the media as a source of information, the media then plays a considerable role to help people understand and shape their perception of risks. Chang has been found that television exposure to H1N1 flu is correlated with the development of people's risk perception of a possible pandemic (Chang, 2012). Fung et al. has linked the cognitive dimension and people's perception of risk. Fung et al. argues that as media coverage of disease increases, the public will be more likely to recognize the prevalence and seriousness of the disease being reported (Fung et al., 2011).

Globalization has caused a shift in technologies associated with communication, there is increased use of social media such as Facebook, Instagram, and Twitter as health information sources (Mano, 2014; Lin et al., 2016). Social media transforms the way people interact with media in which they are able to obtain and share health information from others. Also, they can post their own health-related information or comments as well as joining the health-related group in order to keep updated with the news (Fox, 2011). Davies (2009) revealed that people used social media as a public discussion platform in order to discuss and exchange information during the H1N1 flu outbreak. In addition, it is evident that people's risk perceptions of health-related issues can be influenced by social media (Chung, 2016). Social media can also have an influence on people's emotional perception in terms of the feeling of worry, anxiety, and fear toward the disease (Chew and Eysenbach, 2010; Signorini, Segre, and Polgreen, 2011).

Many studies have shown the association between media exposure and risk perception during the pandemic. During H1N1 in South Korea, the researchers found that exposure to news media is positively correlated with the cognitive dimension, but exposure to entertainment media could indirectly affect personal levels of risk perceptions through the emotional dimension (Oh, Paek and Hove, 2015). Another study during Mad Cow disease revealed that reports from the media could affect risk behavior as well as knowledge and attitude toward MCD (Park and Sohn, 2013). During the MERS outbreak, social media exposure was positively correlated to forming risk perceptions among the public (Choi et al., 2017).

Existing literature covers the assessment of risk perception and preventive behaviors, with some having media among their primary factors. Most studies are conducted by employing quantitative approaches. However, there is no relevant study in Thailand about risk perception on the Covid-19 situation. This study then attempts to fill the gap by examining the influence of the media on Thai people's risk perception during the Covid-19 outbreak in Thailand. The central research question in this study is –*How does the media influence Thai people's perception of risks during the Covid-19 situation in Thailand? And How does it affect their lives?*

Methodology

This study utilizes quotas sampling in which 20 of participants will be selected to participate in interviews. Quotas sampling is considered as a non-random sample selection in which the researcher is able to control the characteristics of the participants. As a non-probability sampling, there is always a chance of personal bias because the researcher is the one who recruits the certain group of participants. However, it allows the

researcher to control the qualifications and the knowledge of the interviewees more effectively as this study requires the participants who have experienced the Covid-19 situation in Thailand. In addition to quota sampling, snowball technique was used for referral of possible participants.

The primary purpose was to stratify small samples across five different groups based on macro employment characteristic; from unemployed university students to freelancers. This is an exploratory study with very limited preparation time and limited connectivity due to health procedures which were prevalent during the first months of the Covid pandemic. Ethics approval was not obtained due to disruptions to the ethics time procedures which were not updated for expedited approval until well into the pandemic. It should be noted that due to Covid protocols, ethics protocols needed to be updated to deal with lack of physical meeting, document signing and this took much longer than normal. Given the urgency of the situation the researcher carried out this short exploratory study in preparation for a larger study, post Covid protocol regulatory updating. Inclusion into the study was voluntary and expressed to the researcher after initial screening of employment at the time of the study.

Primary data for this study will be qualitative data collection by conducting semi-structured interviews. The qualitative data collection requires approaches on subjectivism which will help gain an in-depth social understanding by getting the opinions and perceptions of the participants. The qualitative approach is more exploratory interns of understanding at a general level as well as the intensity of perceptions. Semi-structured interviews allow for approaches to gain information which would not be gathered from a rigid structural approach, instead allowing respondents to speak to their thoughts on a particular topic whilst allowing the interviewer

flexibility to follow different lines of pertinent inquiry (Henrirk et al, 2020). Interviews were conducted using Zoom online platform due to Covid protocols which discouraged on site physical interaction. Each interview lasted approximately 30 minutes where participants were questions on the media consumption patterns and preferences, perceptions of the evolving Covid situation, trust in information

provided and how this influenced their behavior due to risk perception.

Secondary data will help support the empirical primary research and enhance analysis of the study. As the situation of the Covid-19 is a recent phenomenal topic in which the number of studies has just been published, this study then required the secondary data relating to the topic to be the supportive information.

