

Covid-19 Information on Social Media and Anxiety Disorders in Students

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Abstract

The Covid-19 pandemic has had an impact on all levels of society around the world, including in Indonesia. Since its appearance in Wuhan China, various information and news about this virus has been massively broadcasted through various channels. Posts on social media can be in the form of news links from official mass media channels, in the form of opinions about Covid-19. This research focused on the relationship between information of covid-19 on social media and the level of anxiety of university students and the objective of this research to seek the relationship or causality among both variable. Independent variable on this research is the social media post about covid-19 (X), which is influence to dependent variable that is the level of anxiety of university students. A number of 100 students participated on the research and filled the questionnaire, which was distributed along September 2020. At that time, Indonesia has experienced the second wave of the Covid-19 global pandemy. The study find that there is relationship between Covid-19 information on social media and the anxiety level of university students. However the relationships among both variables is on the low level. These findings show imply that there is a need for the party who are in the effort on pandemic mitigation to put attention about the information spread on the society, considering that those information could influence to the mental health of the university students and the welfare of the society at general.

Keywords: Framing, Djoko Tjandra, Online Media, Corruption, Entman.

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1. INTRODUCTION

At the end of 2019 the world was shocked with a rare virus, namely the new type of corona (SARS-CoV). The World Health Organization (WHO), the world health organization, has determined that Covid-19 is a Global Pandemic. This disease has spread to 65 countries in the world (WHO data, March 1, 2020) (PDPI, 2020). This virus first appeared in Wuhan and after that, the number of people infected with the virus has increased sharply in various parts of the world. Data on March 2, 2020 shows that the death rate worldwide has reached 2.3%, while in Wuhan it is 4.9%. And according to the case study of the first 41 patients in Wuhan, there

were 6 cases of people who died (Huang, et, al., 2020) in (Yuliana, 2020). How can this virus be infected? This virus spreads by coming into contact with one another, such as coughing, sneezing and talking. The resulting droplets can quickly spread to humans and cause new infections in the body. Not only that, this virus if it falls on an object or on a surface and this virus can infect, so if humans touch objects or something on the surface and touch body parts such as eyes, nose and mouth without washing hands, it is fatal and causes The virus works for 3 days after initial symptoms appear, but spreads up to two days before symptoms appear and at a later stage is disease from the virus. Many people who are infected do not have symptoms and do not realize it, therefore sometimes this virus is not easy to understand because of the uncertainty of people without symptoms, but many people who are infected with this virus have strong immunity so they recover without symptoms

Information about Covid-19 is now often found, especially through social media. Social media is an online media, where users can easily participate, share and create content (Palupi, Meifilina, and Harumike, 2020) including blogs, social networks, wikis, forums and virtual worlds (Anang, 2016). Along with the times, especially in the development of communication technology, it is easier for humans to share information and communicate with people without the need to think about obstacles in terms of cost, distance and time (Silvia, 2015). These conveniences have an impact on society such as dependence on communication media that can be done in writing (Robbins, 2013). Social media can also be classified into a group of applications based on the internet and developed on the basis of web technology where in today's digital era there are many easy-to-access media such as Instagram, Youtube, Twitter, Facebook, TikTok and other social media. The advantage of social media communication networks is the speed with which they can send information and get information.

The use of media in individuals can be seen from 3 things, according to Lometti, Reeves, and Bybee in Rahmani (2016). The three things are, first, it can be seen from the amount of time, this is related to the frequency, intensity and duration used in accessing a site. Second, it is seen from the content of the media, by choosing the right media so that the message can be conveyed and communicated properly. The third is seen from the relationship between media and individuals. In terms of the use of social media, Indonesia is one of the countries with the most social media users. Arviani and Alamiyah (2018) in their research found that one of the reasons for the use of social media in Indonesians is as a means of seeking health information. Furthermore, Gashya and Alamiyah (2019) specifically mention that in Surabaya's millennial generation, the use of social media is aimed at finding information related to mental health through Instagram media.

The use of social media during a pandemic like this is getting stronger, with the government's advice to stay home, more and more people are taking the time to socialize. And it is also not surprising that all the news on all digital platforms is about Covid - 19. Social media is a place to get information as well as interaction and direction towards other news developments. (Sampurno, Kusumandyoko and Islam, 2020) said the changes that occurred in society during this pandemic were because most of the information is transmitted with people who are always connected and continuously get information around the world. The existence of irresponsible news, such as the spread of hoaxes and various modes, causes many people to experience panic and anxiety to excessive. Therefore, the importance of using social media must be considered, in order to maintain the mental health of readers in the current pandemic situation.

