

# Revisiting The Research on Crisis Communication and Media Use During The Time of Crisis

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**Abstract.** This study aims at revisiting the research on crisis communication and media use during the time of crisis by employing a systematic review on the selected peer-reviewed journals articles published from 2015-2020 by reputable publishers which include Taylor & Francis, Routledge- Taylor & Francis group, John Wiley & Sons Ltd, SAGE, and Elsevier. The articles ( $n = 95$ ) were carefully analyzed to examine the research trends on the topics, geographical spread of the scholars, type of crisis under investigation, research method and design, media channel under investigation, media users, and communicating organization. The findings indicate that the research on crisis communication and media usage viewed from the journal articles published from 2015-2020 remains fluctuative where the highest number of research was in 2016 and 2019; the geographical distribution of the research scholars is dominated from Europe while America, and Asia come next; the crisis under investigation includes managerial misconduct crisis, natural crises, public health crises, accidents, multi crisis, terrorism, and riot; most research during the study time range employed a qualitative method and non-experimental design; single media channel and multiple media channel were the type of media under examination; the media users which were examined consist of citizens/customers/stakeholders, crisis managing organization, and mixed of both.

**Keywords:** Crisis, communication, media use

## 1 Introduction

The crisis situation may strike human's life as what is happening in the today's time namely the Covid 19 Pandemic which has caused fatalities worldwide. This Covid 19 outbreak has led to a crisis in many different sectors such as social, economic, political, cultural and education. Due to its great impact for the people, it calls for the scholars and experts from different sub-disciplines such as communication studies, disaster management, social science, psychology, and information management to examine the crisis situation. Crisis is defined as a suddenly change event which threatens stakeholder's vital expectancies, critically affects organization's performance and provide negative impacts [1]. This definition is limited on the crisis event which is experienced by an organization. However, in a broader context, crisis may include natural disaster, terror, violence, accident, technical error recall, transgression, mixed crisis, and general crisis [2]. Crisis can be divided into three stages namely pre-crisis stage which include detecting crisis signal, preventing and preparing; crisis stage which comprises of recognizing and controlling actions; and post-crisis stage which consists of evaluating, learning and following up communication [1]. The different stages of crisis, for sure, require different approach and communication strategies to deal with. Therefore, the crisis managing entity should select an appropriate

strategy or approach in order to cope with each different stage in order that the the crisis can be well treated.

At the time of crisis, people will make some considerations before they help a person affected by the crisis. The first consideration is assessing the situation. When the situation is dangerous, they will provide an assistance [3]. The second consideration deals with how to help the crisis-affected person which includes deciding the course of action to be taken [4]. To enhance both processes, a crisis communication is required in order to reduce the negative impacts due to the crisis [5]. At this stage, people tend to be active in seeking for information to identify and ensure that the information they receive is valid and reliable. In this case, people may utilize different media channels for fulfilling their need of correct information. A study reports that the most selected media for crisis communication include TV news, face to face communication, text messages, Facebook, and phone calls. This media selection rely on the crisis itself and the way people know about the crisis [6]. The studies on crisis communication give emphasis on the importance of accessible, reliable, and clear information which spread during the time of crisis [5]. If people consider that crisis communication is understandable and reliable, they are eager to do an intended action [7]. In this regard, crisis communication may assist the citizen by providing easy to follow messages, valid and complete information pertaining to the crisis situation.

Media serve many functions for crisis communication for example it facilitates the exchange of information and enable opinion sharing. Among the research on media use during the time of crisis focus on social media as the needs for real time and quick communication increase during the crisis situation. Some studies suggest that social media can be used to prevent the spread of rumors which may worsen the crisis situation [8], [9]. In addition, the conversation that circulates around the social media platforms may become valuable sources for issue management. In this case, an organisation can map the themes, problems that may threaten the organization [10]. Moreover, the analysis on social media help organisation to identify and understand the issues that may come up. By addressing the issues at an early stage of its emergence, the organisation can prevent the issues to become more complex. Also, social media help the citizens to create and utilize an emergency response so that a mitigation effort can be taken [11]. Beside social media, the traditional media also play a significant role during the crisis situation. In crisis responses, the professionals are suggested to utilize social media, while not ignoring the traditional media [6] because audiences utilize social media for exchanging personal information with their family or mates, rather than seeking for information dealing with crisis during the emergency situation. Another reason is that the contents of traditional media tend to have a stronger impact than other media platforms on how people communicate about emergency situation [12]. With regard to this, social media and traditional media should be integrated in its use to enhance communication strategies to deal with crises as they complement each other.

