A Brief Research of Crisis Communication on Social Media: from Theory to Practise

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Abstract: During imminent threat crises, such as natural disasters, publics have minutes to decide how to respond after receiving a warning. Yet, scholars to date have neither sufficiently investigated publics' preferences for disaster information behavior nor fully uncovered how communication via different information forms and sources might impact milling behaviors and motivations to take protective actions. In addition, the widespread use of social media has stimulated the number of crises on a global scale and given rise to regenerative crises which involve multiple crisis stages and publics. Crisis communication has become one of the central topics in public relations research, particularly with the rise of dialogic communication on social media and online news media. The number of crises on a global scale escalates due to the widespread use of social media. Further crises appear as regenerative crises with trigger events amplified by heated discussion on social media. This study focus on the development and evolution off crisis communication theory.

Keywords: communication; crisis; disaster; social media

1. Introduction

The concept of crisis and its definition and basic extension have undergone a long process of evolution. Due to different time, policies, culture, environmental background, etc. and internal factors, various academic documents have different interpretations. From various research perspectives, researchers or related institutions in various countries have different connotation definitions of this issue. Although there are differences in the way of expression, the basic core definition is consistent, that is, a crisis is a sudden and unexpected event that threatens the operation of organizations and institutions, and threatens finances and reputation. Crises can harm stakeholders physically, emotionally, or financially. Crisis will damage reputation, because it will give people a reason to have a negative view of the organization. Although a certain kind of crisis has a unique aspect. But at the same time, various emergencies will have the following commonalities:

First, the crisis is uncertain. The outbreak of a crisis is often difficult to predict and fully grasp.

Second, the crisis is harmful. According to the Emergency Events Database [1], 22,000 disaster events have occurred worldwide. The Global Terrorism Database [2] records a total of 190,000 terrorist attacks from 1970 to 2019, as well as information on more than 91,000 bombings, 20,000 assassinations, and 13,000 kidnappings and hostages. Since emergencies contain primary risks, it is also possible that new derivative events may be caused by various factors after the incident.

The third is the urgency of the crisis. Crisis management requires a decision-making response in a very short time to avoid the losses it causes and prevent secondary accident.

Fourth, the crisis is proliferation. As the development of information technology provides diversified platforms for information dissemination, the dissemination of crisis information is not limited to the internal organization, but also spread through various social media platforms. The new media and the Internet have played a key role here. Most stakeholders will learn about the crisis from news reports and online social media. The other situation is for victims or potential victims. They are more likely to experience a crisis, and the organization directly informs them about the crisis. If the reputation changes from favorable to unfavorable, stakeholders can change the way that they interact with the organization. There are many definitions of crisis, ranging from environmental disasters to threats to personal reputation [3].

In recent years, some studies have pointed out that the crisis is "communicative" [4]. Nowadays, the common method of solving crises tends to "communication." Crisis communication is one of the important studies in the field of communication. In the past ten years, communication scholars have conducted extensive research on crisis communication issues, but this field still needs more theoretical development and research contributions, such as discussions on "real world crises" [5]. The research results of Rasmussen et al. [6] showed that from 2009 to 2015, there were more and more researches on social media risk and crisis communication (Figure 1).
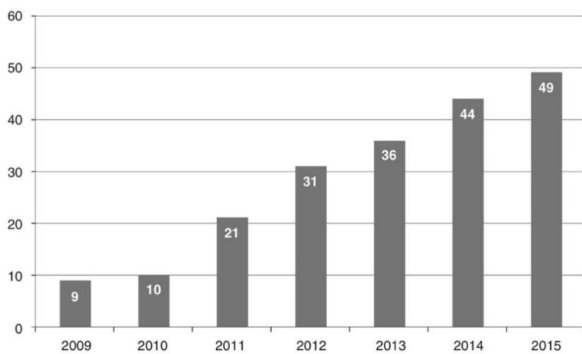
Figure 1. Number of journal articles on social media risk and crisis communication from 2009 to 2015.

At present, with the rapid development of social networks, the dissemination of crisis information such as online rumors has become the focus of the information technology field. Crisis events mainly affect public psychology and behavior through the dissemination of crisis information. People will try to obtain information about the crisis through various channels and respond through expression of opinions.

