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From Mass Panic to Social Recovery: A Review on Indonesian Netizens in Dealing with Covid-19

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Abstract— Corona outbreak has brought a disaster in Indonesia, both to physical and mental health. Within six months, 1,155 people have been infected by the deadly virus. Less than a month after the first Indonesians identified positive Covid-19 on March 2020, 9 million tweets on corona virus emerged in Twitter. The overflowing information in social media holds accountable for panic attack among the Indonesian society. This study aimed to identify the process of Indonesian society in dealing with corona through Twitter using social network analysis; not only on the panic, but also on social reconciliation in dealing with corona. Epidemic psychology model by Philip Strong was implemented to systematically and profoundly constructs the arguments. The findings imply the mass panic among the Indonesian society during the early emergence of the pandemic in March 2020 (epidemic of fear). Thereon, the society expressed their awareness and thus jointly campaigned to obey the health protocol suggested by the government, called epidemic of moralization. Ultimately, the society began to demonstrate epidemic of action when many accounts were created to engage with social solidarity to promote real action in supporting those impacted by Covid-19.

Keywords—*Indonesian Netizen, Covid-19, Mass Panic, Epidemic Psychology*

I. INTRODUCTION

Corona virus emerged as a trending topic with 34 million tweets since the 1st of January to 30th of June 2020 in Twitter all over the world. Since the 2nd of March 2020 when the first Indonesians confirmed positive Covid-19, discussions on the virus overflowed in cyberspace. Not less than two million tweets tweeted since the 2nd of March to the last of June. This indicates that the issue of Covid-19 became one of the most frequently discussed by Indonesian community at that time.

Social panic springs up around the world once people encounter uncontrollable issue within their environment [1]. Covid-19 is one of the examples to describe the panic state created in human cognition [2]. The whole discussions, both online and in real world, have been dominated by deadly virus. However, such discussions do not convey our understanding on how the virus spreads asymptotically.

We need to conduct in insightful investigation on social media to understand this mass panic. Social media can be the main source of social panic as ensued to a group of people [3]. Along with social media, mass media can provoke moral panic and induce public anxiety [4]–[6]. Social media can be

a source of cheap, easy, and fast information and eventually narrows down the information gap. Social media impulses broad-mindedness, creativity, and imagination to individual users [7]. At the same time, the society is likely come across information shuttering as a result of overwhelming and repeated information. Not to mention the disinformation, misinformation and hoax blown in social media platform that lead the social anxiety to soar.

As social beings, humans correlate with physical and virtual social relationship [8]. The correlations bring out consequences, such as the decay of face to face social relationship, even the hardship in distinguishing false and true news [9]–[11]. Different from the previous times, today, nearly all human beings are connected through one network. All people are connected in one technology called smartphone and internet. In fact, smartphone have dominated 97% of the use of information technology all over the world [12].

Smartphone consumption will continue to rise, even in several years ahead. The reason is the void of competitor to overthrow the smartphone features. All human needs are pretty much available on gadgets; television, radio, newspaper, including thousands of photos, music, and most importantly, they embrace the feeling of being connected to all of their friends through social media. Real world conversations are predominantly shifted to online and results in the overflowing and uncontrollable information, and thus, provokes two unsettling dualities among the society; leaving social media or stay tune.

This is the reality faced by the Indonesian society as the fourth largest internet user in the world. Among population of 273 million people in 2020, 171 million are internet users (Internet World Stats, 2019). The use of internet in Indonesia has been dominated by 89,4% of chatting application and 87% of social media [13]. According to the most recent data on January 2020, the social media users in Indonesia have reached 160 million people, with access data using smartphone up to 338 million connections [14].

Comparing to daily internet use up to 6 hours and 43 minutes a day (We Are Social, 2020), The Indonesians are considered as the most exposed to information on Covid-19 in social media. Therefore, it is reasonable that people are influenced by information related to Covid-19 in Indonesia. In January – February, the government was confident that the deadly virus would not spread in Indonesia. On the 2nd of March 2020, the situation dramatically changed after the

President of Indonesia, Joko Widodo, announced the two residents of Depok, a city next to Jakarta, confirmed positive Covid-19.

