The Uses of Computer-Mediated Communication Video Conference in Meeting the Needs of Interaction with Peers During Covid-19 Pandemic

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ABSTRACT

Pandemic Covid-19 makes each individual do all activities from home. It causes individuals to have difficulty meeting friends face-to-face. Application of video conference is the most popular media by now for individual interaction face-to-face with friends. The formulation of the problem in this research is how to use the term of video conferencing as a communication technology in meeting the needs of interaction with peers during the Covid-19 pandemic. This study aims to see video conferencing as technology-mediated communication in meeting needs interaction with peers. Researchers used the theory of uses and gratifications, the concepts of computer-mediated communication (CMC), video conferences, and peers. The approach used in this research is qualitative. The data interview method was carried out through interviews with subjects aged 9-21 years included elementary school student, junior high school, senior high school, and college student. The conclusions in this study reveal that individuals have a desire to establish or interact with their peers, especially during the Covid-19 pandemic, which did not allow them to meet in person. So, video conferencing is a solution to the limitations of face-to-face interactions that cannot be done during the Covid-19 pandemic. The individual also gets gratification obtained in using video conference technology such as the amount of information, the relationships in their friendship are getting better, entertainment when routine boredom, and makes individual a better person.

Keywords: Computer-mediated communication, video conference, peers

1. INTRODUCTION

The Coronavirus Disease (Covid-19) pandemic, which has hit almost all parts of the world today, is a major problem for every country. Several countries, including Indonesia, are doing some strategies for handling and preventing the spread of Covid-19. Indonesia implementing Work From Home (WFH) system, which forces office workers to do their work from home thereby reducing the meetings or interactions of each worker. Likewise, the education sector has asked to carry out online learning in hoping of reducing the spread of Covid-19. It also affects individual communication through face-to-face, and physical interaction to be reduced. In general, it is absolutely contrary to the nature of humans as social beings who have need to interact with other people [1].

According to Aristotle, humans are *zoon politicon* (political beings), meaning that humans are social creatures who always interact and relate to other people. Especially in the sphere of friendship, interaction with peers is a necessity. The existence of interaction with peers can create a good social life for the self-development of each individual [2]. This condition makes technology an intermediary to

establish communication and interaction with other individuals. Technology mediated communication is a process of human communication through computers, which involves people, placed in a particular context using media to achieve a goal [3]. This technology-mediated communication, namely computers and the internet, is manifested in a service application called a video conference.

Video conferencing used audio and video to bring people to different places at the same time for a meeting. So that geographical factors, distance, and time differences are no longer an obstacle to the realization of communication that involves communicators in places that are far apart from each other [4]. Simply put, video conferencing creates a conversation between two people (point-to-point) or involves several places (multi-point) with more than one person, in a virtual room. In addition to audio and video activity delivery, video conferencing also allows the exchange of documents, information displayed on computers, whiteboards, and messaging. Video conferencing services are realized in the form of several applications such as Zoom, Google Meet, Skype, Join Me, WebEx, and so forth. It is often used by the business sector,

education sector, health sector, as well as personal and community purposes.

The formulation of the problem in this study is how to use video conferencing as technology-mediated communication in meeting the needs of interaction with peers during the Covid-19 pandemic. The research objective is to determine the use of video conferencing technology-mediated communication in meeting the needs of interaction with peers.

The author examines the use of video conferencing using the uses and gratifications theory which has the basic concept that the audience is active in selecting media to meet their needs [5]. This theory focuses on the uses of the media to obtain gratification or fulfillment needs. Starting from a need, then choosing the right and appropriate media, to achieve satisfaction in media uses [6]. Through this theory, researcher wants to research more deeply about the uses of video conferencing in meeting the needs of peer interaction during the Covid-19 pandemic.

2. BACKGROUND

2.1. Communication

Laswell defining communication as who said it, what was said, in what channel it was said, to whom it was said, and with what effect it was said. Turner says that communication is a social process where individuals use symbols to create and interpret meaning in the environment. One of the contexts of communication is mass communication, which means communication through mass media with several communicators at once [7]. DeVito argues about mass communication that mass communication is communication aimed at the masses with a large audience and it's difficult to define. This is supported by the uses of mass communication which is transmitted by audio nor visual transmitters as the medium [8].

2.2. Uses and Gratification

Researchers use several concepts from the uses and gratification theory which is one model of the big theory of mass communication. This theory emphasizes that the audience plays an active role in determining which media is chosen to meet their needs [5].

