



#### **Conference Paper**

# Exploring the Impact of COVID-19 Hoax on the Mental Health of Millennial Moms

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#### **Abstract**

Hoaxes keep existing during this COVID-19 pandemic. They are indicated to be capable of heightening anxiety levels. Current works of literature about hoax-health impacts during the COVID-19 pandemic are still limited. Millennial, young generations, who are attached to the Internet technology, has the highest anxiety level. Millennial women or moms are already familiar with gadgets. They are surely exposed to hoaxes during this pandemic. Moms are the center of family defense. COVID-19 hoax influences these millennial moms' mental health. Therefore, it is important to be studied because it contributes to mental health literature during this pandemic. This research applied a qualitative method. The data were taken from an online survey and processed by thematic analysis techniques. The findings showed that the greatest impacts of COVID-19 hoaxes on moms' mental health were health-institutional distrust and apparatus-government distrust. Thus, it led to a lack of cooperation to promote the protocol and influenced the COVID-19 pandemic preventive efforts.

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Published: 5 January 2021

Publishing services provided by Knowledge E

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Selection and Peer-review under the responsibility of the ICoPsy Conference Committee. Keywords: hoax, anxiety, pandemic, qualitative survey

### 1. Introduction

Since March 2020, Corona (SARS-CoV-2) has been a global pandemic and greatly impacts the social health system in many countries (Tasnim, Hossain, & Mazumder, 2020). The pandemic has a never-experienced impact on individual physical health in all countries, with millions of confirmed cases and thousands of mortality cases (Sigurvinsdottir, Thorisdottir, & Gylfason, 2020). COVID-19 impacts are mostly correlated to death and economic aspect. However, the implication of COVID-19 mental health impact has not been clarified. The early evidence from China showed that people had reported an increased rate of anxiety, depression, stress, and psychological burden symptoms (Sigurvinsdottir et al., 2020). The increasing mental health problems due to COVID-19 were also found in European adult people (Smith et al., 2020) and the United

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States of America. It was reported that 43.3% suffered high depression levels, and 45.4% suffered high anxiety levels (Liu, Zhang, Wong, Hyun, & Hahm, 2020).

Various policies have been applied to minimize these pandemic impacts, such as social distancing and homework. These policies were applied in all impacted countries. It brings changes in daily life, such as closing schools, shopping centers, offices, and public facilities. Such changes due to policy implementation have social, mental health impacts (Davenport, Meyer, Meah, Strynadka, & Khurana, 2020). This condition makes most people frustrated and feeling lonely. The needs of being connected eventually could be done via telephone, video call, and social media usage. The need to keep in touch via online media becomes the greatest motivation for social media users (Marino, Gini, Angelini, Vieno, & Spada, 2020). It could be observed from the global social media usage spike during the pandemic. Social media is deemed able to mediate efficiently (Braun, Tricklebank, & Clarke, 2013). In this perspective, social media becomes a useful meant for society during this pandemic (Sigurvinsdottir et al., 2020).

Social media also has weaknesses during the pandemic, such as false information or rumor to make social panic or frightened. This was ever found during the Ebola case (Fung et al., 2016). COVID-19 pandemic does not only lead to health challenges but also the increasing rate of COVID-19 hoaxes (Mian & Khan, 2020). They make society frightened and lead to incorrect behaviors, such as fake treatment practices (Drouin, McDaniel, Pater, & Toscos, 2020). Various hoaxes could be found on social media. They deal with etiology, prevention, transmission, and COVID-19 medication. These lead to various physical and mental health problems, as reported globally (Tasnim et al., 2020). High exposure frequencies dealing with COVID-19 phenomena on media are correlated to greater mental health problems, such as among adult Chinese (Guo, Feng, Wang, & van IJzendoorn, 2020). An interesting finding showed that anxious individuals would seek more information from the Internet or social media. However, such information during the pandemic could trigger that anxious feeling (Drouin et al., 2020; Sigurvinsdottir et al., 2020). Thus, social media usages could be positive and negative during this pandemic.