Soon after the announcement, information regarding Covid-19 was widely spread in Twitter. The shortage of face masks in Indonesia emerged as the most intense tweeted in Twitter as it directly related to each individual health. About 87 thousand tweets in Twitter were related to the shortage of face masks. Out of 87 thousands of discussions, 11 thousands were shared in Twitter timeline on the 3rd of March, one day after the Indonesian citizens were confirmed positive Covid-19. This is evident that the mass panic among the Indonesian society was resulted by the spread of corona in Indonesia.

Following the panic due to face mask shortage, the Indonesian netizens were hit by another panic due to the scheme of lock down as had executed in other countries at that time. Globally, the discussion related to lockdown reached 2 million tweets, and 19 thousand tweets were initiated by the Indonesian netizens. Instead of proceeding with lockdown option, the Indonesian government implemented Large-scale social restrictions (LSSR) in which successfully gained 557 thousand tweets, higher than the number of tweets on lockdown. One of the most upheaval thing was panic buying with 6 thousand tweets.

This scene reflects that the Indonesian society enthusiastically heed on Covid-19 issues. Everyone commented on social media and eventually led to the emergence of infodemic. The term of infodemic is defined as an information that overwhelms people's consciousness, some call it as tsunami of information [15]. The term of pandemic is associated with the spreading of disease at a wide range of geographical area. In addition, infodemic is related to massive but unsolutioned information spread due to the lack of media and health literacy [16].

Correlation between the intensity on social media use (including online game and internet in general) with anxiety expressed by the users are high [17]–[19]. The anxiety is often associated with fear of missing out (FoMO), a state where an individual is fear of missing information and hence constantly accesses the social media or other source of information (Fabris et al., 2020; Jood, 2017). In terms of Covid-19, FoMO may cause problems as people tend towards the desire of knowing the latest social issues to build conversation and to socialize.

II. METHOD

The study focused on review on tweets in Twitter posted since January 2020 to June 2020. Referring to the theory of epidemic psychology, we explicitly categorize the research objects into two-time spans, January – February as the early stage of pandemic triggering the panic, March – April, when the Indonesian society started to understand Covid-19 and May – June, when tweets of the Indonesian netizens changed to social solidarity. We screenshot the interesting tweets that reflect concrete panic activities, explanations, and actions for in-depth analysis.

The study was conducted using social network analysis, and Drone Emprit Academy (DEA) provided by Universitas Islam Indonesia, to manage the quantitative data of tweets in

Twitter. This application enabled the researcher to find whole needed tweets, from technical data (number and types of tweets) to tweets quality (positive/negative sentiments, emotion on the tweets). The qualitative data was analyzed based on the epidemic psychology model by Philip Strong (1990) to generate an understanding on the Indonesian society internalization process in dealing with Covid-19.

III. RESULT AND DISCUSSION

The travelers are the most potential virus carriers in which the virus may spread faster to other countries [22]. Thus, many countries start to band any flight from other countries to their countries. However, instead of the travelers, social media spreads the fear in even faster way than the spread of the coronavirus itself to the whole world [23]. Often times, the extreme use of social media makes events published in social media seem to happen in each individual's real world.

Not to mention the use of social media altering from temporary to primary needs. People embrace social media with their emotion as if directly communicate with others, including their way of responding information in social media. Hence, they express their panic on issues they view on social media, the same way as they express their emotion towards issues in real world as before social media evolved into the fame.

Information on Coronavirus and people infected by the virus through social media may affect public psychology and arouse the feeling of panic, rebellion, fear, boycott to those suspected as virus carrier, panic buying on supplies, and stockpile medical equipment for personal benefit [28][31]. And such behaviors best describe the situation in Indonesia.

