Social Media and Public Pedagogy as Pandemic Resilience

Muh Ariffudin Islam
Visual Communication Design, Faculty of Languages and Arts, Universitas Negeri Surabaya, Indonesia
muhariffudin@unesa.ac.id

Ika Anggun Camelia
Fine Arts Education, Faculty of Languages and Arts, Universitas Negeri Surabaya, Indonesia
ikacamelia@unesa.ac.id

Muchammad Bayu Tejo Sampurno
Department of Performing Arts, Faculty of Music and Performing Arts, Sultan Idris Education
University, Malaysia
tejo@fmsp.upsi.edu.my

Abstract

The rapid transmission of Covid-19 has made the Indonesian government have various kinds of actions and policies to regulate the pattern of life in society, one of which is a policy to carry out activities online. This policy has resulted in a very large public consumption of gadgets, smartphones, or other electronic communication tools, so that information provided by official news centers, social media, or other information platforms is considered a valid source of information. Under these conditions, there is a correlation between social media and public pedagogy which controls and influences each other. This study aims to examine, describe, and bring up realistic facts related to social media content on public education in responding to this pandemic. The method used in this study is a qualitative method with a virtual ethnography approach. This approach refers to ethnographic research that adapts from online sources that specifically examine existing data in cyberspace, especially on social media. The results of this study indicate that social media is one of the online media that can educate the public by presenting information content, prevention, action, and conservation. Social media acts as an entity capable of driving community activities from elements of education, activities, and resilience. The resilience offered by social media in its campaign as public pedagogy, increasingly claims the influence of social media development on social relations. Social media and resilience provide a sense of calm to individuals during the Covid-19 pandemic.

Keywords: *social media, public pedagogy, pandemic resilience*

1. INTRODUCTION

Corona virus, or what is currently known as Covid-19, is a virus that has become a pandemic that is troubling people around the world. Several mass media reported that the origin of this virus emerged from a place in the city of Wuhan, China at the end of 2019. It was stated that this virus emerged from one of the places where wild animal consumption transactions were in that city. Various speculations have arisen regarding the development of this virus, one of the most prominent is when this virus can be transmitted between humans through water that comes out of the human body through

the nostrils or mouth, which is called Doplet. Thus, it is known that this virus is very dangerous. Another speculation emerged from one of the research results which stated that this virus can live in the air, as well as on the surface of objects that are around humans. On one occasion, it was stated on the official Kompas.com website that WHO had declared this virus to be a global pandemic in the world.

Indonesia is one of the countries affected by the emergence of Covid-19. The first time it was detected positive in Indonesia was on March 2 2020, at that time there was still 1 person detected. The transmission of this virus is said to be very rapid. This can be seen from the official data from the Covid-19 information portal, https://covid19.go.id/ (accessed May 31 2020, 14.45 WIB) which states that on May 31 2020 (when this research was conducted), there were 26,473 people in Indonesia who were infected and positively infected, 7,308 people recovered, and 1,613 people died. The ease and rapid transmission of this virus has made the government take various actions and policies to regulate the pattern of life in society. One of the most visible is the recommendation, appeal, and even the obligation for the whole community to stay at home.

When the final report of this research was written (2 November 2020), the number of cases of Covid-19 transmission in Indonesia was still unstable. There is often an increase and sometimes the cases of Covid-19 are slumping in Indonesia. It was recorded that on November 2, 2020, the number of positive confirmed cases of Covid-19 reached 415,402 people, the accumulation of recoveries was 345,566 people, and the number of deaths reached 14,044 people (https://covid19.go.id/). In situations like this, several government policies have emerged, including; implementation of new habits (new normal) and advice to stay at home for those who have no interest in activities outside the home. This means that people are allowed to do activities outside the home with the condition that they must implement strict health protocols. This then gave rise to the resilience and adaptive attitude of the community during difficult situations during a pandemic.

Figure 1. Online information regarding Covid-19 in Indonesia, updated on 2 November 2020. [Source: official website https://covid19.go.id]

With the recommendation to stay at home for people who have no interest in activities outside the home, and applied to all levels of society both in Indonesia and around the world, it has an impact on economic development and growth. People are encouraged to stay at home, so that buying and selling transactions that help the wheels

of the community's economy become very hampered. In addition to economic factors, anxiety about the ease of transmission of this virus causes symptoms of psychological anxiety that impact behavior. With the recommendation to stay at home, automatically all activities, both work and school, or other activities, will be carried out at home. In conditions like this, people's consumption of gadgets, smartphones, or other electronic communication devices becomes very large, so that information provided by official news centers, social media, or other information platforms is considered a valid source of information. Under these conditions, a correlation arises between social media and public pedagogy which control and influence each other.