Table: Findings of the Study

Demographic background and media consumption

Group	Participant	Age	Gender	Media Consumption		
1	Participant A	20	F	Facebook	BBC News	Twitter
1	Participant B	23	F	Facebook	Line Group	
1	Participant C	23	M	Facebook	BBC News	Twitter
2	Participant D	26	F	Facebook	Twitter	Television
2	Participant E	55	F	Facebook	Thai online newspaper	Television
2	Participant F	25	M	Facebook	Line (Hospital group)	Instagram
3	Participant H	20	F	Facebook	BBC	Instagram
3	Participant I	24	M	Facebook	Thai online newspaper	Twitter
3	Participant J	30	M	Facebook	Instagram	Television
4	Participant K	28	M	Facebook		
4	Participant L	35	M	Facebook		
4	Participant M	45	M	Facebook	Television	
5	Participant Q	29	M	Facebook	Twitter	
5	Participant R	24	M	Facebook	Youtube	Blockdit
5	Participant S	32	F	Facebook	Twitter	

Group 1 are university students. 1 male and 2 females are selected. All of them are university students between 20-23 years old. The findings show that Facebook is the most popular channel for this group, following BBC online news and Twitter.

Group 2 are the medical staff. 1 male and 2 females are selected. Still, Facebook is the most consumed channel for them. Interestingly, 2 out of 3 participants in this group choose television as one of their media channel consumptions. Participant D said that she still watches television because it is one part of her everyday life. For

instance, she said that “when I work at the hospital, televisions are everywhere so I cannot avoid it, so when I have a break, I sometimes watch it.” (Participant D, 2021).

Group 3 are office workers. 1 female and 2 males are selected. All of them are office workers in private companies, which at the time of interview, there was no work from home policy. They all have to go outside for work. Facebook is still the main channel for them to receive the news. Participant J who chooses television claimed that “during the 1st phase, everyone needed to stay at home, right...so when I stayed at home, I watched TV every morning.” (Participant J, 2021).

Group 4 are entrepreneurs. 3 males are selected. All of them have their own businesses, which can be considered as small businesses. 2 participants consume information and news from only Facebook. They believed that Facebook could cover everything, so they do not need to consume from other channels. For participant M, he said that he would watch television only when there was a lockdown, but after the lockdown, Facebook is his main platform.

Group 5 is freelancers. 1 female and 2 males are selected. All participants in this group choose Facebook as their main channel, followed by Twitter, YouTube, and Blockdit. From 15 participants, there is only 1 participant mentioning Blockdit. Participant R said that “it is a new social media platform in which there will be only news, knowledge or articles without fake news.” (Participant R, 2021).

By interpreting the data, it seems that ages are not the influential factor in choosing the media platforms. Even though the participants who are older such as participant E (55 yrs.) and participant

M (45 yrs.), their main channel of consumption is still Facebook as same as the younger generation. Also, the findings suggest that the main reason why people choose television is not because of its fast and accurate information.

Knowledge and understanding of the Covid-19

This part of the interview two questions was asked based on the participants' responses; What is the Covid-19? and How would you describe the Covid-19 situation? Most participants had some general knowledge about the situation. They all knew that the Covid-19 is one kind of virus that can spread easily, and they could prevent it by wearing masks. Some participants also mentioned that this virus can damage lungs when they get infected. However, participants who belong to the medical staff group could give more specific details and information. For instance, participant D said that “This virus can cause the infection in your respiratory system and also affect other systems as well. The symptom is very versatile from dry cough, high fever up to severe respiratory distress.” (Participant D, 2021). Similarly, participant E claimed that “As it is the new emerging infectious disease, it allows the virus to spread more easily, and people also don't have immunity to this disease. For the symptom, it is similar to normal flu, having fever, cough but the most different symptom from normal flu would be your sense of smell and taste will be destroyed.” (Participant E, 2021).

Discussion

By interpreting the data, this would support the ideas that risk perception is usually shaped by one's knowledge. It is associated with the cognitive dimension of risk assessment. If people are unknown or unfamiliar with the events, they are more likely to perceive events to be risky

(Chung & Yung, 2013). In this study, it is evident that all people know some basic information about the Covid-19. They know what the Covid-19 is, how it can spread, and how to prevent themselves. These findings imply that the media play a constructive role in shaping the knowledge of Thai people. It helps reduce the probability and uncertainty about the disease. However, assessing knowledge might offer a limited explanation of the influence on risk perception. Only knowledge might not be enough to ensure the risk perception of people. It needs to consider the understanding of people from what they have received so far. The findings show some knowledge gaps between different groups of people. These knowledge gaps, if not addressed urgently, may lead to serious consequences for the public. It is important that public health interventions incorporate COVID-19-related education for different groups. The government also needs to investigate the specific knowledge needs so that it can help shaping one's risk perception effectively.