Social media was suspected of triggering heuristics by providing news development facility based on comments from Internet users. It would be severer when the users only read sporadically without comprehensively understanding them (Ku et al., 2019). Another finding showed that an individual that did not think critically would tend to spread COVID-19 hoaxed information (Stanley, Barr, Peters, & Seli, 2020). A study involving 1600 adult people in the United States of America showed that people shared false information dealing with COVID-19. It occurred due to a lack of information credibility



consideration in their surroundings. It becomes a crucial problem during this pandemic because such false information has health risks, even for other people's life (Nowell, Norris, White, & Moules, 2017). The fact showed that false information spread was very quick than the trusted information. Thus, it becomes a complex problem (Tambuscio, Oliveira, Ciampaglia, & Ruffo, 2018). This hoax spread gets worrying (Karlova & Fisher, 2013; Kumar & Geethakumari, 2014). Moreover, hoax information spreads faster than factual information.

This high-frequency spread of hoax in Indonesia makes Indonesia a susceptible country toward hoaxes. Indonesian people seem like enjoying to gather along and tell a story together. This situation leads to personal perspective construction on understanding certain information (Khan & Idris, 2019). Based on the latest update on October 18, 2020, the confirmed Covid-19 case rates in Indonesia were 373,109. It increased 4,267 cases from the previous rate (Satuan Tugas Penanganan COVID-19, 2020). Based on Kominfo (KOMINFO, 2020) data, in the middle of June 2020, 850 hoaxes dealing with the COVID-19 pandemic were spread through social media. The increasing case rates were then proportional to the increasing rate of pandemic-related hoaxes (Nasir, Baequni, & Nurmansyah, 2020). Pandemic triggers uncertainties and increases the hoax spread. Based on the survey, Indonesia is in the sixth rank in using the Internet. The Indonesian people are the top Internet users with a 15% increasing proportion in a year, from 2018-2019 (APJII, 2019). Dealing with social media usages, Indonesia is the top three countries in terms of Facebook users. It reaches 140 million users (Statista, 2020). The survey also showed 61.5% of Indonesian people feeling interrupted due to these hoax spreads (Mastel, 2019). In this pandemic period, people get more active to access health-related and COVID-19 information. A study conducted by Norr et al. (Norr, Capron, & Schmidt, 2014) showed a high correlation between behaviors to access information about health toward a high-experienced anxiety level. This pandemic period is full of anxieties. It leads to a higher anxiety level due to this hoax exposure from social media.

The millennial generation is identified as the largest and the most familiar interest users and technology advancement (Betz, 2019). According to the American Psychiatric Association (American Psychological Association, 2018), the millennial people are the generation with the highest anxiety level. Therefore, it is interesting to determine the correlation between the millennial people's attachment to technology toward mental health, specifically during this pandemic. In this pandemic, millennial people have a high tendency to use social media for various interests. Thus, it cannot be separated from hoax exposures (Faizah, 2020). From a gender perspective, female millennial people tend to have a higher anxiety level than the male millennial (Li & Graham, 2017). During



this pandemic, millennial moms will have more physical and psychological burdens. The cross-sectional survey result at the beginning of the COVID-19 outbreak showed that women had stress, depression, and high anxiety symptoms proportions (Wang et al., 2020). Moms are the center of family defense. Therefore, if a mom is interrupted psychologically, it will lead to interrupted physical immunity. Then, eventually, it will influence her family health. The mom's unstable emotion also influences family harmony, especially during this social distancing and work from home situations. These situations emphasize people to spend more time staying at home (Janssen et al., 2020). Thus, a mom's role during this COVID-19 pandemic is crucial and is susceptible to stress (Spinelli, Lionetti, Pastore, & Fasolo, 2020). These hoax spread impacts will trigger anxiety, confusion, panic, and public distrust (Limaye et al., 2020) for millennial moms. Works of literature dealing with millennial moms' health due to the COVID-19 hoax spread are still limited or have not been found. Thabusom, Sazma (Thabusom, 2005) found that related mental health researches on women in Asia were neglected. Therefore, this research aims to find out the COVID-19 hoax types toward mental health of millennial moms. The data were collected through Online questionnaire form (Google form). The respondent consisted of 65 millennial moms. The review on this topic would be additional data for COVID-19 - mental health literature to overcome mental health problems due to COVID-19 hoaxes in Indonesia.