Prevention efforts and preventive measures have been carried out by various institutions in Indonesia, both government, private and independent entities. Each of them contributed to educating the public in responding to Covid-19. This cannot be separated from the contribution of social media which has provided efforts and actions to prevent the transmission of Covid-19. From the health side, many factors influence people's behavior when responding to this virus, for example, at this time it has created the habit of always washing hands after traveling, cleaning floors and doorknobs with disinfectant, always wearing a mask when outside the home, even preparing personal prayer mats. from home when going to the mosque. Behavior like this is the main element in responding to new conditions, so that this has an impact on individual health and public health in order to avoid Covid-19.

Social media has the capacity and ability to reach millions of people at the same time. The strength of this media lies in personal or individual reach, so that social media can influence individual and community values which also support the environment in order to maintain habits and behaviors that have been adapted to be more health conscious. Besides that, the current pattern of health services to the community has changed and shifted, so that information from social media can be used wisely to provide education to the public (public pedagogy).

Social media sends health information intentionally on the authority of the account owner. Most social media sources of information through news and other features and indirectly into the realm of popularity in mass entertainment sites. News or other coverage of health information and medical developments that can save lives can also be alarming and misleading. Social media can be an unavoidable source of health information for the majority of Indonesians. Social media has become one of the media for education, starting from the abundance of information and opportunities for interaction and directions towards developing information into other links. This indicates that apart from being a medium of entertainment, social media can be used as an alternative source of answers to daily questions, including information and questions about Covid-19. From the description of the background above, the formulation of the problem arises, namely how social media educates the public about the Covid-19 pandemic through the culture that is in it, and how the media can act as a public pedagogy by involving mass media communication in strategies to increase public awareness of efforts Covid-19 handling and prevention efforts.

2. RESEARCH METHODS

This research uses a qualitative method with a virtual ethnography approach (Denzin & Lincoln, 2018; Leavy, 2017; Lune & Berg, 2017). This approach refers to ethnographic research that adapts from online sources that specifically examine data in cyberspace, especially on social media (Boellstorff et al., 2012; Fabian, 2008; Hine,

2001). In addition, this research will be equipped with an embedded mix method, namely by adding a quantitative description. This trend stems from an interest in studying culture on social media which is directly involved in the culture of sharing when responding to the Covid-19 pandemic. Using the Ethnographic Method with a virtual ethnographic approach, it is further stated that this research will also study communal tendencies, information dissemination, and online educational processes (Boellstorff et al., 2012; Mills, 2019).

Research using an ethnographic approach has been carried out by many researchers, especially in the realm of science, sociology, anthropology, and cultural studies. Koes Winarno in his article entitled: "Understanding Ethnography Ala Spradley", which was published in the journal Smart in 2015, stated that Spradley, who has a contemporary ethnographic concept, believes that ethnography has main characters, namely in-depth, qualitative, and holistic-integrative analysis. Furthermore, it is stated that the main technique used in this method is participatory observation, where the researcher will need a longer time, and openly conduct in-depth interviews, so that the results of this study are not just at the surface level, but can really understand mindset, behavior, and culture that are developing in society (Winarno, 2015).

Along with the development of cultural attractions and technological developments, ethnography begins to touch the realm of objects that are felt to have a wider level of cultural reach and influence. In this case, along with these developments, several relevant methods emerged for studying current cultural activities, namely virtual ethnography. Cristine Hine in her book entitled "Virtual Ethnography" states that in a virtual context, the internet is a culture and a cultural artefact (Hine, 2001). It can be understood that the internet is a public space, where all people have the freedom to do their activities in that space. From human activities, some of them will produce objects or goods that are created from existing interactions. From this understanding, all objects resulting from human activity on the internet can be referred to as artifacts. Social media is also included in the artefacts section of cultural activities that become cultural objects, so that research on the information offered by social media is still very relevant to Virtual Ethnography. Even though this book was published in 2000, it still has strong and fundamental relevance, so it can be used as a basis for this research.

The depth of information obtained when collecting and analyzing data is one of the characteristics of ethnographic research. In this case, the researcher will be directly involved and become an integral part of the object under study. In other terms, Spradley stated that an ethnographer (ethnographic researcher) must have participant observation that is closely related to the object under study (Winarno, 2015).

This research is limited to the realm of social media selection, namely Instagram. In a descriptive-analytical manner, data is presented to explain the occurrence of public pedagogy during the Covid-19 pandemic through social media and the cultural "attractions" that occur in it. Then, this research also identifies how a media can influence society by involving mass media communication in a strategy to increase awareness about how efforts to handle and prevent the Covid-19 pandemic.

