



## **6. Media Exaggeration and Psychological Impact: A Correlational Study on Women's Mental Noise During COVID-19**

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### **Abstract**

*During a public health emergency, anxiety and fear associated with mental illness affect the whole community. The exploratory research strategy is used in the study. The research is exploratory in nature. An attempt has been made to explore the risk perception among women during the COVID-19 pandemic and relationship between media exaggeration of coronavirus threat/risk and mental noise among women. The results of this study also showed that at times of public health emergency, the government must deal with these psychological issues, worry, and dread. The mental noise model, which examines how individuals process information under stress and suggests that efficient communication is compromised in high-alert circumstances like catastrophic terrorism, tends to process information differently when they are under stress. The more the women thinks that media exaggerates the threat/risk of coronavirus the mental noise (anxiety/fear/panic) will also increase. Based on the Pearson correlation (.218) test the hypothesis is accepted, because there is a relationship between media exaggeration of coronavirus threat/risk and mental noise among women. The value of  $r$  is .218, which shows that is not a very strong correlation. Though considering the large sample size ( $n > 100$ ) a correlation coefficient as small as .218 can be significant (Taylor, 1990).*



**Keywords:** Media exaggeration, Mental Noise, Risk Communication, Risk Perception, COVID-19

## Introduction

Disease outbreaks, especially those that spread to become pandemics, have had a terrible influence on the world's economies, security, and even health. Large-scale disease outbreaks and pandemics have occurred frequently throughout history including Spanish Flu, severe acute respiratory syndrome (SARS), Middle East Respiratory Syndrome (MERS), Ebola, and Zika. They not only pose a serious threat to human health but also have an impact on trade, tourism, and other forms of transportation. They can also lead to serious political and social unrest (Maurice, 2016).

In order to reduce the effects of any public health crisis, including disease outbreaks, effective preparation, and response are essential. The quality and quantity of information that is accessible at any one time has a significant impact on the success of emergency preparedness and responses, and effective communication and coordination across partners are essential. Communication and information exchange are seen as essential elements for coordinating the management and control of infectious diseases.

During a public health emergency, anxiety and fear associated with mental illness affect the whole community (Gao et al. 2020). Social media played a major role during the pandemic in dissemination of information during the COVID-19 pandemic. They have also noted that social media is the key method for information gathering during the COVID-19 outbreak. Here, exposure to social media is similarly linked to fear and anxiety. One of the main reasons for mental illness and people's perception of the danger of COVID-19 is the impact of inaccurate and misleading information.

WHO has talked about the five principles of risk communication. In times of emergency, building and **sustaining trust** is essential for risk communication. Emergencies are times of intense emotion and uncertainty, and when this happens, individuals tend to heed the advice of trusted authorities. People tend to trust those they perceive as credible, such as those they care about, professionals they respect, and those who have demonstrated their goodness in the past or in their immediate



area. **Transparency** in communication is crucial for fostering trust, but it's even more crucial for maintaining trust. This includes expressing doubt and being honest about bad information. It takes knowledge and ability in risk communication to convey information in a clear-cut but compelling way that doesn't incite panic. **Early announcement** of an emergency and the transmission of information, even if it is insufficient, inspires public confidence in the authorities and fosters trust. The quick release of information is also essential in today's hyper-connected, 24-7 environment to stop rumors from spreading. So, messages are further reinforced by the dissemination of information from many sources. The foundation of a risk communication strategy is listening to and comprehending public perception. Information must address public worries and concerns and be presented in a way that the public and key stakeholders will find useful in their daily lives. Additionally, **listening** makes it possible to spot rumors and false information early on. Since emergencies frequently come out of the blue, prompt action must be done. Prior to an emergency occurring, **planning**, capacity building, community engagement, media engagement, and system and structure establishment must be done.

The exploratory research strategy is used in the study. The research is exploratory in nature. An attempt has been made to explore the risk perception among women during the COVID-19 pandemic and relationship between media exaggeration of coronavirus threat/risk and mental noise among women. Survey method has been used in this paper and structured questionnaire as a tool is used in the study. The hypothesis of the study is:

**H<sub>1</sub>** There is a relationship between media exaggeration of coronavirus threat/risk and mental noise among women.