### 2. Literature Review

This pandemic brought psychological pressure and social mental-health problems (9). It is in line with Lima et al. (Lima et al., 2020). They argued that anxiety was a dominant emotional response in a pandemic. (Rajkumar, 2020) found that mental-health problem works and works of literature dealing with are still limited. Even so, this pandemic obviously caused mental-health problems (Asmundson & Taylor, 2020a). There is important to do for future studies. It could even be done in preliminary studies concerning pandemic effects toward mental-health in all countries. It especially deals with poor health infrastructure and severe impact (Duan & Zhu, 2020). Indonesia is one of the countries with slow recovery management from the COVID-19 pandemic. Dong and Bouey (Dong & Bouey, 2020) argue that countries with high COVID-19 reports must be aware of social mental-health problems. Therefore, Indonesia has to consider mental-health problem potentials in its society. Most Western countries have been applying psychological intervention in their protocols (Duan & Zhu, 2020). Since Indonesia is still a developing country, it has not prioritized its intervention to provide its society's



psychological well-being. COVID-19 pandemic prevention cannot be separated from social mental-health problems (Dong & Bouey, 2020).

Any misleading information exposures or hoaxes in this pandemic could increase anxiety. One of health anxiety is suffering paranoid and panic with observable health symptoms. Due to the hoax exposures, several maladaptive behaviors were exaggerating behaviors to have medical consultation, avoiding medical care at hospitals, or over-storing logistic behavior. Several examples were still in the individual level of COVID-19 hoax effects. For a broader scope, COVID-19 hoaxes led to social distrust toward public authority (Asmundson & Taylor, 2020a). It is in line with Ho et al. (Ho, Chee, & Ho, 2020). They found that providing accurate information for society could minimize maladaptive responses, such as panic and paranoid toward certain diseases and their transmissions. Therefore, the emerging effects and hoax types had to be reviewed, and accurate intervention could be developed.

Hoax is not a new phenomenon. Since the tabloid era, it has been recognized for a long time, the beginning of the 20<sup>th</sup> century (Lazer et al., 2018). Post-truth was a popular term in 2016. It deals with less influential objective information conditions in public opinion than less objective and booming information (Baccarella, Wagner, Kietzmann, & McCarthy, 2018; Nowell et al., 2017). Attention on hoaxes increases proportionally to their disadvantages. Even in a constitutive criminology perspective, a hoax is defined as a harmful discourse. Lee and Ma (Lee & Ma, 2012) argue that social media content is a *User Generated Content* (UGC) in nature. It provides freedom for users to participate. The factor of the spread is another characteristic of social media. This media does not only produce established and consumed content but also distributed and developed content by users. Dealing with hoaxes, users' information content development gets fading or turns out differently due to various comments without reliable data (Gabielkov, Ramachandran, Chaintreau, & Legout, 2016). Hoaxes have a lifetime in terms of the cognitive aspect of mass social media construction. However, the real problems are their sporadic and great destructive potentials for society (Alhabash & McAlister, 2015).

There seems to be a need for mental-health-related research during this pandemic with various determinants. It is required as a preventive strategy for the COVID-19 pandemic toward the people's mental health (Asmundson & Taylor, 2020a). The population of such research is dominated by susceptible groups. They were such as the elderly (Yang et al., 2020), homeless (Tsai & Wilson, 2020), immigrant workers (Li & Graham, 2017), mental health disorder patient pregnant women (Rashidi Fakari & Simbar, 2020), and Chinese learners that study overseas (Zhai & Du, 2020). Dealing with those populations, the rising problem includes high depression symptoms of the elderly and



a lack of mental-health access (Yang et al., 2020). The homeless fears to be imprisoned during this pandemic (Tsai & Wilson, 2020). The disadvantageous correlation between COVID-19 related stress and maternal-neonatal related stress was found by Rashidi Fakari and Simbar (Rashidi Fakari & Simbar, 2020). On the other hand, other finding showed discrimination potential and stigmatization experienced by Chinese learners that studied overseas during this pandemic (Zhai & Du, 2020). One of the susceptible groups toward mental health due to COVID-19 hoaxes is the millennial generation. An annual mental health national discussion issued by the American Psychiatric Association (American Psychological Association, 2018), argues this generation belongs to those born during 1980-1994. They are called the millennial generation because they grew up in the new millennium and in this more digital era.