A. Epidemic of Fear

All discussions on Covid-19 along with the variants, such as; lockdown, panic buying, personal protective equipment for health professionals, work and study from home, social distancing, to crowdfunding, emanate in social media. Twitter, in particular, has been one of the most powerful social media in Indonesia. Twitter has the biggest base in Indonesia after Facebook and Youtube. In 2019, not less than 22,8 million Indonesians used Twitter and strengthened their position at the top five of the biggest Twitter user in the world [26]–[29].

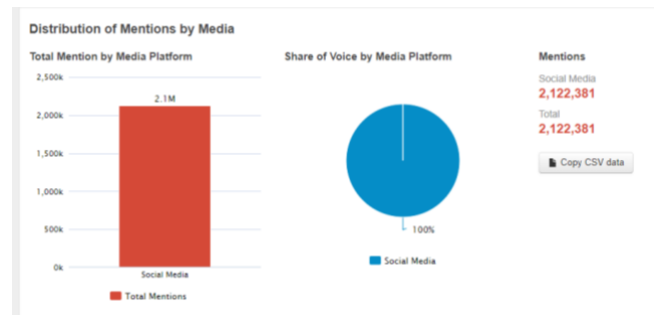


Fig. 1. Total tweet in Twitter within six months since the 1st of January 2020

This plague has threatened the health stability of the whole society and chaos in social media. Discussion on corona outbreak in Twitter reached 2 million mentions. The

2 million mentions were dominated by tweets since the 2nd of March 2020 after the President of Indonesia, Joko Widodo, announced the first Indonesians confirmed positive Covid-19. Everyone sees that corona impacts on people's daily lives [30], [31]. The fact signifies that the panic occurred as corona hit Indonesia faster than they thought.

On 18th of May 2020, there had been 96 thousand mentions regarding Covid-19 in a day. This is the highest number since the 2nd of March to 30th of June. Unfortunately, the top mentions were discussion on troubling issue where people assuming terrorists acted on behalf of Islam and used the pandemic to shoot Syrians. This religious issue was imposed to strike down some government critics by calling them as guerrillas of ISIS and Al Qaeda. This issue emanated some fears and concerns. We found that the information was originated from a Twitter account called @ID_HILMY84 that no longer active and we classified it as buzzer, account that generates negative issues in Indonesian politics.

On figure 3, we see the seeds of heroism conveyed in Twitter, where a nurse, Ari Puspita Sari, who was having 4-month of pregnancy, reported died of Covid-19. This tweet was retweeted 14,878 times and liked by 35,808 people, meaning 50 thousand people shared the information. When we do the like (push the love button means like), the information will appear on our homepage and will be visible to our followers. Despite the clarification that the information was hoax, and Ari Puspita Sari and her 6-month year old fetus were still alive, this in fact, reflects that information related to Covid-19 brings about psychological concern and panic to Indonesian society.

The panic worsened with the issue of panic buying started from 2nd of March 2020. People was hit by confusion as people were scared to go outside due to coronavirus and thus provoked massive buying on supplies. The second panic buying hit Indonesia on 14th of March 2020 when the government suggested the people to do all of their activities at home. This was associated with temporary holiday of education institution and the implementation of study from home and work from home. The third wave of panic buying occurred on 19th of March when 308 confirmed positive Covid-19 and 25 died.

Panic buying can be defined as buying behavior on buying large quantity of products in anticipating possible shortage in the future [32]. During the pandemic, people are worried about the scarcity of supplies and their buying behavior is attempted to sustain their lives. Spontaneity in panic buying behavior is difficult to anticipate by the government as it happens quickly and massively [33]. Although this panic buying does not merely happen in Indonesia, this remains as a social problem impacting wide range of society and affects national economic condition. Psychologically, panic buying affected by consumer behavior, anxiety, uncertainty, and media exposure [34].

Any issue related to coronavirus abruptly became popular in Indonesia. Not only panic buying or corona outbreak attracting fantastic responds from the netizens, but also other issues, such as lockdown, LSSR, government preparedness, prohibition on homecoming, and online learning. Big cases such as LSSR responded by 557 thousand tweets with 49% positive sentiments and 44% negatives. The online learning

issue had been one of national issues discussed by 198 thousands of netizens, with 48% positive sentiments and 49% negative sentiments out of total tweets.