Media channels, frequency and coverage of consumption

Facebook is the first platform that all fifteen participants choose. It is the most convenient channel and always up to date. For instance, participant J said that "Facebook it's also real time which makes it very accessible." (Participant J, 2021). Participant B also supported that "it's fast and self-updated so I can keep up with them.... you can find everything on Facebook...I think like they share their information to every channel they have including Facebook, so I don't need to go to many sources." (Participant B, 2021).

Six participants also keep updated with the news through Twitter and 3 participants used Instagram. These social media are considered to be daily platforms that participants use every day.

By using Twitter, most participants search for news through #hashtags about the Covid. For those who choose Instagram supported that "like from Instagram I heard it from friends who post in their stories." (Participant C, 2021). Four participants consumed traditional media such as television to keep updated with the news. They claimed that television was their main source of information during the first phase of the Covid-19 in Thailand because everyone could not go outside. For participants who did not choose television as their main sources claimed that sometimes, information from television was not real time, and they could not choose information they would like to know instantly. Participant J supported that "on the tv, sometimes it is quite hard to catch all information you receive, and I think it needs to be interpreted more than on social media." (Participant J, 2021).

Three participants mentioned global online newspapers such as BBC as a main channel for them to get the global news and information related to the Covid-19 situation. They believed that BBC posts a standard when reporting the global news. Participant A supported that *...in order to keep updated on the worldwide pandemic situation the broadcasting company like BBC will be able to give better information.* (Participant A).

All participants claimed that for last year when the Covid-19 first hit Thailand, they tended to check and keep updated with the news every day. However, nowadays most people are quite used to the situation. The Covid-19 disease became the normal situation for them in which they need to adapt themselves to live with this disease.

"at that time, I read all about Covid like every day...searching a lot like what are they, where are they come from...I've been watching Youtube video a lot...but

now I'm like yeah I know it exists, I know how it goes so nowadays I just want to know how many people get infected each day...that's it" (Participant H).

"Well actually last year and now I check it regularly, but if you look closer at the daily basis, for last year I checked almost 24 hours. But now I check like only in the morning and at night...that's it to keep update what happened yesterday night and what might happen tomorrow" (Participant K).

Moreover, 5 participants further emphasized that by checking the news every day since the first phase of the Covid-19, it made them develop new habits in keeping updated with the information. *It's same for me...Everyday, I think it became my habit looking at how much new cases in Thailand, which countries receive vaccines and reading article that analyze how long will we be able to go back to our life before the pandemic.* (Participant A).

Media contents and trustworthiness

This section the contents of media people choose to consume which can cause shifts in cognition and emotion. All participants always keep updated with the number of active cases, the number of fatalities, and the number of recoveries. For the official government Facebook pages, they tend to post the numbers of new cases and the information about where they came from (abroad or domestic) which are mostly presented in the format of infographics, posters, and pictures. Some participants did mention using Facebook as a main channel for them because they intended to follow the official government pages which are the most reliable sources from them. Participant A

supported that "there are many fake news during the pandemic so by reading the information or statistics from the government's Facebook page is more reliable compared to other Facebook pages." (Participant A, 2020). Also, Facebook and Twitter provide informal information including the debate and discussion of the current situation, the short and precise conclusion of the symptoms from the experienced patients, and other points of views.

"For example, when the US got the vaccine there are some Thai people that talk about they are Thais living in the USA and they also receive the vaccine like other US citizens or reviews about Thai people receiving vaccines in other countries". (Participant A).

In addition, whenever a new topic related to Covid-19 comes up, such as the vaccine's topic, participants go directly to the BBC website in order to search for more information about that topic due to perception of reliability and accuracy. Reliable, by no means, is not always trustworthy, some participants claimed. They do believe that there is no trustworthy media every way, however, the media do not show bias or attacking anyone as far as they are concerned. Reliable does not mean completely trustworthy. That is why many participants choose to gather information from more than one source.

"I mean I'd rather have news than not knowing anything especially during the pandemic. There I say they are reliable, but that doesn't mean that they are completely trustworthy. I don't gather news from only one source, I tend to find the same information from different sources so I can conclude what's going on". (Participant I).

The public yes they cover...just enough...but then for my business industry (spa) I think it's not enough...like what are the procedures that we can conduct our business, what is the preventive measurement to prevent like my customers....they don't give us enough guideline...I have to create by my own. I made infographics and gave them to my customers. I have everything prepare. (Participant K).