They are highly influenced by computer and Internet development (Betz, 2019). They have early technology attachment compared to other generations (Kaifi, Nafei, Khanfar, & Kaifi, 2012). Therefore, they are more familiar and could master the technology than the previous generation. Other characteristics of this generation are impulsive and lazy (Myers & Sadaghiani, 2010). Social media is a place for them to express themselves (Docu, 2018). They are connected to each other through various social media (Docu, 2018). Almost all millennial persons (97%) regularly use the Internet. Most of them (92%) already have a smartphone, and most of them (85%) admit they use social media. They are the initiators to use various platforms, such as Instagram (52%) and Snapchat (47%) than the older generation (Docu, 2018). One of the greatest anxieties of them deals with FOMO. FOMO, Fear of Missing Out, is defined as an unpleasant feeling to find out other people do or have something better than this current individual (Abel, Buff, & Burr, 2016). A previous study found that these FOMO symptoms might include choleric, anxious, pessimistic, temperament, and inferiority while looking at social media. Seventy percent of the millennial generation admits to having ever experienced FOMO's various realization (with the highest percentage of all generations). Thirty-six percent of the generation reported they knew or experienced FOMO. Besides, 46% of them recorded that FOMO had been worsened by social media (Nowell et al., 2017).

Millennial women have the highest anxiety level. Gender factor also supports this argumentation that millennial women are included in a susceptible group of mental-health problems during this pandemic. Mental health is a term to describe cognitive well-being or emotional level. It is also a term to refer to any mental health disorder existence. From a positive psychological perspective, mental health could cover an individual's skills to enjoy his life and obtain life balance between life activities and efforts to achieve psychological endurance. Gender is one of the mental-health and



mental illness influential factors. Mental health index analysis and data reveal that mental disorder patterns and psychological burden on women are varied than men. The depression, anxiety, and psychological burden symptoms on women were twice or three times higher than men (World Health Organization, n.d.). Women have a greater prevalence of anxiety disorder than men. It includes common anxiety disorder, panic, and specific phobia (Eaton et al., 2012). A Psychiatric-Collaborative Epidemiology study involving 20,000 the United States of America citizens showed high anxiety disorder level for most women (Abel et al., 2016), subjective anxieties or fearful experiences, physiological reactivity, and neglectful behavior (Alhabash & McAlister, 2015). Anxiety disorder is indicated by responses of fear toward any experienced threats (American Psychological Association, 2018; Asmundson & Taylor, 2020a). Future-oriented anxiety of individual deals with potential threat identification. On the other hand, fears are responses toward direct threats.

Millennial women, especially moms, will have a higher psychological burden during this pandemic. Works of literature concerning the mental-health of moms during this pandemic are still limited. The facts show that both the physical and psychological burdens of moms increased dramatically (Spinelli et al., 2020). Children that usually learn at schools have to learn at home during this pandemic. Moreover, health care gets doubled in this pandemic plus a lower economy that influences family well-being. These make millennial women susceptible to the group during this pandemic. Moms are the center of a family defense. They have crucial roles and greatly influence the whole family members. Any obtained and trusted information by them during this pandemic will have enormous impacts. Any misleading information but is believed by them has a high risk of being implemented in their families. During this pandemic, moms' physical and psychological burdens increased dramatically (Spinelli et al., 2020). A millennial mom is familiar with information and communication technology. This skill is actually useful for them to survive in any situation. Unfortunately, this gadget-familiarity also has high risks, such as hoax exposures from social media. Several pieces of the literature showed that during this pandemic, the anxiety level toward health increased. It also increased the information searches about health through the Internet. However, several findings showed the effects of those information exposures on anxiety levels (Norr et al., 2014). It means when an individual unwisely searches through the Internet, then he will be more anxious. This heightening anxiety lowers human immunity. Other effects are such as government-policy distrust. This situation will be very bad for moms. When a mom is sick, then she cannot defend her family in this pandemic. The same thing goes for an apathetic mom toward the government's policy. It influences how a mom treats



her family. It may also influence other family members, especially the children. They may be ignorant of the health protocol. It seems trivial, but the effects on the millennial moms' mental-health should be investigated.