3. RESULTS AND DISCUSSION

The process of evolution in the field of information technology does not only give rise to new media, but can bring about changes in the way people interact and communicate. Mulawarman and Nurfitri (2017) mentioned that currently the world has no boundaries and no secrets that can be covered up. All human activities can be monitored through social media, either by people they have known, or by people they have never met before. With no boundaries and having a very high reach, social media is often used as a means to convey certain messages, or for political (Mulawarman & Nurfitri, 2017).

Public Pedagogy or which can be more simply referred to as "public education" in general can be understood as forms, processes, and parts of education outside formal schools. Kitagawa (2017) from Sandlin, O'Malley, and Burdick (2011) states that the public typology of pedagogical literature is as follows, (1) citizenship inside and outside school, (2) popular culture and everyday life, (3) informal institutions and public space, (4) dominant cultural discourse, and (5) people's intellectuality and social activities (Kitagawa, 2017). From this typology, each has an influence and has a pattern of community education related to addressing issues or providing an understanding of the phenomena that are developing.

A. The Role of Social Media during a pandemic

Regarding the massive and excessive use of gadgets during a pandemic, social media has a fairly large role. As an online entity, social media has a very broad character and has many benefits. Regarding the role of social media during a pandemic, some of the benefits of social media include; as a medium of information/education, prevention/handling, action, and conservation.

### 1) Education and Information Facilities on Social Media

During the Covid-19 pandemic, the official media in Indonesia took turns informing each other about the developments of Covid-19, both through television, radio and on the internet, and especially also through social media. Several social media platforms display Covid-19 info in a very open place and can be automatically seen by social media users. On Twitter, for example, every netizen (internet user community) can immediately find out Covid-19 information when they are on the homepage and in the search homepage. By utilizing the Twitter algorithm, when Covid-19 info is suppressed, netizens will automatically be in touch with official accounts that are currently uploading or have uploaded news related to Covid-19.
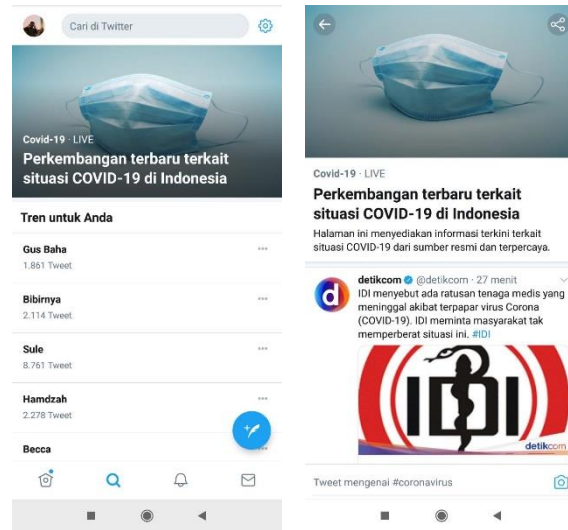
Figure 2. Covid-19 information that appears automatically in the Twitter search feature
2.   [Source: Screenshot from gadget]

Not much different from Twitter, Facebook also provides information about Covid-19 which is very easy to reach. Links regarding Covid-19 can be found immediately when Facebook users open a menu or personal profile. When netizens click on the link, they will immediately be connected to news about the development of Covid-19 that has been shared by official accounts, both from the government and private companies.
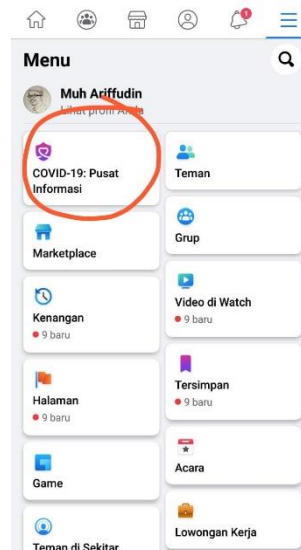
Figure 3. Covid-19 information that appears automatically on the Facebook menu feature
[Source: Screenshot from the author's gadget]
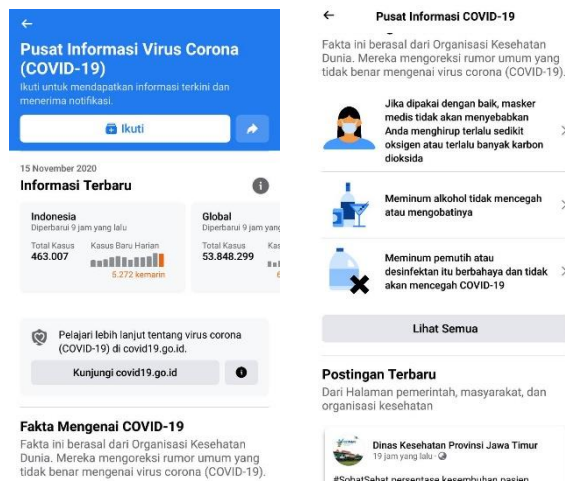
Figure 4. News about Covid-19 from the government (covid19.go.id), that appears on Facebook when netizens press the Covid-19 link..
[Source: Screenshot from the author's gadget]