Media and emotional dimension

In this section emotional dimensions help to evaluate how people's risk perception is shaped and influenced. The interview results are quite varied. Most feelings since the beginning of the Covid-19 in Thailand are all expressed in a negative way. Participant C accepted that since the beginning of the Covid-19 in Thailand, every time he watched/looked at the news about the Covid, he began to feel fear. Participant L also claimed that "I feel hopeless...you know...it seems like there is no ending for this situation and I'm concerned about how long this situation will last...when we can go back to the normal situation." (Participant L, 2021).

By assessing each platform of media, it was evidence that Twitter can pose the most impact on people's emotion. Participants A said all information from Twitter mostly comes from individuals' minds and thoughts. Thus, it made the participant feel more emotional than consuming another media. She supported that-

"there are several that I never knew about because it's not on the official news platform. For example, there will be some people who tweet about how they got affected by the crisis, after reading about it

by knowing that there are chances that it may be fake new but I still feel bad for them for experiencing those things without any help". (Participant A).

For participants who belonged to medical groups, they did not have much emotional influence from the news. Participant E said that she just felt that she needed to increase her protection or to be more cautious, but she did not feel scared or anxious. She also supported that "I have medical knowledge and public health so it's not that influence me." (Participant E, 2021). Participant F also supported that

"At the beginning I felt like the media portrayed the situation to be more dangerous than usual...but it did not that affect me because last year as I worked at the hospital, the area was designed to be the safe zone". (Participant F).

When the participants were asked to give some examples of types of news that can cause them to feel worried or anxious, the answers were quite varied. For the participants who have their own business would feel anxious when they saw news about the implementation of lockdown measures. This was because the measures directly affected their businesses which caused them such a hard time to deal with the situation. For example, participant M said that "if there are some news related to my business, like lockdown or ease lockdown...I would feel anxious sometimes if they're bad news." (Participant M, 2021). Other participants were more concerned and began feeling fear when they saw the news about there being new spreading of the virus near their place of living. Participant J supported that-

I think the news that said about covid-19 is back and it is transmitted in the place where my home is near. For example, Food Villa has more people

who are infected covid-19. Thus, this kind of news makes me anxious. (Participant J).

Risk Perception

Perceived vulnerability, also called perceived susceptibility or perceived likelihood, is defined as the belief of individuals about the likelihood of a health threat's occurrence. Participants were asked "How likely they think that they will develop or contract disease, after they have all information from the media? All participants agreed that they still have a chance to be contracted with a disease even though they protect themselves seriously. For example, participant B said that

"I think risk is always with us at this time, but it depends on how serious you would protect yourself and how serious people nearby you are as well...for me I think it might be low." Some people also mentioned that they were always at the high risk but up until now they are still fine.

Participant Q said that

"I am always at the high risk. You know I'm fat, having a high blood pressure. I have a risk of diabetes...I worked in the hospital, frontline...I drink I smoke...but I'm still fine." (Participant Q, 2021).

Participants aged between 20-30 years old insisted that their health might have a stronger immune system than the older people, so this could be one of the main factors to help them have lower possibility of developing a disease. In addition, participants who are medical staff all said that they are unlikely to develop the disease because of their behaviors. For example, participant D claimed that

"I think for myself the risk is low since I'm not going out a lot and my job is in strictly clean area." (Participant D, 2021)

Self-efficacy can be explained as the individuals' beliefs in their own capabilities to manage a risk or threat they are facing. Participants were asked how confident they are that they can prevent the disease in the case of an outbreak. Participants all know how to protect themselves from the virus; wearing face masks, using alcohol gel or washing hands frequently, avoiding crowded places, having social distancing. They are confident in what they have been doing to prevent the disease. Participant I supported that

"I am pretty certain that as long as I am aware of wearing a mask and cleaning my hand as well as stay 3 feet apart from strangers, it is unlikely that I will contact any diseases at all" (Participant I, 2021).

However, many participants claimed that they are not sure about the other people's sides. As long as they still have to go outside and meet a lot of people, they are still concerned. Participant A supported that

I think by going outside the house it means there is a higher chance of getting Covid-19. I knew as a fact that that by going outside the house does not mean I will get Covid-19 but there are many things to be concerned about. (Participant A).

Discussion of the Findings

The findings partly support and validate the media amplification of the public risk perceptions. Especially during the beginning of the outbreak, they did not have sufficient information about this new emerging infectious disease. Thus, people

then rely on different media as their main sources of information to satisfy their information needs. The findings revealed more than 5 platforms as their sources of information, namely Facebook, Twitter, Line, Instagram, Television, online newspaper and Youtube.