The data suggests the panic wave happened among Indonesians from Covid-19. Critics regarding the



Fig. 2. Top mention in Twitter on conspiracy of ISIS during Covid-19 pandemic

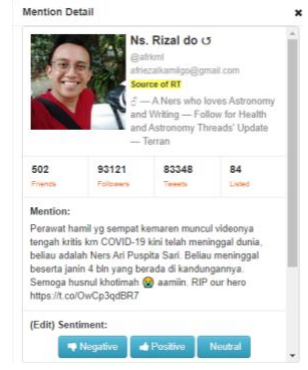


Fig. 3. Top retweet in Twitter on the death of a nurse and her fetus from Covid-19

government weakness in handling Covid-19 was one of the reasons people hit by the panic. Survey by Indo Barometer conveys that until last of April 2020, two months after the first Indonesians confirmed positive Covid-19, the public level of trust to the ability of the government in handling this virus, shrinks down (Bayu, 2020). The reasons said to be state institutions that did not seem to cooperate one another in handling coronavirus to massive rapid test that had not been conducted in Indonesia. On the contrary, results on survey conducted by same institution in March 2020 suggest that the public trust towards the government was 64,3%.

B. Epidemic of Explanations

People evolve in dealing with the world issue; moreover, Covid-19 is one of the biggest crises in the history of human being in 21st century. Those with the ability to adapt with the physical and social environment begin to search for explanation on how Covid-19 works. Such attempt is to understand the whole information regarding the crisis so as to attain the confidence that human being can survive. The crisis might bring out terror, panic, and war, nonetheless the crisis provides myriad chances to understand the world in a better way.

The second concept of epidemic psychology conveys the information that after the crisis, human being will start to find reasonable explanations related to the crisis. Many people were deceived by wrong explanations, even believed in conspiracy in any great crisis emanating in the world. This is normal, as the human are troublesome living in the state of ignorance. Any explanation conveying information regarding the origin to the future of a crisis will be trusted.

In seeing the Covid-19 handling, the society initiated to be open to understanding in hoping that coronavirus would stop immediately. In case of face mask shortage, people were anxious as the face mask was perceived as symbol of their life savior from the virus that attacks human respiratory. This was affected by massive information reported by the mass media and social media regarding the face mask shortage. On 29th of February 2020, BBC News Indonesia reported the

long line for face masks in Daegu, South Korea, and retweeted 1,188 times with 2,023 likes.

The second highest number of retweets was when the netizen criticized the government for not handling the face mask shortage, and rather prioritizing formula to increase the number of tourists. Tweet from @jansen_jsp was retweeted 765 times with 2,735 likes. Compared to topic discussed by the netizens in April 2020, people who were aware of how mask could help preventing corona transmission, directly tweeted to suggest the whole people to use face mask. This is called as epidemic of moralization. This is when many people aware and began to be new agents in sharing understanding on the use of face mask to the public.



Fig. 4. Tweet from @AzzamIzzulhaq on 3rd of March 2020

Fig. 5. Tweet from @regapwg on 3rd of March 2020

Fig. 6. Tweet from @ditsamaptapmj on 7th of April 2020

The above tweets describe the issues of face mask, from panic to moralization. The first figure represents the opinion gathering from @AzzamIzzulhaq stating possible conspiracy related to the face mask shortage in Indonesia. Figure 5 presents the same pattern that the face mask was in shortage, with a few moralization messages by @regapwg. The person suggested the netizens to tear their face masks before disposing them to prevent 'irresponsible parties' from re-using them. The second tweets reflect the fear and thus in line with public panicking. Different from tweets in March, figure 6 presents more peaceful tweets in which suggesting all netizens to use face masks without expressing fear and panic.