In addition, social media as an educational medium plays a role in screening data about Covid-19 on social media. For example, on the Instagram accounts of government agencies or public figures who are considered to have an influence on the development of Covid-19. This can be seen from the impressions in the form of likes and comments contained in one of the uploads, both from the government's official account and from the public figure. For example, in the upload of Doctor Tirta with the account name on Instagram, namely @dr.tirta where he is a doctor and also a public figure whose uploads on his Instagram content are known to have high concern for the government and society in preventing the transmission of Covid-19. Doctor Tirta on his Instagram account is known to have 1.9 million followers, and when he uploads photos or news, he will get tens of thousands of likes and hundreds of thousands of comments from his followers.

Figure 5. Doctor Tirta's upload on Instagram received 65,049 likes and 650 comments (accessed November 20, 2020). [Source: Screenshot from the author's gadget]

2) Prevention and Handling Education on Social Media

Aside from being an information medium, social media also acts as a means of prevention or treatment. Not much different from informative patterns, the role of social media at this stage also acts as an educational medium. This linkage will go hand in hand with the role of social media as a means of information. The role of information and prevention roles are complementary and inseparable. For example, on the official Instagram, Unesa Crisis Center @ucc_unesa presents content that contains prevention or treatment during the new normal period.

Figure 6. Upload @smcc_unesa on Instagram with the main message, namely preventing the transmission of Covid-19.

3) Education on Social Media

Along with the frequent emergence of news related to Covid-19, it will psychologically increase anxiety for the community. An extraordinary feeling of fear will arise spontaneously in each individual, so that excessive paranoia will have an impact on decreasing the body's immunity. In this case, social media can play a role and act as a medium of entertainment for the public to simply refresh and indeed provide entertainment as an antidote to anxiety. In connection with the current era which is synonymous with the demographics of millennial society, entertainment will lead to audience segmentation which tends to be in a current position. During the pandemic, social media accounts appeared as a response to the pandemic. Until finally the term social media market was found, which presents an interesting treat from a pedagogical point of view, which is related to the current position.

Starting in October 2020, during the pandemic, social media has changed its function as a media for conservation. People who have stayed at home for too long have an impact on the country's economy, so the ongoing issue of recession is a logical consequence that must be lived. In the end, the affected people will take the action of "looking for something" to make ends meet. During this conservation period, the media plays a role as a distributor of news related to physical and non-physical improvements, including; renovation of economic recovery, new standards of tourism, education, and cultural activities.

B.   Education during a Pandemic
1)   Education in the New Normal Era

The pandemic is a problem that has been faced by the community in the midst of the issue of the implementation of independent learning. This is a mutually supportive

link to transform education in Indonesia which has not utilized technology optimally to become technology experts, so that the activities to be developed refer to the pandemic problem, namely the adjustment of educators in learning in the new order. Initially, the 2013 curriculum was designed for three standard situations consisting of standard issues, processes, and assessments which essentially refer to how an educator designs, implements, and assesses students face-to-face. However, since March 2020 everything has changed. Indonesia, which is one of the countries affected by the Covid-19 pandemic, is forced to carry out limited educational activities (no face to face meetings), so that every educator and student is "forced" to be able to maximize digital technology.

The transitional curriculum simplifies KD and indicators that can cover other KD. Learning can be carried out topic-based, not in groups (groups of study) or classes, where material can be carried out across classes, across schools, and even across regions. A more flexible time for delivering material to students, as well as an assessment model that involves parents, portfolios, journals or logbooks and not just relying on tests. As Galileo Galilei and Sir Isaac Newton said that everything that has an effect must have a cause. The law of cause and effect also applies to the development of human life. Changes and developments are not always caused by positive things only and sometimes in the form of negative causes. Major events such as wars, natural disasters, and the spread of pandemic and epidemic diseases can also be seen from their power of influence as causes of changes and developments in people's mindsets.

Education is one that will feel the positive impact of the pandemic, namely adjusting from pedagogical guidelines to heutagogy. Pedagogy is the science or art of being a teacher. This term refers to learning strategies or learning styles and teaching strategies. In relation to the teaching strategy, teaching philosophy is applied and influenced by background knowledge and experience, personal situation, environment, and learning objectives formulated by students and teachers. This is learning that is done as usual. As Hiryanto mentioned, Heutagogy is a study of learning that is determined independently by the learner, it can also be seen as a natural development from previous educational methodologies, especially from developing abilities and perhaps providing an optimal approach to learning in the twenty-first century (Hiryanto, 2017).