Also, the findings could indicate the high frequency of media consumption, especially during the first phase of the pandemic. People were more exposed to the media because they would like to know as much as they can about this new emerging disease. There are some differences between traditional media like television and social media according to the findings. The findings show that traditional media such as television sometimes do not provide sufficient information about the disease and they are too slow in presenting the information. Thus, they need to rely on social media such as Facebook as their main sources of information. Findings could support the previous finding that when people are unable to obtain contents from traditional media, they are more likely to turn to the Internet to generate and disseminate information (Austin et al., 2012). In this case, the findings suggest that Thai people are more exposed to social media which can positively affect the formation of risk perception. It can be noticed that in the future, traditional media will become outdated, and social media will become the main source of information.

By interpreting the data, it shows that the type of sources that are used in media coverage influence the people's thoughts. People's risk perceptions will be affected by their perceptions of sources' trustworthiness. The findings suggest that people tend to rely on the government official sources such as the Covid-19 center Facebook page and the Ministry of Public Health Facebook page.

The main reason for selecting these media channels is that because of its reliability and trustworthiness. This implies that Thai people still believe in the government in dealing with this pandemic. The belief that information is accurate because it comes from reliable sources would influence the level of risk perception. This would support the study of Vaughan & Tinker (2009) that trust has been found to be the main factor in influencing people's risk perceptions, risk-preventive behaviors, and support for the government. However, Thai media channels still could not fulfill the information needs in some certain aspects. For example, the news about the vaccines. Some participants mentioned that Thai sources are not able to provide detailed information for them to have a better understanding of the products, so they need to rely on the global media channels such as BBC. It is clearly seen that for uncertain health risk issues, people may rely on the scientists, experts or government officials who present as reliable sources in media coverage. This point of argument can support the previous findings that people are more likely to accept certain risks if the institutions that deal with the risk issues are trustworthy (Peter et al., 1997). The results show that some people need to rely on global media channels for more specific and accurate information.

The findings show that the media has positively influenced the emotional dimension of people which can affect the level of perceived risks. These findings support the notion that perceiving risks is essentially an emotional experience (Sinaceur, Heath, & Cole, 2005). It is also suggested that emotion might play a more crucial role than knowledge in evaluating risks. The interview results emphasize the feeling of fear and anxiety amongst Thai people when they consume the news related to the Covid-19. However, the self-rated anxiety can be varied depending on the type of information they receive.

Some Covid-19 information increased the public anxiety, while others decreased it. The findings reveal that people tend to have stronger emotions when they perceive risks that are related to themselves. Information about new spreading of the disease near their places positively increases people's anxiety level. This can influence people to adopt more serious preventive behavior.

Apart from the type of information, the media platforms could possibly influence the emotional dimension as well. The findings indicate that if people choose to consume media from informal platforms such as Twitter, which is opened for the public to discuss and talk about experience related to the Covid-19, it can influence the perception of people more than usual. Interestingly, information about the number of reported Covid-19 cases is negatively associated with anxiety and fear. Instead, it actually lowers the uncertainty level because uncertainty level often arises with lack of information (Anderson et al., 2019). The findings imply that people tend to have stronger emotions when they perceive risks that are more self-relevance, which causes them to adopt more serious preventive behaviors (increasing risk perceptions). On the contrary, people are likely to feel less anxious when they get to know more information about the seriousness of the disease through the media.

People's decisions and actions pursued are influenced by their self-efficacy values. Most people tend to do things in which they are knowledgeable and assured and avoid those in which they are not (Pajares, 1996). All media channels they choose to consume can provide adequate details and information that they need to know in order to develop the protective behaviors. This could also affect the level of confidence in self-protection. This would support the previous research that optimistic confidence from an

individual's self-efficacy is a significant predictor of risk perceptions (Rimal & Real, 2006). Information from the media is evident to help people have more self confidence in dealing with the disease. People, on the other hand, claim that their confidence might be affected by the external factors which are out of their controls.