2. Situational Crisis Communication Theory

With the development of society, crises have become more complicated and diverse. Crisis-related research has become a hot spot in management, public relations and communication. In the early studies, Stage Analysis Theory (Steven Fink), Image Restoration Theory (William Benoit), and Focal Event Theory (Thomas Birkland) all focused on individual aspects of crisis, but none of theories or models can fully discuss crisis issues. Until 2007, Coombs and others put forward Situational Crisis Communication Theory (Figure 2).
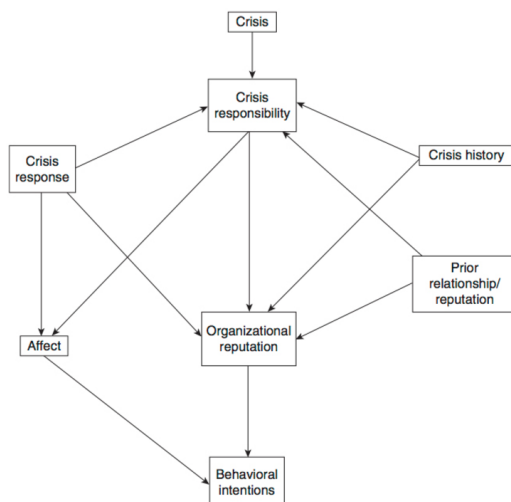

Figure 2. Situational Crisis Communication Theory, SCCT [7].

Subsequently, the model was extensively tested and studied by the academic community, and gradually proved its authenticity. The Situational Crisis Communication Theory is derived from the Attribution Theory proposed by Weiner in 1985. This theory reveals the psychological changes experienced by stakeholders when determining the occurrence of an event, and the attribution of their praise for the success or failure of the

event. Attribution Theory is one of the most representative theories in social psychology. According to this theory, in real life, people tend to look for the causes of incidents, especially emergency situations which have negative effects. If the incident originates from the person's own cause and happens repeatedly, people will think that the person is responsible for the crisis, and generate anger and take negative actions against them; if the crisis is caused by external factors that cannot be controlled, such as emergencies, accidents Events etc. People will think that the person is innocent, and will sympathize with them and take positive actions against them. Controllability and stability are the basis of people's attribution. Coombs' Situational Crisis Communication Theory attempts to address the needs of practitioners and provide a framework for handling crises [8]. He strives to present research in a way that bridges the gap between theory and practice, and provides guidelines for crisis managers. The theory is based on previous research and provides a new framework. Coombs listed thirteen types of crises in his research, and grouped them into three types according to their characteristics: victim, accidental, and preventable [9]. In addition, Coombs collected crisis response strategies in the literature and classified them. Based on summary and expansion, Coombs proposed a list of ten crisis response strategies.

The SCCT model includes specific steps that communication practitioners should follow. When a crisis occurs, practitioners should first determine what type of crisis has occurred and how to protect stakeholders from physical or psychological impact. The first step involves guidance and adjustment information. Point out that the information determines what should be done to protect yourself from threats. Adjusting the information can determine what happened and what measures will be taken to protect stakeholders from similar crises in the future. After these instant communication tasks are completed, the second step of the SCCT model requires practitioners to identify and evaluate reputation threats caused by the crisis. Coombs pointed out two ways to complete the second step. 1. Determine the type of crisis according to the attributes of stakeholders, 2. Choose the corresponding response strategy according to the type of crisis. The SCCT model provides three types of response strategies: denial, diminish, and rebuild.

The Situational Crisis Communication Theory has been studied by scholars and applied in various organizations and fields. This model provides a basic method for the research of crisis theory. A large number of scholars participate in research and improve and modify. In the general field of crisis communication, SCCT is regarded as the main theoretical framework. [10,11] In various organizations and different crises, the model is applied to quantitative and qualitative analysis. For example, the model has been applied to non-profit organizations [12,13], for-profit organizations [14], political groups [15], social media [16,17], etc. From the perspective of system theory, SCCT is a countless tool used to assess crisis response and provides practitioners

with an evidence-based model to guide them in managing crises. At present, the problems involved in the theoretical model of situational crisis communication have been experimentally verified in the usual types of crisis. Coombs and others are testing this theory for more types of crisis, while trying and expanding more variables and relationships to join this. One model. Their latest research progress is to conduct research on crisis response strategies under the background of the new technology era to understand the impact of different media usage on presentation effects. Finally, Coombs pointed out the limitations of the research. First of all, their experiment was based on college students, and this sample cannot replace other groups. Second, because the research has a manipulation test, that is, their research subjects' perception of the crisis situation is objective and active, rather than subjective and non-experience, and their manipulation of the crisis situation in the experiment follows There is a big gap between the real situation in real life. This is where the problem lies in testing the theoretical model by experiment. Therefore, the theoretical value of the Situational Crisis Communication Theory (SMCC) needs to be discussed by researchers through more research methods and variables.

3. Social Media Mediated Crisis Communication (SMCC)

With the development of the Internet and the popularization of network information, the dissemination of information has undergone tremendous changes. Many studies point out that the Internet has become the first and most reliable source of information for people to find information [18]. Nowadays, the source of crisis transmission is no longer a single aspect (government or organization), the public can participate, share, and seek crisis information anytime and anywhere. The rapid development of new media has caused social media to change the way people communicate and analyze information. Through social media, individuals can exchange information with a large group of people in real time. Network mobile devices have enabled people to access social media anytime, anywhere. Many scholars are increasingly trying to explain and predict how various forms and sources of crisis information affect the public, such as comparing traditional media and social media's response to crisis information [19,20]. Although some theories and models before crisis communication have achieved positive results, they also provide important references for crisis management. However, in the new media era, the effects of using social media to communicate and disseminate information are incomparable with those in the traditional media era. Relevant research has been lagging behind this issue, so it is necessary to explore the new problems faced by crisis propagation in the new era.