In addition to face mask issues, the netizens began to conduct moral activities to attract massive awareness on some issues related to Covid-19, such as Large-Scale Social Restrictions (LSSR) in some provinces in Indonesia. In addition, people suggested all netizens to obey the rules so that Covid-19 would stop soon. This was provoked by many cases when people disobeying the health protocol in which resulted in the increase number of positive coronavirus from day to day. The people consciously called for obedience to LSSR in which classified as the wave of epidemic of explanation or moralization.

C. Epidemic of Action

The holocaust of Covid-19 that is happening nearly all over the world cannot be taken lightly. Netizens must face the night mare in their real world that seem to never end. Thus, those who had awoken from the panicking called for an act to solve the Covid-19 issue. Some might not be realized, however, their exclamation to act can be called as action. Action means to perform various actions involving two people, three people, or even thousands [25].

Actions by the netizens may create positive and negative effects. During pandemics happened in the previous years, from Black Death in Europe, Syphilis in Italia, Swine Flu in Mexico, to AIDS in more modern age, oftentimes led the blame on certain groups of people. All plagues were started from mass panic and finding the black sheep that eventually ended with violence against a group of people assumed to be the cause of the plague [35]. However, in case of Covid-19, no actions lead to a group of people attacked by massive violence. There is a difference to positive direction as a result of knowledge that explains correctly about the pandemic.

The followings are actions provoked by the Indonesian netizens regarding LSSR. There was a wave where the society began to desire that the Covid-19 would stop soon, and thus they wanted to exclaim others to obey the government rules. In my opinion, this exclamation tends to positive direction in which the netizens were not provoked by the buzzer blaming a group of people, either to group of government-pro or contra [36].



Fig. 7. Tweet from @ridwankamil on 19rd of May 2020

Fig. 8. Tweet from @CiaClarissa2 on 19rd of May 2020

Fig. 9. Tweet from @CiaClarissa2 on 19rd of May 2020

Note: Figure 7,8 and 9 demonstrate tweets suggesting others from various circles to collectively comply with LSSR as initiated by the government to stop the spread of Covid-19 in Indonesia

Action demonstrated by the Indonesians were not limited to activities in the internet, but also in real world. Covid-19 that initially triggered the panic attack, eventually promoted social solidarity. Despite the concern on Covid-19, this plague was no longer fearsome. Many people had started to go outside without obeying the health protocol and results in the increase dramatic number of positive Covid-19 from day to day. Social solidarity in Twitter conveyed people to stay at home and limit their activities outside.

Some public participants were recorded by Kompas as evidence that the Indonesians were not apathetic to the plague. Tailors in Malang, tailored hazardous materials to create personal protective clothing (APD) to be distributed to many people without delivery cost. After the actions performed by tailors in Malang, Faculty of Dentistry UGM tailored the same APD and distributed them to the whole region in Java without delivery cost. Following the actions, Faculty of Social and Political Science of UI raised public funds for canteen sellers of Balsem in the area of the faculty as they were economically impacted during the campus holidays.

The Medical Faculty of UI produced hand sanitizers to be distributed to clinics, schools and hospitals. The famous designer of Indonesia, Anne Avantie, produced face masks and APD to be distributed to 400 hospitals all over Indonesia. From various social media platform, it was

reported that the influencers raised public funds and conducted their own personal donations to support the Covid-19 victims. This was just a small part of solidarity reported by the media or the ones that went viral in social media. I believe there are many social actions performed out there in helping each other.

Other finding conveys the emotional data from Twitter netizens that changed to ‘joy’ and ‘trust’. From the perspective of data on explanation, moralization, and action, the society could have changed from negative emotion such as fear, panic, angry, and sad to joyful emotion and confidence. The followings present the public trust that Covid-19 would end soon or at least could be prevented by the health authorities.