Conclusion and Recommendations

The study sheds light on the influence of the media in shaping risk perception of Thai people during the Covid-19 outbreak period. Notably, there are four influential factors revealed according to the results. The first influence found is the level of social media exposure. Thai people tend to rely on different social media platforms to access information which can influence the formation of people's risk perception. Secondly, the source's trustworthiness has positively influenced the risk perception. If they receive information from the trustworthy sources, they tend to accept the risk easily. Thirdly, the study reveals that media has influenced the emotional dimension of people when assessing risks. They are more likely to have stronger emotions when they perceive risks that are related to themselves, which can increase the risk perception of the people. Because when they receive this kind of information, they would adopt more preventive behaviors. Fourthly, the media influence the level of self-efficacy. The findings suggest that Thai people have a high level of self-efficacy which can decrease the risk perception of the people. This is because information from the media enables people to have more confidence to deal with the disease. However, the study also suggests that external factors such as preventive behaviors of other people, can decrease the level of self-efficacy because it has a negative impact on people's confidence.

The overall satisfaction of people on the role of the media in Thailand indicates that the media plays a good role in informing people about the situation. Without media, people cannot know what is going on in society. Even though some people might not be interested in the news, they still have some sources where they can receive the information every time. Moreover, media help prevent people from going to risk places, and to be more aware of themselves and everything around them. On the other hand, people suggest that information from the media must be interpreted seriously and critically. There is some fake news everywhere, so believing in fake news might be more dangerous. Consuming too much information could affect their emotions as well. Some people tend to be more anxious, panic, paranoid, and concerned when receiving the news. Open communication between the government and the general public, experts, and relevant industries is essential for successful risk communication during a health emergency. Furthermore, risk communication should not be

handled by a single agency but rather in partnership with the media, health experts, the government, and other industries.

The findings in this study can serve as a marker for future research and application. In the future when crisis occur it is essential for information from government sources to be unbiased and carry authority. Thais tend to give way to authority claims and have a predilection for government support in times of distress. Authority sources must use alternative media mediums including social media to broaden their information coverage. Each medium also has segmented viewing habits. Youtube is candidate for longer form whilst Facebook and Reddit are short forms which require differentiated media cultivation. Trust is essential in the first instance as Thais show a high degree of self-efficacy when managing risk. To establish trust in the initial stages of a crisis is essential and this must come from authoritative sources as was seen in the pandemic response.

References

- Anderson, Christina M., DeFries, Ruth S, Litterman, Robert, Matson, Daniel P., Nepstad, Daniel P., Schlesinger, M, Shaw, Rebecca, Smith, Pete, Weber, Christopher, Field B. (2019). Natural climate solutions are not enough. *Science*, 363(6430), 933-934. doi:10.1126/science.aaw2741.
- Austin, Robert, Devin, Louis, & Sullivan, Edward. (2012). Accidental innovation: Supporting valuable unpredictability in the creative process. *Organization Science*, 23, 1505-1522. doi:10.2307/23252320.
- Bonnet, Emmanuel, Amalric, Marion, Chevé, Morgane, Travers, Muriel. (2012). Hazard and living environment: Combining industrial risk and landscape representations. *Journal of Risk Research*, 15(10), 1281-1298. doi:10.1080/13669877.2011.646289.
- Brug, Johannes, Aro, Arja R., Oenema, Anke, de Zwart, Onno, Richardus, Jan H., & Bishop, George D. (2004). SARS Risk Perception, Knowledge, Precautions, and Information Sources, the Netherlands. *Emerging Infectious Diseases*, 10(8), 1486-1489. doi:https://dx.doi.org/10.3201/eid1008.040283.
- Chang, Chingching. (2012). News coverage of health-related issues and its impacts on perceptions: Taiwan as an example. *Health Communication*, 27(2), 111-123. doi:http://dx.doi.org/10.1080/10410236.2011.569004.
- Chew, Cynthia, & Eysenbach, Gunther. (2010). Pandemics in the age of Twitter: Content analysis of Tweets during the 2009 H1N1 outbreak. *Plos One*, 5(11), 14118. doi:10.1371/journal.pone.0014118