Based on the exposures, it will be interesting to analyze

- 1. how the moms' perceptions dealing with the hoax meaning;
- What types of hoaxes in this pandemic that could cause anxiety and confusion of moms are;
- 3. How the moms recognize that certain information are hoaxes;
- 4. What they do while receiving hoaxes;
- 5. and what impacts of COVID-19 hoaxes are experienced by them.

# 3. Methodology

This research applies a qualitative research method. It is the best approach to be carried out in this COVID-19 pandemic situation. A qualitative research method can reveal social responses, reasons, and social interaction during this pandemic. To obtain the portraits of how hoaxes about mental health on Indonesian adult women are recognized during this pandemic, a qualitative survey was done to investigate them. This qualitative survey was chosen after several considerations. They were such as suggestions from (Lobe, Morgan, & Hoffman, 2020). They stated that during this pandemic, the data should be collected by obeying the health protocols. It meant to obey the *social-distancing* regulation and to minimize direct meetings with the participants. A qualitative survey was chosen to describe comprehensively based on the participants' perspectives about the experienced impacts of COVID-19 hoaxes.

#### 3.1. The data collection

The data were collected by a qualitative survey. This qualitative survey was chosen to get data based on the participants' perceptions. It became the window for researchers to get into the *social meaning world* of the participants. It also functioned to explores their views and opinions (Braun, Clarke, & Gray, 2017; Braun et al., 2013). Five opened-questions were delivered for every participant. The questions dealt with what they knew about hoaxes, types of hoaxes they received during this pandemic, what they had done after receiving it, what applied strategies they did to prevent hoaxes, and what impacts



they experienced with those hoaxes. The survey was made in Google from and shared via WhatsApp. The data were collected from October 11 until 15, 2020.

## 3.2. Data Analysis

The respondents consisted of sixty-five millennial moms aged from 27 until 40 in Malang. They were collected from an online survey. After the data were collected, the researchers analyzed the obtained data. This research applied thematic analysis by grouping, categorizing, concluding, and reconstructing the data. It had a purpose to determine the important concepts from the data set (Ayres, 2008). The data analysis process was begun by familiarizing, coding, arranging the themes, labeling, and producing the report (Davey, Clarke, & Jenkinson, 2019).

#### 3.3. Trustworthiness

This research used member-check by re-confirming the data analysis results with the participants. Then, the participants provided feedback for every research result.

### 4. Results and Discussion

The data analysis process was done after collecting the data from the opened questionnaire. Generally, the findings showed that hoaxes had impacts on millennial moms' mental health. The participants' perspectives dealing with hoaxes toward mental-health could be explained in five aspects. They understood about hoaxes, types of hoaxes they ever received, what they did after receiving it, what strategies they applied to prevent hoaxes, and what they felt with those COVID-19 hoaxes. After obtaining the findings, a member check process was applied for all participants to validate the findings. Every participant was labeled, such as P1, P2, and so on.

## 4.1. Understanding hoax news

All sixty-five participants shared their understanding of hoaxes as false news. They stated that hoaxes were false and misleading news that was spread widely. Here are the answers of the participants about hoaxes.



TABLE 1: Perceptions related to hoax definitions

Comprehension about hoaxes	Examples of the Respondents' Responses
	Fake news that is spread widely (P1) (P34)(P52)
	Incorrect information, but it seems correct (P3)(P31)(P48)
	News with unclear sources of truth (P26)
	Doubtful News (P45)
	News that is intentionally designed to be viral (P53)

# 4.2. The obtained hoax types during this pandemic

The survey results showed 65 or all respondents grouped hoax types dealing with COVID-19 as confusing and unsettling information. It shown at table 2.