The application of distance learning is a transition period that requires a lot of new innovations. The term new normal is known as the movement for a new order, namely the post-pandemic transition period to normal conditions. However, the impact of the pandemic has renewed the digital literacy system and culture which was not done before. This is a positive impact that brings renewal. This means that at this time people are combining real activities with digital activities. These changes have never been studied by educators, so adjustments are needed that can combine the two by utilizing social media as an alternative learning tool that can be done independently.

2) The Role of Social Media in Public Pedagogy

In 2020, many innovations were shown by educators, especially in East Java at the Senior High School (SMA) level. The East Java Provincial Education Office urges high school teachers of the same level to compete in creating learning channels on YouTube to support learning at school. This is inseparable from the role of schools that support teachers to innovate in providing online-based learning by utilizing social media. The use of social media is indeed very appropriate given the data on social media users released by inet.detil.com that based on We Are Social's latest report, in

2020 it was stated that there were 175.4 million internet users in Indonesia. Based on Indonesia's total population of 272.1 million, this means that 64% of Indonesia's population has experienced access to cyberspace.

Percentage of internet users aged 16 to 64 who have each type of device, including mobile phones (96%), smartphones (94%), non-smartphone mobile phones (21%), laptops or desktop computers (66%), tablets (23%), game consoles (16%), to virtual reality devices (5.1%). The report also says that there are 338.2 million Indonesians who use cell phones. And 160 million of them are active users of social media (medsos). The most used social media are YouTube, WhatsApp, Facebook, Instagram, Twitter, Line, FB Messenger, LinkedIn, Pinterest, We Chat, Snapchat, Skype, TikTok, Tumblr, Reddit, Sina and Weibo.

Social media is broadly defined as digital media which is generally web-based, composed of a series of user thoughts, and just like conventional media functions as a facility for disseminating information. Information circulating on social media is of various types ranging from academic, medical, to entertainment information. Social media has the capability to (1) Send and convey information quickly, (2) Has local and global coverage, meaning it covers the whole world because it is done wirelessly. (3) The costs required are not so much. The three benefits that can be felt are more than enough to eliminate the limitations of conventional methods in disseminating information. Social media as a facility for disseminating information is a concept that has enormous benefits, but all of these benefits do not come for nothing. Using one of Sir Isaac Newton's laws of energy exchange, which says that pushing an object also gives a boost in the form of negative energy to the force that pushes it.

Social media can be a supporter of the continuation of independent learning echoed by the Minister of Education, Nadiem Makarim that Merdeka Learning is the beginning of an idea to improve the national education system which seems monotonous. Merdeka Learning is one of the programs to create a happy learning atmosphere in schools, a cheerful, happy atmosphere for students and teachers. As for the background, there are many complaints from parents about the national education system that has been in force so far. One of them is a complaint about the large number of students who are targeted with certain values, and it is also added that the Merdeka Learning program is a form of policy adjustment to restore the essence of assessment which is increasingly being forgotten. "The concept is to return to the essence of our law to give schools the freedom to interpret the basic competencies of the curriculum, to be their own assessment," as stated by the Director General of Teachers and Education Personnel (Dirjen GTK) of the Ministry of Education and Culture, Dr. Iwan Syahril, Ph.D.

3) Activities during the Pandemic

Since announcing that Covid-19 was a global pandemic on March 12 2020, because it has infected more than 121 thousand people in 118 countries, various attitudes have been taken by each country to prevent a wider spread. Apart from advising the public to do activities at home, several regions in Indonesia have also taken strict steps, namely the implementation of Large-Scale Social Restrictions (PSBB). Of course, this PSBB step will have an impact on the rate of economic growth which was also affected during the pandemic. From the other side, the impact of this PSBB is not always only negative. Some people who are able to see an opportunity, immediately take a stand to open a business. One thing that can be seen is the emergence of mask

manufacturers, both those produced at home and on a large scale. Given the scarcity of masks, and even if they do, they are quite expensive. In addition, the production of hand sanitizers has also begun to mushroom in the community.

During the PSBB period, many creative industry products were found. As in the early days of the Covid-19 transmission, masks were produced to meet demand. Along with the development of time, with the condition that the existence of masks is starting to be easy to find, many creative actors are developing their businesses. As one example, some sell batik masks, patterned masks, and even special masks for children, so this has become a new activity for creative industry players.

C. Resilience

The Covid-19 pandemic in Indonesia has had an impact on the psychological aspects of society. This is because individual accessibility is hampered by policies designed to prevent the spread of the Covid-19 virus in Indonesia so that it does not spread further. In addition, the policies of several companies to deactivate and cut the salaries of their workers have had a significant impact on people's mental health during the pandemic. The essence of education is one of them as a tool, media and method to improve mentality and increase vitality, one of which is through the role of public pedagogy. (Burbules, 2016). Public pedagogy, which has wide coverage in its media, collaborates with technological developments which are considered the most efficient trajectory in helping to increase people's vitality during a pandemic. The reasons are related to access which tends to be free, people's ownership of gadgets in accessing the internet as a form of technology, and the fact that people are currently dependent on gadgets and the internet. (Dyer, 2020; Greenhow & Lewin, 2019; Ricciardelli et al., 2020; Sampurno et al., 2020).