- Choi, Doo-Hun, Yoo, Woohyun, Noh, Ghee-Young, & Park, Keeho. (2017). The impact of social media on risk perceptions during the MERS outbreak in South Korea. *Computers in Human Behavior*, 72, 422-431. <https://doi.org/10.1016/j.chb.2017.03.004>.
- Coleman, Cynthia-Lou. (1993). The influence of mass media and interpersonal communication on societal and personal risk judgments. *Communication Research*, 20(4), 611-628. doi:10.1177/009365093020004006.
- Davies, Melissa. (2009). Swine flu as social media epidemic: CDC tweets calmly online. Retrieved from <https://www.nielsen.com/us/en/insights/article/2009/swine-flu-as-social-media-epidemic-cdc-tweets-calmly/>
- Dudo, Anthony D., Dahlstrom, Michael F., & Brossard, Dominique. (2007). Reporting a potential pandemic: A risk related assessment of avian influenza coverage in U.S. Newspapers. *Science Communication*, 28(4), 429-454. <http://dx.doi.org/10.1177/1075547007302211>.
- Dunwoody, Sharon, & Neuwirth, Kurt. (1991). Coming to terms with the impact of communication on scientific and technological risk judgments. In L. Wilkins & P. Patterson (Eds.), *Risky business: Communicating issues of science, risk, and public policy* (11-30). New York, NY: Greenwood
- Eveland, William P., Jr. (2005). Information processing strategies in mass communication research. In S. Dunwoody, L. B. Becker, G. Kosicki, & D. McLeod (Eds.), *The Evolution of key mass communication concepts: Honoring Jack McLeod* (217-248). Cresskill, NJ: Hampton Press.
- Fox, Susannah. (2011). The social life of health information, 2011. *Pew Research Center*. Retrieved from <https://www.pewresearch.org/internet/2011/05/12/the-social-life-of-health-information-2011/>.
- Frewer, Lynn J., Miles, Susan, & Marsh, Roy. (2002). The media and genetically modified foods: Evidence in support of Social Amplification of Risk. *Risk Analysis*, 22(4), 701-711. <https://doi.org/10.1111/0272-4332.00062>.
- Fung, Timothy K. F., Namkoong, Kang, & Brossard, Dominique. (2011). Media, social proximity, and risk: A Comparative analysis of newspaper coverage of Avian flu in Hong Kong and in the United States. *Journal of Health Communication*, 16, 889-907. doi:10.1080/10810730.2011.561913.
- Holmes, Bev. J. (2008). Communicating about emerging infectious disease: The importance of research. *Health, Risk & Society*, 10(4), 349-360. doi:10.1080/13698570802166431.
- Kosicki, Gerald M., & McLeod, Jack M. (1990). Learning from political news: Effects of media images and information-processing strategies. In S. Kraus (Ed.), *Mass communication and political information processing* (69-83). Hillsdale, NJ: Erlbaum.
- Lee, Jennifer E. C., Lemyre, Louise, & Krewski, Daniel. (2010). A multi-method, multi-hazard approach to explore the uniqueness of terrorism risk perceptions and worry. *Journal of Applied Social Psychology*, 40(1), 241-272. doi:10.1111/j.1559-1816.2009.00572x.
- Lee, Eun-Ju, & Oh, Soo Youn. (2013). Seek and you shall find? How need for orientation moderates knowledge gain from Twitter use. *Journal of Communication*, 63(4), 745-765. <http://dx.doi.org/10.1111/jcom.12041>.
- Lin, Wan-Ying, Zhang, Xinzhi, Song, Hayeon, & Omori, Kikuko. (2016). Health information seeking in the web 2.0 age: Trust in social media, uncertainty reduction, and self-disclosure. *Computers in Human Behavior*, 56, 289-294. <http://dx.doi.org/10.1016/j.chb.2015.11.055>.
- Mano, Rita S. (2014). Social media and online health services: A health empowerment perspective to online health information. *Computers in Human Behavior*, 39, 404-412. <http://dx.doi.org/10.1016/j.chb.2014.07.032>.
- Marris, Claire., Langford, Ian, Saunderson, Thomas, & O'Riordan, Timothy. (1997). Exploring the "psychometric paradigm": Comparisons between aggregate and individual analyses. *Risk Analysis*, 17, 303-312. doi:10.1111/j.1539-6924.1997.tb00868.x.