Mental health is a condition of one's development which includes optimal physical, intellectual, social and mental health which forms a harmonious and productive life (Mukniah, 2020). One of the factors that can affect mental health is anxiety. While anxiety itself is a condition in which a person is overwhelmed with a sense of fear and worry that is in him regarding what is happening and what problems are being experienced or strange things that are felt. According to Nevid Jeffrey S, Spencer A & Greene Beverly in (Umniyah, 2017). Anxiety is an appropriate response to a threat, but anxiety can be abnormal if the level is out of proportion to the threat or seems to come without a cause. It is necessary to know that this is a natural thing for anyone to experience such as the emergence of anxiety, fear, and stress in the midst of this pandemic.

However, Oktulkani (2018) in his research stated that anxiety becomes unnatural when it occurs periodically so that it interferes with thinking patterns to daily activities. This anxiety disorder is not a trivial thing and can cause reactions naturally if a person is faced with conditions of uncertainty, danger to unexpected situations. The symptoms of anxiety disorders according to Nevid et al (2005: 164) can be categorized into 3 types of symptoms, namely: - Physical symptoms consisting of restlessness, trembling limbs, sweating a lot, difficulty breathing, heart beating fast, feeling weak, chills, irritable or irritable. - Behavioral symptoms, namely being shaken, behaving to avoid, clinging and dependent. - Cognitive symptoms, namely feeling disturbed by being afraid of something happening, worrying about something, having mixed thoughts or confusion, difficulty concentrating, fear of inability to solve problems.

Regarding anxiety, several experts have conducted research related to anxiety disorders related to Covid 19, including Mukniah (2020), Suryaatmaja and Wulandari (2020) who tried to see the relationship between anxiety levels and adolescent attitudes due to Covid 19, and Fegert,

Vitiello, Plener and Clement discusses literature related to mental health risks faced by children and adolescents during a pandemic (2020). Furthermore, Gao, Zheng, Jia, Chen, Mao and Yen (2020) discussed mental health problems, including anxiety, and social media exposure during a pandemic. They found a significant association between mental health problems and frequent social media exposure during the covid-19 outbreak. The amount of information that can be accessed easily through social media actually has an impact on participants in general. Moreover, misinformation, negatively charged, hoaxes, have caused fear. In addition, the flood of information through social media has also been reported to cause negative feelings such as fear, anxiety, worry and others. Furthermore, Gao, et al. explained that anxiety expressed via social media is contagious and may result in more serious mental health disorders in local people (2020).

Research that discusses the relationship between covid-19 information on social media and anxiety disorders experienced by students is still very limited. Existing research discusses anxiety in adolescence (Fitria and Ifdil, 2002), while in late adolescence or early adulthood such as student age, it is still very limited. Therefore, this study aims to look at the relationship of Covid-19 information on social media to Surabaya students' anxiety disorders.

2. RESEARCH METHODS

The research method discusses how sequentially a research is carried out, namely with what tools and procedures a research is carried out (Hamdi and Bahruddin, 2015: 3). The method used in this research is a quantitative method which is based on the philosophy of positivism. This method is used to study a specific population or sample. The sampling technique used in this research is nonprobability sampling, which means that the sample selection is not through random or random techniques. Based on the sampling technique, this study uses the convenience sampling technique. This technique was chosen because the purpose of this study was to describe the object of research without generalizing to the population. The population selected in this study were 272,846 active students studying at universities in Surabaya, East Java in 2019. The sample selection used the Slovin formula with an exact value of 10% so that a minimum number of 100 respondents was obtained. Respondents in this study were selected according to certain criteria, namely: 1) are active students studying at universities in the city of Surabaya, 2) are male or female, 3) actively use social media, and 4) have access to filling out questionnaires by researchers. Data collection was carried out in September 2020, where Indonesia has entered the second wave of Corona, since the first case of Covid-19 was announced in March 2020.