The research on crisis communication issues ranging from the natural disaster crisis (e.g.[13]), disease outbreak (e.g.[14]), organizational-related crisis (e.g.[15]), terrorism (e.g. [16]), accidents (e.g. [17]), and etc have been widely carried out by different scholars. Many research on crisis communication are linked to the media usage both social media [18] and traditional media [19]. The investigation of social media platforms such as twitter, facebook, youtube, instagram on the crisis communication research has received a growing attention from the researchers as they offer timely and speedy exchange of information.

However, some studies also stress the importance of traditional media use during the time of crisis [20], [21]. Traditional media such as radio, television and public event can provide more trusted information than social media. Since both types of media offer its own benefits, the research on crisis communication and media usage also examine the single or multiple media channels [22], [23]. Due to many research examining the crisis communication and media use, it is necessary to perform a systematic review on the topic in order to identify the update of the crisis communication research and media use therefore a further improvement and development on the areas can be carried out.

This study builds on the previous systematic literature review on crisis, risk, communication [24], lessons learned from crisis communication utilizing social media [25], crisis communication strategies [26], and crisis communication research published in Public Relations journals. Those earlier studies present different research focus, for instance the study in [24] explored the research trends, lessons learned from pre-crisis situations, types of social media, the users of social media, geographical aspects and digital divide; in [25] examined the effectiveness of using social media in crisis communication from the lens of some relevant sub-disciplines, in [26] analyzed the growth of quantitative method in general, theory used, frameworks, the trends of methodology employed, and topics of research within the field of communication studies. The current study attempts to combine some aspects under investigation from the earlier studies in order to get a comprehensive overview on the crisis communication and media usage research such as the trend on crisis communication and media usage published in peer reviewed journals from 2015 to 2020, the geographical spread of the research scholars investigating crisis communication and media usage research, the types of crisis investigated in the crisis communication and media usage research, the methods and research designs employed in crisis communication and media usage research, the type of media used on the crisis communication and media usage research, and the users of media investigated on the crisis communication and media usage research. Also, this study will provide more update research from the peer-reviewed journal articles published from 2015 to 2020. This may enrich the literature on communication and media use and contribute to reveal other potential areas of research for the future development.

## **2 Methods**

The method employed in this study is a systematic literature review which consisted of three stages namely identifying journal articles; selecting and describing the final samples; and performing a systematic analytical works [25]. This method offers a comprehensive search and organization of some characteristics of research in a study which investigates a common theme where its focus and design are heterogeneous [24]. This method enhances the researcher to thoroughly explore the existing research on communication and media usage during the time of crisis.

This study examines articles on crisis communication and media usage published in 35 peer-reviewed journals from 2015-2020. The journals are published by reputable publishers such as Taylor & Francis, Routledge- Taylor & Francis group, John Wiley & Sons Ltd, SAGE, and Elsevier. This is to ensure that the articles investigated in this study are quality articles which has undergone a tight peer-review process. The number of collected journal articles is 105 but 10 articles are excluded from the investigation as

they are less relevant with the topics under investigation therefore the total number of studied articles is 95 journal articles. The articles were searched from the website of the publishers mentioned earlier using the combination of some keywords such as “crisis”, “communication”, and “social media”.

The collected articles were analysed based on the research questions determined in this study. They were coded based on six classifications. The first classification was the year of publication and journal names. The second category was the 1st author’s origin (i.e. Europe, America, Asia). The third category was the type of crisis (i.e. managerial misconduct crisis, natural crises, public health crises, accidents, multi crisis, terrorism, and riot). The fourth category was the research methods (i.e. qualitative, quantitative, and mixed methods) and design (i.e. experimental and non-experimental). The fifth category was media channel being studied (i.e. single and multiple media). The next classification was the users of media (i.e. citizens/customers/stakeholders, crisis managing organization, and mixed of both).

### 3 Results and Discussions

#### 3.1 Research Trend on Crisis Communication and Media Usage

The result of this study shows that the research trends on crisis communication and media use remains fluctuative from 2015-2020. The highest number of research is in 2016 and 2018. However, the overall research increases from 2015-2020. In addition, the research in 2017 and 2019 remains equal in quantities and the research conducted in 2020 is still quite low in its quantity since the study limits the date of articles publication on June 2020 [27]. The research trend is presented in Figure 1 below.