The big change that social media has brought during the pandemic in campaigns related to public pedagogy is when they broaden the interdisciplinary slices that make social media work more complex and collaborative. On the other hand, one way for individuals to benefit from the development of IoT (Internet of Things) is through social media. This is related to community resilience through increasing the number of social connections that allow individual users to build connections and bring out resilience. In this new context of communicating and interacting, the notion of community resilience needs to be rethought, with due consideration given to the emergence of virtual worlds, alternative worlds, and personal relationships in cyberspace. (Houston, 2019).

The term resilience has now been conceptualized in a variety of disciplines but is interrelated. Resilience was originally known in the discipline of psychology as a dynamic and adaptive psychosocial process of individuals experiencing difficulties (Kaufmann, 2015; Krasny et al., 2010). Resilience involves interactions that are multi and inter-related in matters related to family, knowledge, skills, and culture, all of which complement each other (Cumming, 2010; Moran, 2002). The resilience offered by social media in its campaign as a public pedagogy increasingly claims the influence of the development of social media on social relations. Social media and resilience provide a sense of calm for individuals during the Covid-19 pandemic. This is related to the fact that social media can be a catharsis for life's problems (Hesmondhalgh & Toynbee, 2008, p.9-10), and conveyed in the form of social relations that have never happened before with the wide access that social media has such as the network of space and time (Picard, 2015; Sampurno et al., 2020; Simpson et al., 2019). Before the pandemic, social media was believed to be one of the arenas to "distance" from each other which was

close to its addictive nature. However, this is in contrast to what happened during a pandemic, where social media has become an arena for sharing enthusiasm, motivation, inspiration, and a medium for expression without boundaries (Figure 7) (Kaufmann, 2015).
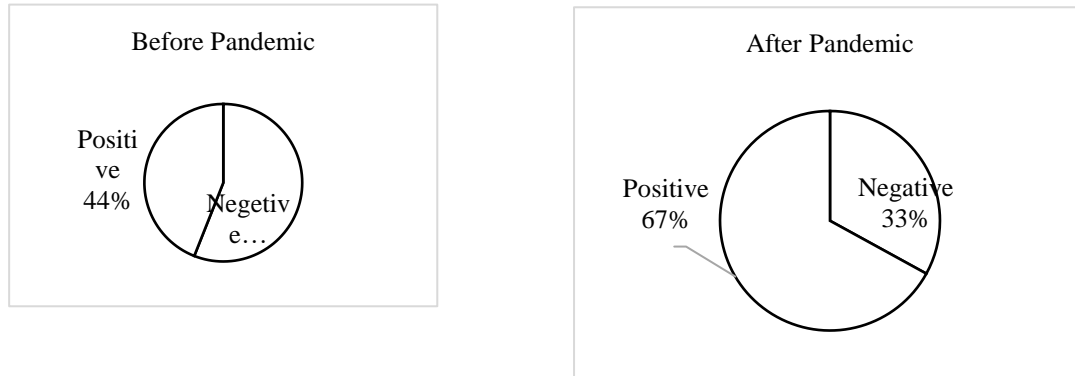
Figure 7. Comparison of perceptions of social media use before and during the pandemic

In the past, Facebook was once the only social media that was most frequently accessed (Alhabash & Ma, 2017). However, individuals are starting to feel comfortable with social media, which is micro-blogging with a limited character, and the emergence of other social media, such as TikTok, has led to a trend towards social media segmentation (Adhya & Chandra, 2015; Alhabash & Ma, 2017). Twitter is popular because of its role as an arena in establishing social relational relations, especially because they offer the possibility to interact simultaneously with many users in real-time. It's different with TikTok, which on the other hand also provides access to creativity freely with the complexity of its features. Therefore, Twitter and TikTok are considered to be social media platforms that are suitable for public pedagogy campaigns, as well as having resilience.
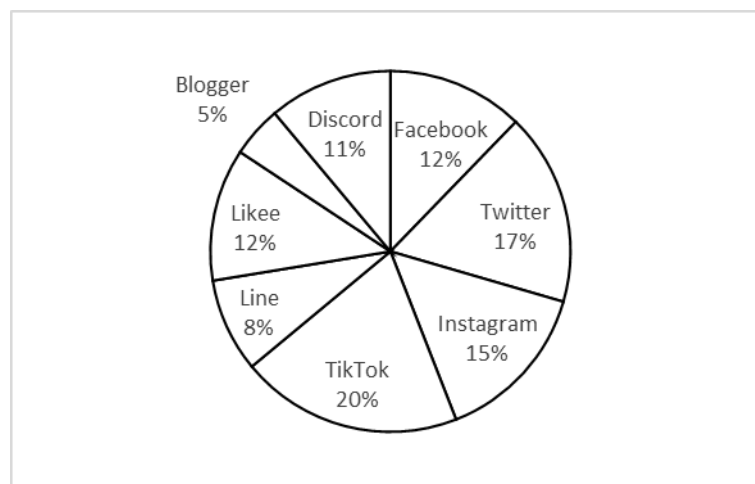
Figure 8. Percentage of use of social media platforms during a pandemic