The data used in this research is quantitative data obtained from the measurement of quantitative variables. Meanwhile, the type of data used is primary data, or data collected from

hand or first sources in research (Silalahi, 2009). By using data collection techniques through a questionnaire questionnaire. Of the 100 questionnaires that were distributed, 100 were filled with a full level of filling. The compilation of the questionnaire uses a Likert scale with a closed questionnaire instrument and a four-point Likert scale with each point stating a positive statement from point 1 = Strongly Agree to point 4 = Strongly Disagree, and negative statements from point 1

= Strongly Disagree up to point 4 = Strongly Agree. There are 4 questions regarding media use and information exposure which are compiled based on the concept of media use according to Lometti, Reeves, and Bybee in Rahmani (2016) and 16 questions regarding the anxiety indicators of media users according to Nevid Jeffrey S, Spencer A & Greene Beverly (2005). Meanwhile, the data analysis technique used in this research is inferential statistical data analysis technique which emphasizes correlational analysis to find the influence or relationship between 2 or more variables (Lalili, 2020).

3. RESULTS

Based on the questionnaire obtained from a population of students studying at public and private universities in Surabaya, East Java, as many as 272,846, represented by a sample of 100 students as respondents who were taken through the Slovin formula, the following research results were obtained:

3.1. Validity Test Results

Based on the results of the validity test, it shows that all the instruments of variable X consisting of X1, X2, X3, X4 all produce values (r_{count}) > than r_{Tabel} . While the results of the validity test of variable Y which has 16 statement items, there are 11 statements that can be said to be valid and 5 statements that are considered invalid so that 5 statements or indicators are not included in the next stage.

3.2. Reliability Test Result

Tabel 1. Reliability Test Result

Cronbach Alpha	N of Items
.893	11

Source : The result of data analysis using SPSS 20

From the results of the reliability test, it can be seen that the results of the Cronbach Alpha are 0.893, which means greater than 0.6, the questionnaire in this study can be said to be reliable.

3.3. Kolmogorov-Smirnov Normality Test

		Unstandardized Residual	
N		100	
Normal Parameters ^{a,b}	Mean	.0000000	
	Std. Deviation	1.66240546	
Most Extreme Differences	Absolute	.060	
	Positive	.060	
	Negative	-.042	
Test Statistic		.060	
Asymp. Sig. (2-tailed) ^c		.200 ^d	
Monte Carlo Sig. (2-tailed) ^e	Sig.	.503	
	99% Confidence Interval	Lower Bound	.490
		Upper Bound	.516

Source: Results of Data Processing Using SPSS 20 Applications

Based on the results of the Kolmogorov-Smirnov normality test, it can be seen that the significance value of the normality test is 0.221. The significance value is said to be greater than Cronbach Alpha 0.05 so that the data population is declared normally distributed

3.4. Correlation Coefficient Test

Correlation coefficient test is a testing activity that aims to find out whether there is a relationship between the independent variable (X) and the dependent variable (Y).

The hypothesis is as follows:

Ho: There is no relationship between covid-19 information on social media and Surabaya students' anxiety disorders.

Ha: There is a relationship between covid-19 information on social media and Surabaya students' anxiety disorders.

Table 3. Correlation Coefficient Test Results

		Covid -19 Information	Anxiety Disorder
Covid -19 Information	Pearson Correlation	1	.221*
	Sig. (2-tailed)		.027
	N	100	100
Anxiety Disorder	Pearson Correlation	.221*	1
	Sig. (2-tailed)	.027	
	N	100	100

Source: Results of Data Processing Using SPSS 20 Applications

Referring to the table of validity test results with Pearson's Correlation technique, it can be seen that the significance value of 0.027 is smaller than the alpha value of 0.05, which means that H_0 is rejected or there is a relationship between Covid-19 information on social media and Surabaya students' anxiety disorders. The magnitude of the relationship value in the Pearson correlation test is 0.221, which means that the relationship between Covid-19 information on social media and Surabaya students' anxiety disorders is at a low level, which refers to the table below:

Table 4. Interpretation of the Correlation Coefficient Results

Coefisien Interval	Level of Relation
Less than 0,20	Very low
0,20 – 0,39	Low
0,40 – 0,70	Medium
0,71 – 0,90	Strong
Lebih dari 0,90	Very Strong

Source: Results of Data Processing Using SPSS 20 Applications

The correlation coefficient number on the result of the correlation test is 0.221, which means that it is positive, so the two variables are said to be unidirectional. Thus it can be interpreted that the higher the Covid-19 information on social media, the higher the anxiety disorder of Surabaya students.

3.5. Simple Linear Regression Analysis

Simple regression analysis aims to prove the hypothesis about whether or not the covid-19 information variable influences social media on Surabaya student anxiety disorders.