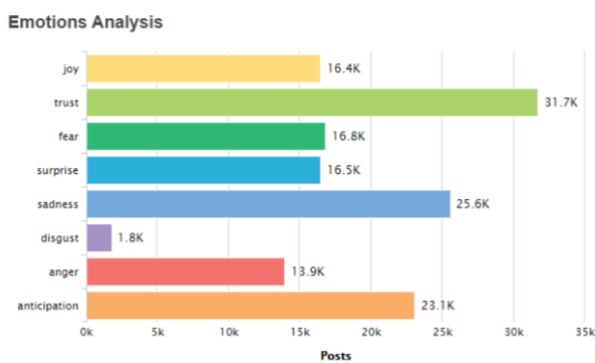


Fig. 10. The Emotions of Indonesian Netizens on Twitter from March To April 2020

The number of netizens believing that the condition in Indonesia would be better in facing Covid-19 was 31,7 people out of 2 million tweets. Despite the many netizens feeling sad (25.6 thousands), the condition is normal in considering that the plague left a deep sadness for many people. Whoever tweeted about face masks, work from home, study from home, or solidarity actions to help the impacted people, should be feeling sad as recorded in Twitter mood. People anticipating were reflected by 23.1 thousand tweets. It is important to notice that Indonesians are moving from panicking to new normal with Covid-19.

IV. CONCLUSION

Indonesian society has learnt valuable experience in 2020. Covid-19 that was first found in China, has attracted many people’s attentions to put discussion on the topic via Twitter. Social media as the object of this study is a representation of real-world society using the media to connect with others using virtual codes. The widely spread information regarding Covid-19 does not come along without an issue. The overflowing information brings out panicking and fear in the society.

In the perspective of epidemic psychology, there are three big stages occur in the society when being faced with plagues, such as Covid-19, including epidemic of fear, epidemic of explanation/moralization, and epidemic of action. This perspective describes the stages of people dealing with Covid-19 in Indonesia, from panic to peace in the middle of the plague. The first stage is two million tweets regarding Covid-19 during the last six months. The face mask shortage triggers the first panic in the society, and

followed by positive cases arises, shortage of self-protective equipment for medical professionals, rapid test, and new normal.

Such panic wave is not eternal. In the second stage, many people had come to their sense and initiated to campaign and suggested others to obey the health protocol by wearing face masks, performing physical-distancing, using hand sanitizer and regularly washing their hands after going outside. The netizens changed from panicking to contagious awareness. Some netizens initiated to share information related to prevention, treatment, and other information that did not merely related to suggestion to other people to be aware.

The final stage of epidemic psychology is reflected by collective actions by netizens to conduct real action. Numerous ways were performed by the netizens in persuading others to do the same actions. Many government and private institutions raised public funds to buy supplies for those impacted by Covid-19. Some influencers in social media, artists, and ordinary people in all over cities in Indonesia acted together to support each other during the pandemic. They moved together to help, and built social solidarity in helping others impacted by Covid-19.

This yields in public trust that Covid-19 would eventually be preventable, although not completely removed. The people started to obey the new health protocol with ‘new normal’. Although the people were panic in the beginning, currently 31 thousand people put their trust on the health authority to lead the people in dealing with Covid-19. Thousands of people are still expressing their sadness as shown in tweets, however, the situation is still normal as their posts related to this plague as each post related to this plague will cause emotional instability. Finally, we can see that the society has moved forward from panic since March 2020 to coming to their terms and acting the new way of life since the last month.