- COVID-19 is no different in that the effects of crises are never gender-neutral. As a result of their already uneven status within economies and communities, women and girls have been disproportionately affected by the economic and social effects of the pandemic. Women stepped in to offer unpaid care for families and communities as health systems failed to handle the influx of cases and schools and care facilities were closed, frequently at the sacrifice of their own mental and physical health. The transmission and effects of the



virus have also made clear the disparities that exist across groups of women depending on factors such as race, income, age, handicap, and other traits. The sample size consisted of 385 women of various ages, and the data was gathered in Chhattisgarh. There are few delimitations of the study that the women using smartphones and residing in Chhattisgarh are the sample of the study. Only two variables, Media exaggeration, and Mental Noise or stress/anxiety were considered to study.

### **Variables, Terms, and Concepts of the Study**

**Media Exaggeration of threat:** An infodemic is when there is an abundance of information, some of it accurate and some of it false, making it difficult for people to find trustworthy sources and legitimate help when they need it. Sometimes false information does affect the mental state of the masses and one of the recent studies have revealed that one of the major cause behind the stress among the masses is the spread of false information concerning the COVID-19 pandemic (WHO - MOH Vietnam, 2020).

**Mental Noise:** (LaTourrette et al. 2003) this model shows how individuals process information under stress and suggests that efficient communication is compromised in high-alert circumstances like catastrophic terrorism, people tend to process information differently when they are under stress. When values are at threat, emotional arousal and/or mental agitation from feelings sometimes result in "mental noise."

### **Mental Noise Model**

The amount of "mental noise" (Covello et al. 2015) refers to as being produced by stress increases as worry and stress levels rise. As a result, audiences' ability to understand information and messages is diminished when engaging in activities that increase mental noise. The mental model's theory, which heavily relies on natural science and expert reviews of messages that are tested and retested prior to being delivered in a variety of formats, is described by Morgan as intellectual in its approach rather than "do it yourself" and suggests that this more complicated method ensures greater success in message acceptance and audience action. In comparison to many other



approaches to creating risk and crisis messages, the message creation process is time-consuming, somewhat difficult, and expensive. However, Morgan argues that this approach is not only more likely to be successful due to the extensive discernment process but also places a strong emphasis on audience acceptance of the reasons why a particular action should or should not be taken. He contends that communications are more likely to be successful or unsuccessful without a knowledge of why a particular audience comprehends and reacts to certain hazards beforehand (Morgan et al., n.d.). Women among Chinese healthcare professionals during COVID-19 reported more severe stress and interrupted sleep as well as more severe symptoms of anxiety, despair, sleeplessness, and general distress. In their study (Prout et al., 2020) they found out that, participants who identified as female and/or younger were more likely to do so. Participants who identified as non-binary tended to be more likely to feel psychological discomfort, despite this study's small sample size. (Gao et al. 2020) in their research paper has pointed out that, that during a public health emergency, anxiety and fear associated with mental illness affect the whole community. They have also noted that social media is the key method for information gathering during the COVID-19 outbreak. Here, exposure to social media is similarly linked to fear and anxiety. One of the main reasons for mental illness and people's perception of the danger of COVID-19 is the impact of inaccurate and misleading information. The results of this study also showed that at times of public health emergency, the government must deal with these psychological issues, worry, and dread. The mental noise model, which examines how individuals process information under stress and suggests that efficient communication is compromised in high-alert circumstances like catastrophic terrorism, people tend to process information differently when they are under stress (LaTourrette et al. 2003). When values are at threat, emotional arousal and/or mental agitation from feelings sometimes result in "mental noise." There is intense mental noise when one is exposed to hazards that have negative psychological characteristics. An individual's capacity for thoughtful response is hampered by mental noise.