- Ministry of Tourism and Sports. (2020). Tourism Statistics 2020. Retrieved from https://www.mots.go.th/more_news_new.php?cid=592.
- Morton, Thomas A., & Duck, Julie M. (2001). Communication and health beliefs: Mass and interpersonal influences on perceptions of risk to self and others. *Communication Research*, 28(5), 602–626. doi:10.1177/009365001028005002.
- Ng, C. P., Law, T. H., Mohd Jakarni, F. M., & Subramaniam, K. (2020). *Transportation Research Part A General*, 117, 292–301.
- Ng, Yu Jie, Yang, Janet, and Vishwanath, Arun. (2017). To fear or not to fear? Applying the social amplification of risk framework on two environmental health risks in Singapore. *Journal of Risk Research*, 21(12), 1487–1501. doi:<https://doi.org/10.1080/13669877.2017.1313762>.
- Oh, Sang-Hwa, Paek, Hye-Jin, & Hove, Thomas. (2015). Cognitive and emotional dimensions of perceived risk characteristics, genre-specific media effects, and risk perceptions: the case of H1N1 influenza in South Korea. *Asian Journal of Communication*, 25(1), 14–32. <http://dx.doi.org/10.1080/01292986.2014.989240>.
- Paek, Hye-Jin, Oh, Sang-Hwa., & Hove, Thomas. (2016). How fear-arousing news messages affect risk perception and intention to talk about risk. *Health Communication*, 31(9), 1051–1062. <http://dx.doi.org/10.1080/10410236.2015.1037419>.
- Pajares, Frank. (1996). Self-efficacy beliefs in academic settings. *Review of Educational Research*, 66(4), 543–578. <https://doi.org/10.3102/00346543066004543>.
- Park, Jee-Eun, & Sohn, Aeree. (2013). The influence of media communication on risk perception and behavior related to Mad Cow disease in South Korea. *Osong Public Health and Research Perspectives*, 4(4), 203–208. <https://doi.org/10.1016/j.phrp.2013.06.005>.
- Rad, Roghayeh. Ezati, Mohseni, Shokrollah, Takhti, Hesmaddin. Kamalzadeh, Azad, Mehdi. Hassani, Shahabi, Nahid, Aghamolaei, Teamur, & Norozian, Fatemeh. (2021). Application of the protection motivation theory for predicting COVID-19 preventive behaviors in Hormozgan, Iran: a cross-sectional study. *BMC Public Health*, 21, 466. <https://doi.org/10.1186/s12889-021-10500-w>.
- Reynolds, Barbara, & Seeger, Matthew (2005). Crisis and emergency risk communication as an integrative model. *Journal of Health Communication*, 10(1), 43–55. doi: 10.1080/10810730590904571.
- Rimal, Rajiv, & Real, Kevin. (2006). Perceived risk and efficacy beliefs as motivators of change. *Human Communication Research*, 29, 370–399. doi: 10.1111/j.1468-2958.2003.tb00844.x.
- Sandman, Peter M. (1989). Hazard versus outrage in the public perception of risk. In V. T. Covello, D.B. McCallum, & M. T. Pavlova (eds.), *Effective risk communication: The role and responsibility of government and nongovernment organizations* (45–49). New York, NY: Plenum Press.
- Signorini Alessio, Segre Alberto. Maria, & Polgreen Philip. M. (2011) The use of Twitter to track levels of disease activity and public concern in the U.S. during the Influenza A H1N1 pandemic. *Plos One*, 6(5), 19467. <https://doi.org/10.1371/journal.pone.0019467>.
- Sinaceur, Marwan, Heath, Chip, & Cole, Steve. (2005). Emotional and deliberative reactions to a public crisis Mad Cow disease in France. *Psychological Science*, 16, 247–54. doi: 10.1111/j.0956-7976.2005.00811.x.
- Slovic, Paul. (1999). Trust, emotion, sex, politics, and science: Surveying the risk-assessment battlefield. *Risk Analysis*, 19, 689–701. <https://doi.org/10.1023/A:1007041821623>.
- Slovic, Paul, & Peters, Ellen. (2006). Risk perception and affect. *Current Directions in Psychological Science*, 15(6), 322–325. <https://doi.org/10.1111/j.1467-8721.2006.00461.x>.

- Taheri-Kharameh, Zahra, Bashirian, Saeed, Heidarimoghadam, Rashid, Poorolajal, Jalal, Barati, Majid, & Rásky, Éva. (2020). Predictors of fall protective behaviors among Iranian community-dwelling older adults: An application of the protection motivation theory. *Clin Interv Aging, 15*, 123-129. <https://doi.org/10.2147/CIA.S224224>.
- Vaughan, Elaine, & Tinker, Timothy. (2009). Effective health risk communication about pandemic influenza for vulnerable populations. *American Journal of Public Health, 99*, S324-22. doi: 10.2105/AJPH.2009.162537.
- Wahlberg, Anders, & Sjöberg, Lennart. (2000). Risk perception and the media. *Journal of Risk Research, 3*(1), 31-50, doi: 10.1080/136698700376699.
- WHO praises Thailand for tackling bug. (2020). Bangkok Post. Retrieved from <https://www.bangkokpost.com/thailand/general/2037147/who-praises-thailand-for-tackling-bug>.
- World Health Organization. (2013). Health Topic: Disease outbreaks. Retrieved from <https://www.who.int/emergencies/diseases/en/>.
- World Health Organization. (2021). WHO Coronavirus disease (COVID-19) dashboard. Retrieved from <https://covid19.who.int>.