REFERENCES

- [1] T. Wijaya, “Factor Analysis of Panic Buying During the Covid-19 Period in Indonesia,” *SSRN Electron. J.*, 2020, doi: 10.2139/ssrn.3603750.
- [2] A. R. Ahmad and H. R. Murad, “The Impact of Social Media on Panic During the COVID-19 Pandemic in Iraqi Kurdistan: Online Questionnaire Study,” *J. Med. Internet Res.*, vol. 22, no. 5, p. e19556, 2020, doi: 10.2196/19556.
- [3] A. Shensa, J. E. Sidani, M. A. Dew, C. G. Escobar-Viera, and B. A. Primack, “Social media use and depression and anxiety symptoms: A cluster analysis,” *Am. J. Health Behav.*, vol. 42, no. 2, pp. 116–128, 2018, doi: 10.5993/AJHB.42.2.11.
- [4] E. Goode and N. Ben-Yehuda, “Moral Panics: Culture, Politics, and Social Construction,” *Annu. Rev. Sociol.*, vol. 20, no. 1, pp. 149–171, Aug. 1994, doi: 10.1146/annurev.so.20.080194.001053.
- [5] J. P. Walsh, “Social media and moral panics: Assessing the effects of technological change on societal reaction,” pp. 1–20, 2020, doi: 10.1177/1367877920912257.
- [6] S. Cohen, *Folk Devils and Moral Panics: The Creation of The Mods and Rockers*, vol. 6, no. 4. New York: Routledge, 2002.
- [7] N. A. Hamid, S. Ishak, S. Syamsul, and N. M. Yazam, “Facebook, YouTube and Instagram: Exploring Their Effects on Undergraduate Students’ Personality Traits,” *J. Soc. Media Soc.*, vol. 4, no. 2, pp. 138–165, 2015.
- [8] J. P. Abel, C. L. Buff, and S. A. Burr, “Social Media and the Fear of Missing Out: Scale Development and Assessment,” *J. Bus. Econ. Res.*, vol. 14, no. 1, pp. 33–44, Jan. 2016, doi: 10.19030/jber.v14i1.9554.