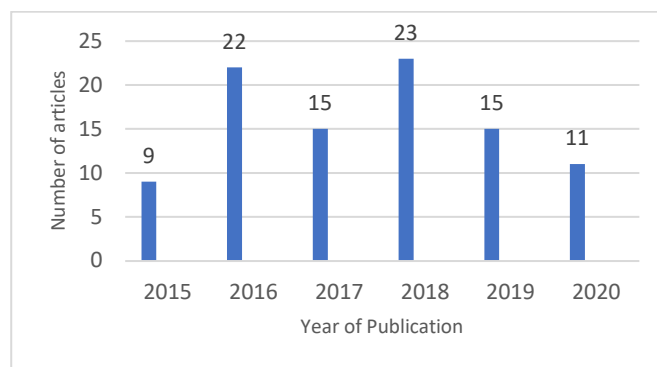


Fig.1. The number of journal articles on crisis communication and media use published from 2015-2020

#### 3.2 The geographical distribution of the research scholars

The scholars who conduct a research on crisis communication and media use from 2015-2020 classified by the continent are still dominated by the European continent (e.g. [28]), America (e.g. [29]) at the second place, and Asia (e.g. [30]) at the third place. Moreover, viewed from the country, USA shows the highest number of scholars (n = 31). The spread of the scholars in each continent from the highest to the lowest is Europe (n = 9 countries), Asia

(n = 6 countries) and America (n =3 countries) respectively. The data on the geographical spread of the scholars are presented in the following table.

**Table 1.** The geographical distribution of the research scholars

Europe		America		Asia	
Countries	Number of Articles	Countries	Number of Articles	Countries	Number of Articles
UK	10	USA	31	Hongkong	5
Sweden	9	Canada	1	China	4
Netherland	9	Columbia	1	Singapore	3
Germany	6			Korea	2
Belgium	4			Malaysia	1
Finland	2			Israel	1
Denmark	2				
France	1				
Irlandia	1				
Switzerland	1				
Norway	1				
<b>TOTAL</b>	<b>46</b>		<b>33</b>		<b>16</b>

### 3.3 Types of Crisis Under Investigation

This review demonstrates that there are eight types of crisis under investigation namely managerial misconduct crisis such as the organizational and corporate crisis (e.g. [31]), natural crisis such as flood and storm cases (e.g. [32]), public health crisis such as the 2014 Ebola outbreak, Swine flu and Bird Flu cases (e.g. [33]), terrorism such as CBRN Terrorism (e.g. [34]) accidents such as Malaysia Airlines Flight MH17 crash and “Nut Rage” Incident on Korean Air (e.g. [35]), multi-crisis (e.g. [36]) and riot like The Ukrainian–Russian conflict of 2013–2017 (e.g.[37]). Among the crisis types, managerial misconduct crisis becomes the most studied crisis (n = 34) while riot is the least studied crisis. The summary of crisis type is presented in the following table.

**Table 2.** The type of crisis under investigation

Type of Crisis	Number of Articles	%
Managerial misconduct crisis	34	35,8
Natural crises	17	17,9
Public health crises	14	14,7
Terrorism	9	9,5
Accidents	10	10,5
Multi Crisis	10	10,5
Riot	1	1,1
<b>TOTAL</b>	<b>95</b>	<b>100%</b>

### 3.4 Research Designs and Methods

The data in this study show that the articles under investigation employs different research designs and methods. The research designs are classified into experimental and non experimental while the research methods are categorized into qualitative, quantitative and mixed methods [25]. The number of articles utilizing non-experimental research design is higher than that of experimental research articles. In addition, the highest to the lowest number

of research method which is utilized is qualitative, quantitative, and mixed methods respectively. The data are presented in the following table.

**Table 3.** The Research Designs and Method Used

<b>Research Designs/Methods</b>	<b>Type of Research Design/Method</b>	<b>Number of Articles</b>	<b>%</b>
Research Design	Experimental	39	41,1
	Non Experimental	56	58,9
Research Methods	Qualitative	52	54,7
	Quantitative	31	32,7
	Mixed Method	12	12,6
<b>TOTAL</b>		<b>95</b>	<b>100%</b>

### 3.5 Types of Media Used

The articles analysing the media use is classified into two categories namely, articles examining multiple media platform and single media platform. In total, the number of articles analysing a single media platform is higher that of multiple media platform. Moreover, twitter shows the highest number media platform being analyzed. Beside twitter, other single media platforms include Blogs (e.g. [38]), Facebook (e.g.[39]), Mobile phone Messages (e.g [40]), TV (e.g. [41]), Newspaper (e.g. [42]), Website (e.g. [43]), Weibo (e.g. [44]), and Others (e.g. [45]). In addition, 31 articles analyse multiple media platforms including Newspaper and Tabloid (e.g. [46]), Newspapers, broadcast and cable networks (e.g. [47]), Social and Traditional Media (e.g. [23]), Social Media and Mobile Phone Messages (e.g. [31]), Print Media (e.g. [48]), Social Media (e.g. [49]), News Media (e.g. [50]), Traditional Media (e.g. [51]), Twitter and FB (e.g. [52]), Twitter and WA (e.g. [53]). The data above are presented in the following table.