TABLE 2: the Participants' responses dealing with the obtained hoax types during the pandemic

Hoax types	The examples of the participants' responses
The transmission mechanisms	-Feeling anxious due to information telling that COVID could be transmitted from Xiaomi mobile phone (P4) -Feeling confused due to the information telling that O typed blood had a higher risk of infected by COVID (P9) -Feeling uneasy to listen to information that free-mask sharing had potentials of COVID-19 virus transmission (P33)
Vaccination	-Feeling anxious with herd immunity. In fact, the vaccine had not been invented (P17) -Unclear invention of COVID-19 drug (P28) -Feeling anxious to listen to information that the COVID-19 vaccine could weaken human immunity (P31) -Feeling uneasy to listen to information that the COVID-19 vaccine had microchips installed in it (P39) -COVID-19 vaccine made people sterile (P43) -Feeling uneasy to listen to information telling that the government officers avoided the use of vaccine and asked the people to try it in the first place (P52)
COVID-19 is merely genetic engineering and has hidden conspiracy	-COVID-19 is a conspiracy from China (P45) -COVID-19 is a weapon to eliminate the human population (P55) -ThermoGun could damage the brain (P64)
A rumor about manipulation committed by hospital parties	-One of my family members had a rapid test, and the result was positive. But in fact, the whole family members were negative, and none of them was reactive. My father that was deemed positive, was just fine. He actually had never been from anywhere (P24) -People who passed away in hospitals were labeled to suffer COVID-19, but in fact, it was due to other diseases (P25) -People that intended to check up on themselves were asked to sign as COVID-19 patients (P32) -Many COVID-19 hospitalized patients passed away (P47) -The organs of COVID-19 patients were taken before being buried (P51) -Hospitals would consider anyone suffering COVID-19 no matter what their complaints were (P60)



Hoax types	The examples of the participants' responses
Preventive and Medicative Efforts	-Feeling confused about how garlic necklace could prevent COVID-19 transmission (P13) -The mixture of coconut water, lemonade, and salt could eliminate COVID-19 (P23) -Drinking hot tea with pure water that was saved for one week could cure COVID 19 (P36) -Inhaling hot steam from a pressure cooker could cure COVID-19 (P44) -Drinking black coffee three times a day could increase immunity and prevent COVID (P50) -Chewing betel leaves could eliminate the virus (P57) -The mixture of hot water and salt could prevent COVID -Consuming boiled egg at midnight could prevent COVID (P59) -Wearing a mask could trigger health problems (P63)

## 4.3. Methods to check the hoaxed news

It could be done by collecting data. Here (table 3) are examples of the participants' responses.

TABLE 3: Methods to check the hoaxed news result

Methods to check the hoaxed news	The examples of the participants' responses
Rechecking by asking a question and seeking the information from social media	Immediately checking the truth by asking a question or seeking further information from Google (P1) Finding out the information from Google, peers, or police officers (P3) Rechecking the news or information spread through WAG to just in case get the logical information Finding the truth with the personal method (P7)
Directly confirming to the experts	or the key persons from the surrounding spot (P10)
Finding out credible reference	Reading the expert reference (P19)
By the time	Unintentionally finding out the truth (P20) By the time the truth will be revealed (P24) Sooner or later, the truth will be revealed (P35)

# 4.4. The applied strategies while receiving hoaxed news

Table 4 shown the strategies which applyi Table 4 shows the strategies applied by the subject in receiving hoax news

TABLE 4: The applied strategies while receiving hoaxed news

The applied strategies while receiving hoaxed news	Examples of the Respondents' Responses
Do not spread it	Do not forward it to other people (P6)
Ignore it	Do not believe or do not care about it (P26) Keeping silent (P9) Do not care (P32)) Do nothing (P41))
Clarifying the news to the senders	Skipping the information or telling the senders it was a hoax (P5)



The applied strategies while receiving hoaxed news	Examples of the Respondents' Responses
Sharing the actual information	Trying to tell the families, friend, and societies in the surrounding environment that the news was false (P13) Clarifying the news when they were hoaxes based on our personal capabilities and competencies (P25)