In this paper, the mental noise model (Covello et al., 2001). is used as a theoretical framework which works as a "roadmap" for research. This idea aims to comprehend how people take in risky information when under stress. According to this model, people who are under stress pay attention



to a lot of internal "mental noise" and are less able to focus on the information coming from outside sources (Covello et al., 2001). The information offered by risk communicators is more likely to be understood and accepted if they have a conceptual map or mental model to aid them in understanding the risk. As the level of stress and anxiety rises, so does the amount of "mental noise," as described by Covello and his colleagues. The audience's capacity to comprehend information and messages is thus decreased by events that generate more mental noise.

During any health crisis, the majority of individuals get their knowledge from non-medical sources such as local television or other channels that are ill-equipped or unprepared to report the news. During the pandemic, it becomes one of the primary causes of misinformation. Receiving first-hand knowledge from friends, family, or medical sources reduces anxiety and terror. A pandemic should have health experts as one of the primary sources of information because of the exaggeration of facts and news in the media, which contributed to the high degree of anxiety among the masses (Mejia et al 2020).

### Research Findings

Table 1 provides the demographic details of the survey participants. The questionnaire was filled out by 385 women in total. An online survey was used to gather demographic data from the respondents. The online survey was administered to women in Chhattisgarh. The questionnaires were distributed by WhatsApp, email, and other messaging applications.

Demographic Variable	Category	Frequency (n)	Percentage
Age	18-28 years	204	52.99%
	29-39 years	158	41.04%
	40 years & <	23	5.97%
	Graduation	153	41.56%
	Post-graduation	160	39.74%



<b>Educational Qualification</b>	Ph.D.	57	14.81%
	Others	15	3.90%
<b>Occupation</b>	Student	89	23.1%
	Research Scholar	70	18.1%
	Working professional	120	31.1%
	Housewife	79	20.5%
	Others	2	7%

Table 1 Sample Demography

As the data shows (Table 1), 52.99% of the respondents comes from the age group of 18-28 years old, 41.04% of the respondents are from the age group of 29-39 years and 5.97% of the women comes in the category of 40 years and above. When we look at the educational qualification of the respondents (Table 1), 41.56% of respondents have a bachelor's degree or above, 39.74% of women have completed post-graduate work, 14.81% have doctorates, and 3.90% of respondents have selected the other option but have not specified their educational background. The data also shows the (Table 1) occupation of the respondents, 23.10% of the female are students. 18.10% of the respondents are research scholars, here 31.10% of the respondents are working professional and 20.50% of the respondents are housewives. 7% of the respondents have selected the other option but have not specified their occupation.

### Media exaggeration of threat

During any public health crisis people often seek various type information from non-medial sources like, television, social media or from other means which sometimes are not prepared to give news or exaggerates the threat (Mejia et al., 2020). Which sometimes generates panic, stress and anxiety among the masses. The shown figure (1) is a graphic representation of the data where the respondents were asked if the media exaggerates the threat of COVID-19 pandemic while showing the news. 65% of the respondents said yes, they do think that the media exaggerates the threat of COVID-19 pandemic while showing the news.

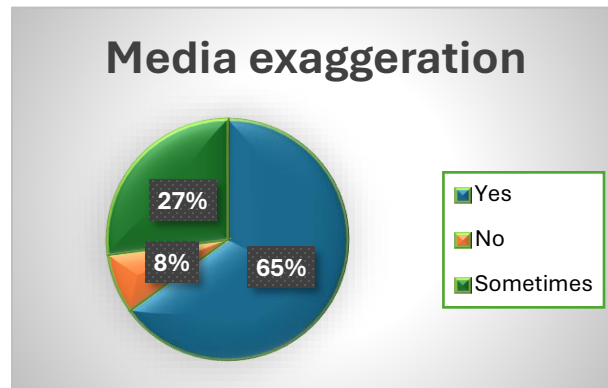


Figure 1 Media exaggeration of threat

However, only 8% respondents said that no, they do not think that the media exaggerates the threat of COVID-19 pandemic while showing the news. On the other hand, 27% of the respondents said yes, sometimes they do feel that media exaggerates the threat of COVID-19 pandemic while showing the news.