The resilience capabilities of Twitter and TikTok are in the typicality and utilization of their features. Furthermore, opportunities for resilience occur when sharing the same interests allows connections, discussions, and exchange of

information, knowledge, motivation, and enthusiasm for life with various forms of expression (Figure 9).
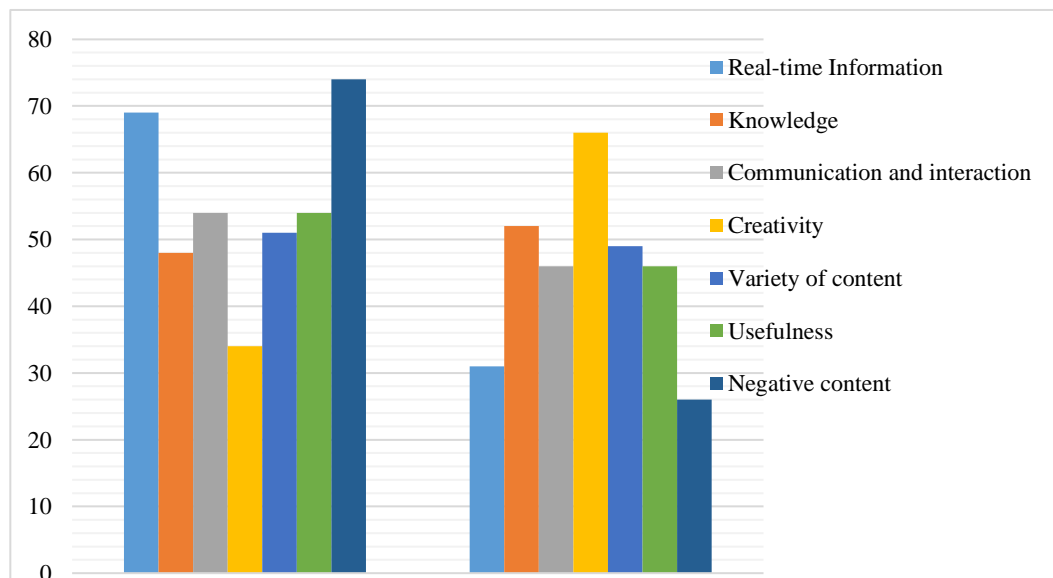
Figure 9. Comparison of Twitter and TikTok features

When individuals enjoy their time using social media, interactions occur in an imaginary space between individuals, social media, and their social networks. The interaction always considers metaphorical aspects both from the individual as the user and the social network that communicates with him. Furthermore, the interactions that are built are persuasive as a tool to create new ideas and synthesis, and to provide an overview of the implementation of ideas or resilience approaches. Just as social media algorithms seem to be able to read the tendencies of their users, these interactions always seem to provide suggestions or even what their users need. This ultimately gives communal strength, some of which remind us of the ability not only to survive or adapt to adversity but also to strengthen and even change perspectives during a pandemic.

4. CONCLUSION

The results of this study indicate that social media is one of the online media that can educate the public regarding the Covid-19 pandemic. From the point of view of IoT, during the Covid-19 pandemic, social media can position itself as a medium capable of presenting content related to Covid-19, namely in terms of presenting information, prevention, action and conservation. During a pandemic, social media acts as an entity that is able to drive community activities from elements of education, activities and activities, as well as resilience. The resilience offered by social media in its campaign as a public pedagogy increasingly claims the influence of the development of social media on social relations. Social media and resilience provide a sense of calm for individuals during the Covid-19 pandemic. In further research development, it can be more focused on each particular social media platform, such as Facebook, Instagram, TikTok, and Twitter, so that it can explore cultural and media relations in more detail according to the user segmentation.

5. REFERENCES

Adhya, J., & Chandra, J. (2015). Social Media Communication: Facebook Use Pattern of LIS People. *Librarian*, *22*, 65–71.