The concept of uses and gratification is also inseparable from gratification which refers to satisfying the needs generated through media exposure. Gratification has two aspects: gratification sought and gratification obtained. The motive for gratification sought is influenced by subjective beliefs, which assume that accessing the media will provide satisfaction to the individual. Meanwhile, the gratification obtained refers to several real satisfactions obtained by individuals for fulfilling certain needs after the individual uses the media.

2.3. Computer-Mediated Communication (CMC)

Nowadays, human communication tools are increasingly diverse, humans have begun to use electronic-based communication tools in interacting with others. In this globalization era, almost all human activities cannot be separated from digital technology-based tools. Almost all human interactions use it as a communication medium [9]. Susan Herring said that CMC is a communication that occurs between humans and one another via computer instruments. CMC allows a person to use communication tools that facilitate interaction between individuals without having to face-to-face or be physically close [3].

2.4. Video Conference

Video conferencing used audio and video to bring people to different places at the same time for a meeting. So that geographical factors, distance, and time differences are no longer an obstacle to the realization of communications that involves communicators in places that are far apart from each other. Simply put, video conferencing creates a conversation between two people (point-to-point) or involves several places (multi-point) with more than one person, in a virtual room. In addition to audio and video activity delivery, video conferencing also allows the exchange of documents, information displayed on computers, whiteboards, and messaging [4].

2.5. Peers/Peers Group

Peers have an important role in the life of each individual. Peers are a group whose members have the same age and position. Peers are formed when someone is involved in the same activity [10].

[11] Through peer interaction, individuals can obtain sources of information and comparisons about the world outside the family. The form includes individual changes that have a collective function, physical support, ego support, intimacy, care, etc.

3. METHODS

This study uses a qualitative approach to determine the uses of video conferencing technology-mediated communication in meeting the needs of interaction with peers during the Covid-19 pandemic. According to Bogdan & Taylor qualitative research is a research procedure that produces descriptive data in the form of written or spoken words from people and observed behaviour. Researchers chose a qualitative approach in this study to describe in detail the phenomenon under study, namely the uses of video conferencing technology-mediated communication in meeting the needs of interaction with peers during the Covid-19 pandemic. Researchers also conducted data

searches by asking direct opinions from people who have experience following the topic in this study accompanied by other document sources as support.

In this study, the authors used a narrative or descriptive research method in the form of a case study method. This research focuses on a particular object which studies it as a case. [12] The case study method is a type of descriptive approach, with research carried out intensively, in detail, and in-depth on an organism (individual), institution, or certain phenomenon with a narrow area or subject. Researchers interpreted the problem under study, namely the use of communication mediated by video conferencing technology in meeting the needs of interaction with peers during the Covid-19 pandemic by assuming that the researcher was not interested or not part of the person side being observed, and was only involved cognitively with the source.

The object to be studied is video conference as technology-mediated communication in meeting the needs of interaction with peers during the Covid-19 pandemic. The subjects in this study, are the users of video conference technology, with the coverage of individuals aged 9-21 years old, who interacted or established communication with peers using video conferencing during the Covid-19 pandemic. The data collection method that the writer used in this research is the unstructured interview method [13]. Unstructured interviews are flexible and open. This research was conducted during the Covid-19 pandemic so that combined online and face-to-face interviews by implementing health protocols such as wearing masks and physically distancing. Interviews were conducted on 4 people with different education levels, namely: Baradanu Kaleano (9 years old, 4th grade student of ABC Kids Elementary School), Kelly Shelina (14 years old, 2nd grade student of SMP Bhinneka Tunggal Ika), Sicilia Rafaelina Doa (17 years old, 3rd grade student of SMA Negeri 2 Jakarta), and Joshua Serafim (21 years old, Accounting student at Trisakti School of Management).

The data validity technique in this study using the triangulation of data sources that compares and checks the degree of confidences of the information obtained with other different sources. Researchers carried out checks and comparisons of sources based on informants who were interviewed (4 informant) with literature studies and journals from related secondary data sources.

4. FINDINGS AND DISCUSSIONS

4.1. The Uses of Computer-mediated Communication (CMC) Video Conference

Aliwarto states that video conferencing technology is a means of conversation between two or more people from several different places in a virtual room [4]. This is manifested in the form of video conferencing service applications that are widely circulating in the community, both free and paid, such as Zoom, Google Meet, Skype, Line, Whatsapp, Discord, WebEx, etc.