Mainstream crisis communication theories, such as Situational Crisis Communication Theory and Image Restoration Theory [21], do not involve how information forms (traditional media, social media or offline word-of-mouth communication) affect the public's crisis

communication behavior. For example, Coombs and Holladay [22] pointed out that the type of media has minimal influence on public assessment of crisis response strategies. In addition, Coombs [23] believes that social media makes the channels used to deliver crisis responses more complex, but does not incorporate this complexity into the SCCT model [24]. With the rapid development of various social media tools such as Weibo, social media has played a prominent role in crisis communication, and related research has become more and more abundant, and has gradually become a relatively complete theory. The most influential among them are Yan Jin of Virginia Union University and Brooke Fisher Liu of the University of Maryland. They proposed "Social Media Mediated Crisis Communication" (SMCC) on the basis of previous crisis communication theories (Figure 3).
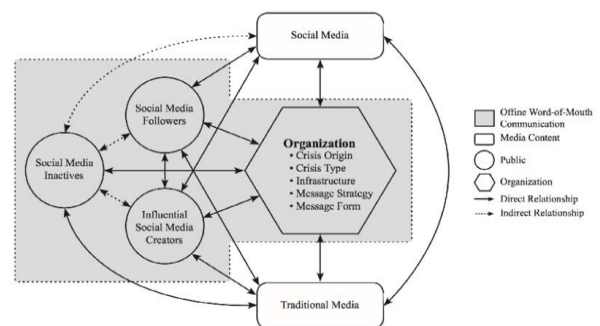

Figure 3. Social Media Mediated Crisis Communication"(SMCC) [25].

The SMCC model helps explain and predict how various publics (influential social media creators, social media followers, etc.), information forms (social media, traditional media, and offline word-of-mouth communication), and organizational sources influence each other, thereby affecting some ways for the public to seek and share crisis information. The SMCC model helps public relations scholars and professionals determine who is most likely to actively communicate in response to crises and other issues. Understanding the public's communication issues or how they seek and share crisis information can help organizations better communicate with the public during a crisis [26]. In the SMCC model, the public obtains information from the media through traditional channels (such as newspapers and television); obtains information from public organizations and members through social media (such as Facebook and Twitter); conducts offline word-of-mouth with friends, family, neighbors, and colleagues communicate with.

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Relevant research has long proven that in a crisis, the frequency of public use of social media has increased significantly, especially in the initial stage of a crisis event. Sometimes, the public's trust in social media reports is higher than that in traditional mass media reports.

4. Crisis Information Seeking and Sharing

Information seeking and sharing are two behaviors taken by the public, which need to be evaluated at the behavioral level. In order to fully understand the behavior of the public, researchers should not only consider the channels and platforms of crisis information, but also the ownership or source of different online channels and platforms. However, existing research only uses hypothetical terrorist attack cases to examine public behavior. Only two social media platforms (Facebook and Twitter) have been studied for seeking and sharing behavior. These findings do not provide a complete situation of how the public uses different sources and different communication channels to seek and share health crisis information. In order to fill this research gap, Jin et al. [26] proposed the theoretical framework of CISS in the field of public health crisis. The framework believes that the behavior of seeking and sharing crisis information should be the result of the core communication behavior of public health crisis communication. It considers various communication activities of the public in order to obtain a more comprehensive scope of its actions: (a) Through online public channels (for example, different social media platforms and websites) and interpersonal channels (for example: text messages and phone calls), (b) Communication activities involving different sources of crisis information (such as traditional news media, health organizations, and peers).

According to China Internet Network Information Center [27], the number of search engine users in China reached 695 million by June 2019, an increase of 13.38 million from the end of 2018. Search engine usage was 81.3%, down 0.9 percentage points from the end of 2018. According to the data, 97.1 percent of users use search engine services from mobile phones, while only 65.0 percent use the service from desktop or laptop computers. With the development of the Internet, the problem of how to solve the spread of crisis has become more complex, which involves multiple levels, such as society, culture, technology, geography and so on. It can be seen from the above literature that, after a long time of evolution and modification, the academic community has put forward various theoretical models for this problem, summarized the internal laws from various angles and obtained

considerable results, but there are still some deficiencies in the research. Therefore, in order to understand and solve the problem of crisis communication, the first thing is to discuss from multiple aspects, combine the theories of psychology and management with communication, and put forward constructive opinions.

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