**Table 4.** The number of articles which analyze single and multiple media channels

<b>Multiple media platform</b>	<b>Number of articles</b>	<b>Single media platform</b>	<b>Number of articles</b>
Newspaper and Tabloid	1	Blogs	1
Newspapers, broadcast and cable networks	3	Facebook	3
Social and Traditional Media	7	Mobile phone Messages	2
Social Media and Mobile Phone Messages	1	TV	6
Print Media	2	Newspaper	6
Social Media	5	Twitter	19
News Media	5	Website	3
Traditional Media	1	Weibo	6
Twitter and Facebook	5	Others	18
Twitter and WA	1		
<b>TOTAL</b>	<b>31</b>		<b>64</b>

### 3.6 Media Users

In this study, the media users are classified into three broad categories namely citizens/customers/stakeholders, crisis managing organizations, and mixed. Based on the data, the first media users which include citizens/customers/stakeholders is studied in 54 articles. The second media user or crisis managing organizations is examined in 36 articles. The third

media user or mixed of both is investigated in 5 articles. The data on the media users are presented in the table below.

**Table 5.** Type of media users

<b>User of Media</b>	<b>Number of Articles</b>	<b>%</b>
Citizens/customers/stakeholders	54	56,8
Crisis managing organizations	36	37,9
mixed	5	5,3
<b>TOTAL</b>	<b>95</b>	<b>100%</b>

All the findings above tell that during the last five years (2015-2020), the studies on crisis communication and media use remain fluctuative. This contrasts with the results of the previous research findings which showed an increasing number of research on risk, crisis, and social media from 2009 to 2015 [24]. This study also reveals that the studies on crisis communication and media use in 2020 is quite low compared to the studies conducted in 2016 and 2018 because the document search is limited to June 2020. However, the research on crisis communication and media use in 2020 will possibly increase till the end of the year since the world has been experiencing a multidimensional crisis due to the Covid-19 pandemic which may attract the scholars and experts to conduct a research on the topic.

As shown in the previous section that the scholars from USA, UK, Sweden, and Netherland dominate the studies on crisis communication and media use. Thus, how crisis communication and media use is addressed from the lens of different culture, political, social can not be revealed thoroughly. Also, the findings and practical contributions provided by the existing research on crisis communication and media may not be applicable to cope with global crisis issues since they are based on some regions or countries. In this regard, the studies can be expanded to broader geographical location especially in Asia whose number of studies on communication and media use is lower than that of western countries.

Various types of crisis were investigated by scholars from 2015 to 2020. The top 3 studied crisis include managerial misconduct crisis, natural crisis, and public health crisis. This indicates that the communication strategies to deal with crises are limited to those type of crisis therefore the exploration on other types of crisis such as terrorism, accidents, multi-crisis, riot are needed to produce many alternative of communication strategies to deal with crisis as each type of crisis may require different approaches and strategies.

The results of this study also demonstrate the research designs and methods which are employed. Non experimental research design and qualitative research methods tend to be more dominantly used. In addition, a few studies on crisis communication and media usage utilize a mixed method. Thus, an further exploration on crisis communication and media usage may be directed to the use of mixed method because using this method enable researchers to comprehensively examine a particular case pertaining to crisis communication and media use.

In terms of the media type, twitter becomes the majority of media used during the time of crisis. This result is relevant with the previous reseach finding [24]. In addition, the studies on other media such as Facebook, Instagram, Youtube are still limited therefore the advancement of research examining those media are required in order to get diverse research results. Moreover, the cultural aspects should be taken into account when examining media use because each region may have media preferences to deal with the crisis situation for example Weibo is more popular in China than in other countries. Also, the investigation of the multiple media channel need to be further developed because the studies on that field are still limited. Given that the combined media (e.g. traditional and social media) may better serve for dealing with crisis communication.

The media users under investigation are dominated by citizens/customers/stakeholders rather than crisis managing organization and mixed of both entities. This result tells that citizens/customers/stakeholders still become priority for an investigation. However, exploring further studies through the lens of both entities (mixed) are needed in order to provide reliable, applicable, and comprehensive communication strategies to cope with crisis issues.

## 4 Conclusions

In summary, this study reveals that the number studies on crisis communication and media usage published in the peer-reviewed journals from 2015-2020 remain fluctuative; the highest to the lowest number of scholars studying the topic are from Europe, America, and Asia respectively; the crisis under investigation comprises of managerial misconduct crisis, natural crises, public health crises, accidents, multi crisis, terrorism, and riot; a majority of studied articles utilized qualitative method and non-experimental design; single media channel is widely studied compared to mutiple media channel; more studies examined media users which include citizens/customers/stakeholders compared to other media users such as crisis managing organization and mixed of both users. This study still has some limitations for instance this study doesn't explore the theoretical aspects and elaborate the recomendations offered by the published articles. Thus, future studies can adrees those issues.

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