Video conferencing service applications being a prima donna for the community, especially during the Covid-19 pandemic. Almost all activities that require face-to-face interaction are carried out through this application. The interviewees said that they often use video conference service applications such as Line, Discord, Google Meet, Whatsapp for activities such as school and interacting with friends.

According to McQuail, [14] there are four motives or reasons for someone to use the media. These motives include diversion, personal identity, personal relationship, and surveillance. Based on the answers from the four resources that researcher interviewed, the biggest motive in individuals using video conferencing technology mediated communication is the personal relationship motive. This was said by the four speakers that the goal of individuals using video conferencing is the desire to establish relationships or interact with their peers which at the time of the Covid-19 pandemic could not be done. "In this pandemic, we can't see each other, so I miss them a lot. I'm trying to use video call… " (Baradanu Kaleano, Elementary school student), said.

Individuals tend to look for other people to meet their needs. One of the needs is the interaction process who needed peers as interlocutors. Individuals feel more comfortable talking, playing, and interacting with their peers. This is in accordance with the research of Nia & Loisa which found that individuals used media as a means of communication with friends [15]. Through the use of video conferences, individuals gained face-to-face communication networks indirectly to satisfy their interaction needs.

The surveillance motive in the use of video conference is also an additional reason for the desire to interact with peers. Individuals try to find information about the world to satisfy their curiosity that is currently hidden because they have to stay at home. Individuals seek and exchange information in the interaction process which has an effect on adding insight and knowledge of their current environment.

The topics or information sought in interacting with peers using a video conference are dominated by topics around the school. This is because the interviewees are still a student so that individuals have a great attachment to their duties and education. Meanwhile, the information sought by resource person number 4 who is a college student (already had sufficient maturity), is information about the world of work and building the future, which is specifically exemplified in topics around finance, how to manage finances, investing, and so on.

"... we often talk about financial finance, now in our ages have started looking for work, so talk about finance like investing or maybe later, what do you want to work, how about managing money. Hmm ya something like that" (Joshua Serafim, College student).

Rohmah's research [6] reveals that the results of individual polls using the media as an escape from their routine reach

62%. Meanwhile, in this study, half of the informants stated that they used video conference media to interact with friends due to boredom after doing a lot of activities (diversion). Then the other half said that individuals do not use video conferences to release their boredom, but rather the desire to interact with their friends.

Personal identity motive is the lowest motive for individuals using video conferencing. The four interviewees conclusively stated that they did not use video conferencing to strengthen individual values or self-understanding. Individuals reveal that the desire to use video conferences occurs because individuals are more likely to interact with friends such as chatting, confiding in, and playing games. But indirectly, the use of video conference had an impact on strengthening individual values and self-development. This was also expressed in Muntaha's study [11] which found that there was a significant relationship between peer social-interactions and social behavior or individual self-development. In this study, the interaction was carried out through communication media, mediated by video conference technology.

Based on the type of message used in video conference technology-mediated communication. Individuals tend to use text messages to invite their friends to gather in a video conference service application. Then, individuals using both audio and video messages in the form of video conferencing. It is also known that outside of the uses of video conference, individuals rarely share audio or video messages separately. Meanwhile, pictures are the message that most often shared in interacting with peers via video conference.

4.2. Gratification Sought in Using Video Conference to Interactions with Peers

Gratification sought is the satisfaction that individuals seek or want when consuming a certain type of media and motives that encourage someone to consume a media. Gratification sought is formed from one's belief about what the media can provide and one's evaluation of media content [16].

The existence of social factors from the Covid-19 pandemic which requires each individual to stay at home raises a need to find a medium for communication in order to satisfy the needs of interaction with friends. The results of the interview from the informants found that video conferences can be a solution to the limitations of face-to-face interaction that cannot be done during the pandemic. The four interviewees felt that using video conference could fulfill their interaction needs with friends. This is based on the uses of video conference which includes audio and video technology at the same time allowing several individuals to be in one situation simultaneously, even though they are far apart. This statement is in accordance with Aliwarto [4] that video conference technology can facilitate conversations between two people or more than several distant places in a virtual room and allows the exchange of information or joint activities.

In looking for the right media to interact with peers, individuals have the hope of freely communicating without any sense of deficiency. This expectation is based on the individual's desire to see the face of the interlocutor when establishing communication. Communication media, instant message chat, and telephone that only using voice system have not been able to meet the needs of individual interaction with peers. The informant said that he still felt something missing because he could not see the expressions or faces of his friends when talking using instant messages, chat or telephone.