Table 5. Results of Simple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	7.303	1.004		7.276	.000
GANGGUAN KECEMASAN	.070	.031	.221	2.239	0,027

Source: Results of Data Processing Using SPSS 20 Applications

From these results it is known that the significance value is 0.27 <0.05, so it can be concluded that the covid-19 information variable on social media affects Surabaya students' anxiety disorders. The consistent value of the covid-19 news variable (a) is 7.303, while the value of anxiety disorders (w / regression coefficient) is 0.070, which means that the average value of anxiety disorders in Surabaya students is 0.070 and every 1% addition of the value of covid-19 information on the media social, then the value of the Surabaya student anxiety disorder level increases by 0.070. The regression coefficient value is positive

3.6. Test the coefficient of determination

Table 9. Determenation Coefficient Analysis Test Results

Model R	R Square	Adjusted R Square	Std. Error of the Estimate
1 1a	.22 .049	.039	1.651

Source: Results of Data Processing Using SPSS 20 Applications

Based on this output, a determination coefficient (R Square) of 0.049 means that the effect of the independent variable (covid-19 information on social media) on the dependent variable (Surabaya student anxiety disorder) is 4.9% and is classified as very low. While the remaining 95.1% is influenced by other factors outside the model conducted by the researcher

4. DISCUSSION

From the test results above, it can be seen that H_a is accepted, this means that there is a relationship between exposure to covid-19 information on social media with anxiety disorders in college students in the city of Surabaya. The relationship category between the two variables is at a low level. This means that the level of anxiety experienced by Surabaya students is at a low level. In contrast to the results of research conducted by Suryaatmadja and Wulandari (2020) which

examined the relationship between anxiety levels and adolescent attitudes due to the Covid-19 pandemic towards 51 high school students in Central Jakarta, they found that most

respondents felt anxious and this feeling anxious made teenagers be kind and comply with applicable health protocols. Likewise with the review conducted by De Miranda, Athanasio, Oliveira, and Simoes-e- Silva, (2020) which stated that the Covid-19 pandemic was extraordinary and had caused anxiety in various ages, starting with children. up to adults. However, Miranda et al (2020) found that adolescents are the less depressed and less anxious age group compared to other age groups.

While the correlation coefficient is positive, which means that the two variables run in the same direction, the higher the students get information about Covid-19, the anxiety disorder also increases. This increase in anxiety accompanied by exposure to covid information through social media is in line with research conducted by Gao (2020) in China which states that there is a positive relationship between frequency of social media exposure and level of anxiety. In this study, it was stated that the more people access information, especially negative information through social media, the level of anxiety in that community will also increase.

The data shows that only a small proportion of respondents experience anxiety disorders, both physical, behavioral and cognitive. When viewed from the frequency of information about Covid-19, this can be understood, because respondents show a low frequency of accessing this information. Most of the respondents, access covid-19 information only a few times a week, while a small proportion admitted to accessing covid-19 information regularly every day and some others did not access covid-19 information at all. The low frequency of accessing information to Surabaya students is possible that respondents have experienced burnout, because this research was conducted after the 7th month of the pandemic in Indonesia. So that students begin to adapt to the situation that occurs.

5. CONCLUSION

Based on the results of research and discussion of the effect of covid-19 information on social media on Surabaya students' anxiety disorders, the following conclusions are obtained:

- a. There is a relationship between covid-19 information on social media and the anxiety level of Surabaya students. The calculation results show that the relationship between the two is at a low level.
- b. From the results of the simple linear regression test, it can be concluded that there is an influence between the covid-19 information by social media on Surabaya students' anxiety disorders.
- c. From the results of the determination coefficient test, it was concluded that the percentage of influence of Covid-19 information on social media on Surabaya students' anxiety disorders was low. And other factors are influenced by other factors outside the model carried out in the study.

- d. This research shows the low frequency of using social media to access information about Covid- 19 during the pandemic, especially during the second wave period.

6. SUGGESTION

The following suggestions that can be given from the findings of this study for further research are as follows:

- a. Future research should look at variables such as anxiety at the onset of a pandemic and when the pandemic has been going on for a while to see if there have been changes that people experience with regard to anxiety over a certain period.
- b. Further research can conduct research on other factors that can cause anxiety in addition to information exposure through social media
- c. The findings of this study imply that posting of information on covid-19 has an influence on student anxiety disorders, for this reason, parties related to handling Covid-19 need to pay attention to information disseminated to the public.

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