# 4.5. The experienced impacts after listening to the hoaxes

Table 5 shows the observable impacts when listening hoax

TABLE 5: The experienced impacts after listening to the hoaxes

The observable impacts	Examples of the Respondents' Responses
Making anxious	Felling worried and thinking negatively I am feeling anxious about this situation (P51) I am feeling worried if I meet other people (P46)
It makes me frightened	It gets stressful if the news is frightening (P5) Feeling afraid if someone is sick (paranoid) (P8) I am afraid if people believe the hoaxes (P13) I am afraid to go to hospitals because I am afraid to be deemed suffering corona (P29)
Triggering panic	It greatly influenced me. Especially dealing with health matter, such as coughing, made me panic as well as having influenza (P18)
Making angry	I am feeling somehow and disappointed (P14) The news is exaggerated, and it annoys me (P34)
Leading to distrust,	Uneasiness, and confusion (P25) Feeling uneasy and hesitant whether corona really existed based on my experience (P26) I wonder if the corona is merely a conspiracy although it really has victims (P33) The applied protocols from the government seem to trump up (P42)
Being more careful	Being careful and aware of something that actually was just fine(P10)
Having no impacts at all	It does not influence me because I ignore it (P7) It does not influence me because I am adhering to the government protocol (P48)

## 5. Discussion

All participants perceived that hoaxes were incorrect or false news. They were designed to achieve certain purposes. Various hoax types during this pandemic could be classified into five classifications. They were transmission mechanism, vaccine, COVID-19 conspiracy, manipulation committed by hospital parties, and preventive and medicative efforts of COVID-19. The participant could figure out that the news were hoaxes through five-category classifications. They were independent evaluation by rechecking the information credibility from the Internet, confirming directly to the experts or the information



senders, seeking the trusted reference or sources, and remaining passive or figuring out the truth by the time. The applied strategy was grouped into four categories: not forwarding the hoaxes, ignoring them, confirming, and spreading the facts or truth from the information. The experienced impacts of these hoax spread during the pandemic were categorized into seven categories. They were triggering anxiety, fear, panic, anger, and distrust, motivation to be careful, and have no effects.

From the findings, all participants, the millennial moms, ever found hoax information during this pandemic. It proved that they were familiar with social media technology (Docu, 2018). All participants considered hoaxes were incorrect or false news. They were designed to achieve certain purposes. The effects of hoaxes could put society at disadvantages during this pandemic, such as panic and increasing anxiety (Oyeyemi, Gabarron, & Wynn, 2014; Scott, 2020). From the responses, all participants were aware that hoaxes were identical to negative matters. All participants realized that hoaxes were not credible information. However, it could not be assured that all participants would immediately realize that certain information was a hoax or fact. Several factors could be the causes of why millennial moms are trapped in hoaxes. One of them was an impulsive tendency (Myers & Sadaghiani, 2010). Hoaxes are typically designed bombastically to be viral and could influence the readers (Baccarella et al., 2018; Pennycook & Rand, 2019). It would not be easy for individuals with impulsive tendencies to think objectively and critically while receiving certain information (Pennycook & Rand, 2019).

During this pandemic, the types of hoaxes were varied and increased dramatically (Mian & Khan, 2020). They could negatively influence health when believed (Spinelli et al., 2020), such as preventive and medicative efforts. It could threaten an individual's health. When it is falsely applied, it even could lead to death. Hoaxes dealing with hospital and policy manipulation spread rapidly, specifically about vaccines. It could worsen the social situation and lead to either government of hospital distrusts from society (Asmundson & Taylor, 2020b). The emergence of institutional distrust, especially toward health institutions and government, would insist the society seek further information via the Internet or social media. This situation could be misused by any irresponsible parties to spread hoaxes. In Indonesia, the COVID-19 handling process is very slow compared to other countries. It happens because of uncooperative natures from society to support COVID-19 handling. It is assumed that hoaxes influence this situation. Therefore, accurate information from credible and accessible institutions should be provided for all elements. Eventually, any panic or social distrust due to hoaxes' spreading could be minimized (Ho et al., 2020).



Dealing with how the participants' hoax recognition, this research found five answer categories to check whether certain information was deemed hoaxes or not. However, the most interesting matter was - most participants answered with ideal reasons at the beginning, such as confirming and evaluating the received information. After being investigated, the facts showed the participants passively recognized certain information were hoaxes. Eventually, they realized that the truth of the information from social media or various information. Some of them cross-checked the truth of the information. Then, they found that such hoaxes spread. However, only a few respondents did it once they received the information. It showed that the characteristics of millennial people who seemed lazy (Myers & Sadaghiani, 2010). This finding is in line with Mastel's survey (Mastel, 2019). He found that most Internet users did not check the facts since they thought other people did it. They did not want to bother themselves with such matters and did not want to spend all of their Internet balance. It supported the argumentation that digital literacy was not correlated to critical behaviors while using social media. Specifically, when there was no intention to do so (Jones-Jang, Mortensen, & Liu, 2019; Pennycook & Rand, 2019).