Any risk or public health crisis produces stress in an audience. The above shown Figure 2 shows that approximately 70% of survey respondents reported feeling worried and stressed out during the pandemic. Approx. 11% of the respondents said that they were not panicked/ stressed or felt anxious due to the pandemic. At last, 19% of the respondents said that sometimes they felt panicked/ anxious and stressed due to the pandemic.

### **Stress/ Anxiety among women**

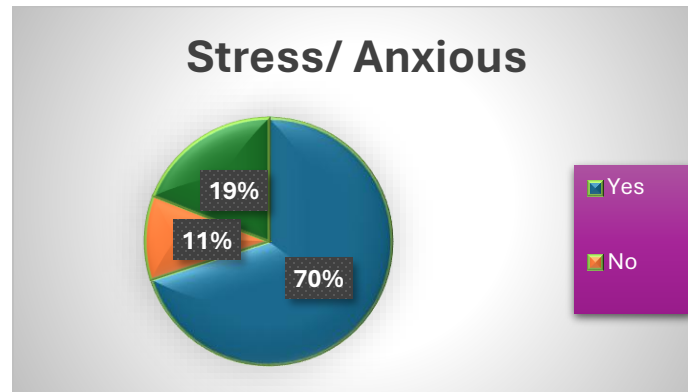


Figure 2 Stress/ Anxiety among women

Any public health crisis or emergency poses a threat to society, and it produces stress among the masses. The mental noise model aims at understanding how people take in risk information under stressful circumstances. According to this idea, people who are under stress are more focused on their internal "mental noise" and are less able to pay attention to information coming from the outside world. When the respondents were asked whether they ever felt stressed or anxiety during the first and second waves of the pandemic? 70% of the women said that yes, they did feel stressed during the pandemic, 11% did not felt stressed during the pandemic and 19% of the women said that they sometimes felt stressed during the pandemic. Covello in his theory has pointed out that given the fear and uncertainty surrounding bioterrorism or pandemic events, it is likely that individuals may react emotionally during the situation. However, the information offered by risk communicators is more likely to be understood and accepted if they have a conceptual map or mental model to assist people understand the risk.

		Media exaggerating	Mental noise
Media threat	Pearson Correlation	1	.218**
	Sig. (2-tailed)		.000



	N	385	385
Mental noise	Pearson Correlation	.218**	1
	Sig. (2-tailed)	.000	
	N	385	385

\*\* . Correlation is significant at the 0.01 level (2-tailed). Table 2

The above table shows (2) that here is a positive correlation between media exaggeration of coronavirus threat/risk and mental noise among women. The more the women thinks that media exaggerates the threat/risk of coronavirus the mental noise (anxiety/fear/panic) will also increase. Based on the Pearson correlation (.218) test the hypothesis is accepted, because there is a relationship between media exaggeration of coronavirus threat/risk and mental noise among women. The value of r is .218, which shows that is not a very strong correlation. Though considering the large sample size ( $n > 100$ ) a correlation coefficient as small as .218 can be significant (Taylor, 1990).

### Conclusion

The results of this study demonstrate how important the media is in influencing public opinion and psychological health amid medical emergencies like the COVID-19 epidemic. According to the study, women's mental noise which manifests tension, anxiety, and fear increases when the media exaggerates the pandemic's threat.

The study emphasizes how crucial ethical journalism and successful risk communication techniques are in times of public health emergency. Fear may be reduced and the propagation of false information stopped with fast, accurate, and transparent information. The findings support the mental noise concept, which postulates that risk-related information is difficult for stressed individuals to comprehend efficiently. Health officials and media experts must thus cooperate to make sure that information is conveyed in a way that reduces anxiety and improves public



comprehension. In conclusion, while media serves as a crucial source of information during emergencies, its potential to fuel anxiety cannot be overlooked. Striking a balance between informative reporting and responsible communication is essential to ensure that the public remains informed without unnecessary distress.

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