- [9] "How Do I Know We are Friends?: Friendship in the age of social media | Panion."
- [10] F. Qorib, "Jumping Culture and Hoax (Lompatan Budaya dan Berita Hoax)," in *Turnback Hoax; Tantangan Literasi Media Digital*, M. Fadeli, A. Dharmawan, and Nurudin, Eds. Surabaya: Litera & ASPIKOM Jawa Timur, 2017, p. 37.
- [11] P. Willmot, J. S. Logan, and A. R. Crawford, "Establishing an innovative new learning environment to foster industry links in higher education," *DS 38 Proc. E DPE 2006, 8th Int. Conf. Eng. Prod. Des. Educ.*, vol. 5, no. 2, pp. 207–212, 2006.
- [12] E. Durou, "Mobile consumption in a post-growth world Deloitte Global Mobile Consumer Survey, Middle East Edition 2019," 2019.
- [13] "Pengguna Internet Indonesia Paling Suka Chatting dan Media Sosial - Berita Katadata.co.id."
- [14] "Digital 2020: Indonesia — DataReportal – Global Digital Insights."
- [15] A. Abd-Alrazaq *et al.*, "Free Communication Fake News in the Context of the Covid-19 Pandemic," *Int. J. Environ. Res. Public Health*, vol. 22, no. 4, pp. 1–11, 2020, doi: 10.2196/19556.
- [16] A. Alvarez-Risco *et al.*, "The Peru Approach against the COVID-19 Infodemic: Insights and Strategies," *Am. J. Trop. Med. Hyg.*, pp. 1–4, 2020, doi: 10.4269/ajtmh.20-0536.
- [17] H. Y. Wong *et al.*, "Relationships between severity of internet gaming disorder, severity of problematic social media use, sleep quality and psychological distress," *Int. J. Environ. Res. Public Health*, vol. 17, no. 6, Mar. 2020, doi: 10.3390/ijerph17061879.
- [18] J. E. Bettmann, G. Anstadt, B. Casselman, and K. Ganesh, "Young Adult Depression and Anxiety Linked to Social Media Use: Assessment and Treatment," *Clin. Soc. Work J.*, 2020, doi: 10.1007/s10615-020-00752-1.
- [19] C. N. Wainner, "Social Media Addiction and its Implications for Communication," 2018.
- [20] M. A. Fabris, D. Marengo, C. Longobardi, and M. Settanni, "Investigating the links between fear of missing out, social media addiction, and emotional symptoms in adolescence: The role of stress associated with neglect and negative reactions on social media," *Addict. Behav.*, vol. 106, Jul. 2020, doi: 10.1016/j.addbeh.2020.106364.
- [21] T. E. Jood, "MISSING THE PRESENT FOR THE UNKNOWN: THE RELATIONSHIP BETWEEN FEAR OF MISSING OUT (FoMo) AND LIFE SATISFACTION," University of South Africa, 2017.
- [22] M. E. Wilson and L. H. Chen, "Travelers Give Wings to Novel Coronavirus (2019-nCoV)," *J. Chem. Inf. Model.*, vol. 53, no. 9, pp. 1689–1699, 2013, doi: 10.1017/CBO9781107415324.004.
- [23] A. Depoux, S. Martin, E. Karafillakis, R. Preet, A. Wilder-Smith, and H. Larson, "The Pandemic of Social Media Panic Travels Faster Than the COVID-19 Outbreak," *J. Travel Med.*, vol. 03, no. 1, 2020, doi: <https://doi.org/10.1093/jtm/taaa031>.
- [24] S. M. Fast, M. C. González, J. M. Wilson, and N. Markuzon, "Modelling the propagation of social response during a disease outbreak," *J. R. Soc. Interface*, vol. 12, no. 104, Mar. 2015, doi: 10.1098/rsif.2014.1105.
- [25] P. Strong, "Philip Strong Epidemic psychology : a model," *Soc. Heal. Illn.*, vol. 12, no. 3, 1990.
- [26] "• Twitter: number of active users 2010-2019 | Statista." <https://www.statista.com/statistics/282087/number-of-monthly-active-twitter-users/> (accessed Mar. 29, 2020).
- [27] "• Twitter: number of users in Indonesia 2019 | Statista." <https://www.statista.com/statistics/490548/twitter-users-indonesia/> (accessed Apr. 03, 2020).
- [28] "Indonesia Fifth-Largest Country in Terms of Twitter Users." <https://jakartaglobe.id/news/indonesia-fifth-largest-country-in-terms-of-twitter-users/> (accessed Apr. 03, 2020).
- [29] "Social Media Stats Indonesia | StatCounter Global Stats." <https://gs.statcounter.com/social-media-stats/all/indonesia> (accessed Apr. 03, 2020)
- [30] S. Susilawati, R. Falefi, and A. Purwoko, "Impact of COVID-19's Pandemic on the Economy of Indonesia," *Budapest Int. Res. Critics Inst. Humanit. Soc. Sci.*, vol. 3, no. 2, pp. 1147–1156, 2020, doi: 10.33258/birci.v3i2.954.
- [31] J. Torales, M. O'Higgins, J. M. Castaldelli-Maia, and A. Ventriglio, "The outbreak of COVID-19 coronavirus and its impact on global mental health," *Int. J. Soc. Psychiatry*, vol. 66, no. 4, pp. 317–320, 2020, doi: 10.1177/0020764020915212.
- [32] B. Shou, H. Xiong, and Z. M. Shen, "Consumer Panic Buying and Quota Policy under Supply Disruptions," *Work. Pap.*, vol. University, pp. 1–29, 2011.
- [33] P. Oliver, "Collective Action (Collective Behavior)," in *The Wiley-Blackwell Encyclopedia of Social and Political Movements*, D. A. Snow, D. della Porta, B. Klandermans, and D. McAdam, Eds. Blackwell Publishing, 2013.
- [34] M. A. Shadiq, R. Hariat, K. F. A. Hasan, N. I'anah, and W. Al Istiqomah, "Panic buying pada pandemi COVID-19: Telaah literatur dari perspektif psikologi," *Psikol. Sos.*, vol. 18, no. 59, 2020, doi: 10.7454/jps.2020.xx.
- [35] S. K. Cohn, "Pandemics: Waves of disease, waves of hate from the Plague of Athens to A.I.D.S.," *Hist. Res.*, vol. 85, no. 230, pp. 535–555, 2012, doi: 10.1111/j.1468-2281.2012.00603.x.
- [36] M. Ibrahim, O. Abdillah, A. F. Wicaksono, and M. Adriani, "Buzzer Detection and Sentiment Analysis for Predicting Presidential Election Results in a Twitter Nation," *Proc. - 15th IEEE Int. Conf. Data Min. Work. ICDMW 2015*, pp. 1348–1353, 2016, doi: 10.1109/ICDMW.2015.113.