Alhabash, S., & Ma, M. (2017). A Tale of Four Platforms: Motivations and Uses of Facebook, Twitter, Instagram, and Snapchat Among College Students? *Social Media and Society*, *3*(1). https://doi.org/10.1177/2056305117691544

Boellstorff, T., Nardi, B., Pearce, C., & Taylor, T. L. (2012). *Ethnography and Virtual Worlds: A Handbook of Method*. Princeton University Press.

Burbules, N. C. (2016). How We Use and Are Used by Social Media in Education. *Educational Theory*, *66*(4), 551–565. https://doi.org/10.1111/edth.12188

Cumming, G. S. (2010). Conceptual Background on Social-Ecological Systems and Resilience. *Spatial Resilience in Social-Ecological Systems*, 7–33. https://doi.org/10.1007/978-94-007-0307-0_2

Denzin, N. K., & Lincoln, Y. S. (Eds.). (2018). *The SAGE Handbook of Qualitative Research* (Fifth Edit). Sage Publications. https://doi.org/10.1007/s11229-017-1319-x

Dyer, H. T. (2020). Defining Social Media…It's Complicated. *Cultural Studies and Transdisciplinarity in Education*, 15–43. https://doi.org/10.1007/978-981-15-5716-3_2

Fabian, J. (2008). *Ethnography as Commentary: Writing form the Virtual Archive*. Duke University Press. https://doi.org/10.1017/CBO9781107415324.004

Greenhow, C., & Lewin, C. (2019). Social media and education: reconceptualizing the boundaries of formal and informal learning. *Social Media and Education*, 6–30. https://doi.org/10.4324/9781315121697-2

Hiryanto. (2017). Pedagogi, Andragogi Dan Heutagogi Serta Implikasinya Dalam Pemberdayaan Masyarakat. *Dinamika Pendidikan.* 22(1).65-71.

Hesmondhalgh, D., & Toynbee, J. (2008). *The Media and Social Theory*. Routledge.

Hine, C. (2001). *Virtual Ethnography*. Sage Publications. https://doi.org/10.4324/9781315797915-4

Houston, J. B. (2019). Community Resilience and Social Media. *New Media in Times of Crisis*, 177–192. https://doi.org/10.4324/9780203703632-12

Kaufmann, M. (2015). Resilience 2.0: social media use and (self-)care during the 2011 Norway attacks. *Media, Culture & Society*, *37*(7), 972–987. https://doi.org/10.1177/0163443715584101

Kitagawa, K. (2017). Situating preparedness education within public pedagogy. *Pedagogy, Culture and Society*, *25*(1), 1–13. https://doi.org/10.1080/14681366.2016.1200660

Krasny, M. E., Lundholm, C., & Plummer, R. (2010). Resilience in social-ecological systems: The roles of learning and education. *Environmental Education Research*, *16*(5–6), 463–474. https://doi.org/10.1080/13504622.2010.505416

Leavy, P. (2017). *Research Design: Quantitative, Qualitative, Mixed Methods, Arts-Based, and Community-Based Participatory Research Approaches*. The Guilford Press.

Lune, H., & Berg, B. L. (2017). *Qualitative Research Methods for the Social Sciences* (Ninth edit). Pearson.

Mills, K. A. (2019). Big Data for Qualitative Research. In *Routledge Focus*. Routledge. https://doi.org/10.4324/9780429056413

Moran, J. (2002). *Interdisciplinarity*. Routledge.

Mulawarman, M., & Nurfitri, A. D. (2017). Perilaku Pengguna Media Sosial beserta Implikasinya Ditinjau dari Perspektif Psikologi Sosial Terapan. *Buletin Psikologi*, *25*(1), 36–44. https://doi.org/10.22146/buletinpsikologi.22759

Picard, R. G. (2015). The humanisation of media? Social media and the reformation of communication. *Communication Research and Practice*, *1*(1), 32–41. https://doi.org/10.1080/22041451.2015.1042421

Ricciardelli, L. A., Quinn, A. E., & Nackerud, L. (2020). "Human behavior and the social media environment": group differences in social media attitudes and knowledge among U.S. social work students. *Social Work Education*, 1–19. https://doi.org/10.1080/02615479.2019.1710125

Sampurno, M. B. T., Kusumandyoko, T. C., & Islam, M. A. (2020). Budaya Media Sosial, Edukasi Masyarakat, dan Pandemi COVID-19. *SALAM: Jurnal Sosial Dan Budaya Syar-I*, *7*(5). https://doi.org/10.15408/sjsbs.v7i5.15210

Simpson, S.-A., Napawan, N. C., & Snyder, B. (2019). #OurChangingClimate: Building Networks of Community Resilience Through Social Media and Design. *GeoHumanities*, *5*(1), 1–17. https://doi.org/10.1080/2373566x.2019.1575761

Winarno, K. (2015). Memahami Etnografi Ala Spradley. *Smart*, *1*(2), 257–265. https://doi.org/10.18784/smart.v1i2.256