The applied strategies by the participants were varied. Some did not spread it because they doubted the information, but the others tended to ignore it. They even did not know what to do. On the other hand, a few participants chose to confirm the truth and spreading the truth. Several participants were passive because of some factors such as lack of knowledge about the information, being ignorant, and being afraid to commit mistakes. The responses of the participants were also in line with Mastel's survey results (Mastel, 2019). The result showed the second-top responses dealt with "what did you do while receiving hoaxes?". They tended to ignore it. It showed millennial generation tended to seek harmony from their surrounding (Docu, 2018). In other words, weak social support leads to uncritical behaviors against hoaxes in social media.

Hoax impacts were varied. They brought anxiety, fear, and panic. The finding is in line with Scott (Scott, 2020). He found that social media could increase panic and social stress during the COVID-19 pandemic. Then, it could affect other daily emotional stability. Some respondents admitted that the spreading hoaxes made them angry and distrust about the existence of COVID-19. This situation led to uncooperative behavior to adhere to the pandemic protocol. Other participants thought they should be more aware of health care services during this pandemic. For them, it did not matter at all, even when it was a hoax. They argued there would be a benefit beyond it.

In contrast, some people thought hoaxes did not influence them. Those who thought hoaxes did not influence at all had a principle to follow which one was trusted and



not. Generally, COVID-19 hoaxes influenced millennial moms but not extremely severe. Some of them felt anxious, afraid, and panic temporary. However, the distrust due to the hoaxes could seriously affect. It made the millennial moms *googling* the information to find out something. It could eventually trap them in a hoax. The reason was - during the searching process, these moms would be exposed to hoaxes (Norr et al., 2014). Government distrust also had a negative impact. It could make people did not want to cooperate and adhere to the protocol. Thus, it impeded COVID-19 prevention (Dong & Bouey, 2020). It could be seen from Indonesia's COVID-19 management.

Several studies dealing with COVID-19 impacts on mental-health had been categorized into five categories. They were a) observational study that showed a mentalhealth problem in a certain population. (b) COVID-19 psychological impacts in a certain population, (c) COVID-19 impact correlation with medical workers, (d) high-risk and susceptible population, and (e) mental-health care sharing method during this pandemic. Related articles about mental-health problems due to COVID-19 had been worked by Chinese, Singaporean, Brazilian, Indian, and Japanese (Rajkumar, 2020). Most mental-health studies about the COVID-19 pandemic dealt with the correlation of health and anxiety or economy and social stress. Shigemura et al. (Shigemura, Ursano, Morganstein, Kurosawa, & Benedek, 2020) explained that economic problems in this COVID-19 pandemic influenced the Japanese mental-health society. Zandifar and Badrfam (Zandifar & Badrfam, 2020) investigated uncertain roles, disease severity, false information, and social isolation that contributed to stress and mental morbidity in Iran. Related works of literature about mental-health problems due to COVID are still limited and must be added. One of the interesting topics in this pandemic is the increasing hoax spread and its mental-health impacts (Limaye et al., 2020).

## 6. Conclusion

This research showed that social media technology familiarity and hoax recognition did not influence an individual's criticism toward certainly received information. On the other hand, although the participants had proper knowledge and social media skills, they would not directly support their critical behaviors moreover when it was not entailed by intensity to use social media. During this pandemic, various hoaxes led to apathetic behaviors and a lack of cooperation on both health institutions and government. To participate in fighting hoaxes, it needs bravery that is influenced by social supports. The most important matter to consider is the effects of hoaxes toward the millennial moms. They were correlated to health-institutional and government distrusts.



# 7. Suggestion

This research expects to be developed by using a quantitative research method with larger respondents. Thus, it will be able to reveal mental-health problems due to COVID-19 hoaxes comprehensively. Future researchers are suggested to add a personality variable. It has the function to reveal the mental-health determinants during this pandemic.

# **Acknowledgment, Funding & Ethics Policies**

Thanks to every involved party in this research. This research is personally funded.

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