Resource person, Kelly Shelina, a junior high school student revealed that she uses a video conference to see the reactions or expression of her friends. "Hmm, I'm using video conference so could see the reactions of my friends when we are talking each other". Through this video conference service application, individuals have the hope of being able to directly see the faces and expressions of their friends, even from a distance. This has also increased the intensity of its use because individuals have a greater sense of longing when they cannot meet their peers during the Covid-19 pandemic.

"Yes, we could say that, sometimes we hang out and talk, but now we can't see each other. So yeah, video calls really help me to see friends that we can't meet right now." (Joshua Serafim, College student).

One of the factors to finding satisfaction in selecting video conference is the content or features of that media. This is inversely proportional to the results of the research found by Fajrin & Tiorida [17] that effort expectancy does not have a significant effect on someone when choosing the video conference media to use. In this study, it was found that the features available in the video conference application and its complexity (in the form of difficulty or difficulty level of the application) were considered insignificant for use because they did not support performance, so they were neglected when used.

Meanwhile, based on the results of interviews, the features and complexity of the video conference application are the main considerations for someone choosing video conference media. Two interviewees said that the main reason individuals choose a video conference application is that easy to use, does not have many requirements, and has a general file size. Two other interviewees said that the appearance and features of the video conference application were the basis for the selection.

Informant number 1 who has an elementary education level prefers to use video conference on the Whatsapp application because on the mobile phone that he often uses, video conference on Whatsapp has a pretty good appearance compared to other applications. Informant number 2 who has a junior high school education level chose to use the LINE application for video conferencing because it has a unique feature in the form of facial effects. Informant number 3 who has a high school education level likes the Google Meet application because of its ease of watching together using the screen sharing feature. Similar to number 3, informant number 4 prioritizes the ease of using the

application followed by consideration of the size of the application file according to the device used so that there is no disruption in the communication process. Informant 4 is also considering and looking for an application that has a screen sharing feature for watching activities together and sharing picture messages together. The video conferencing application chosen is Discord.

In gratification sought, to select the video conference media to interact with peers, individuals really pay attention to the efforts in using the media. Individuals do not want huge efforts in using the media to interact with friends.

Playing activities together are the most dominant in interacting with video conference. Other interactions are sharing information, confiding in, doing assignments, and watching movies together. Basically, the activities carried out by individuals through video conference with peers do not have a significant difference with the activities carried out by individuals face-to-face or direct contact.

4.3. Gratification Obtained in Using Video Conference to Interacts with Peers in Covid-19 Pandemic

The gratification obtained is the real satisfaction obtained by a person after consuming a certain type of media. The gratification obtained asks specific things about what has been obtained after using the media [16].

In seeing the satisfaction that individuals get when interacting with peers through video conferencing, researchers describe it into five parts, namely information, personal identity, integrity and social interaction, and entertainment.

In accordance with the motives for using video conferences that were found, the highest satisfaction was found in the integrity and social interaction sections. Individuals feel the use of video conferences to interact with friends is very effective and easy especially during this pandemic, which requires individuals to carry out all activities from home. This satisfaction is expressed in the form of joy, happiness and gratitude because you can still see the faces of friends you usually meet at school, as well as in the circle of friends. The informant said that interaction using instant message chat and telephone was considered not able to provide satisfaction to users. The informants prefer to use video conferencing which can see the faces and expressions directly of their friends while talking. This study found that the facial expressions of the interlocutors were an important part of a person's interaction. Users relied on a real visual form rather than just writing or sound. It is also said that through using video conferences to interact with friends during the Covid-19 pandemic, friendships can remain well established. The relationship also can become closer and more open to each other.

In the interaction process, individuals also feel satisfaction in obtaining information such as information about the school, friends, even the world. Individuals freely share and get information to meet their own needs. One of the informants revealed "... sometimes we discuss things. So I

can hear my friends' opinions about the problem, then I considering and solve my problem too and keep the information outside as well." (Sicilia Rafaelina Doa, High School Student).

This research also found that satisfactory information obtained through video conferences can fulfill the curiosity of each individual. Then also this information makes the individual feel at peace because it can increase the sense of knowledge. The resource person conveyed that through information sharing interactions, individuals learn from each other and improve their own education. This means that individuals feel satisfaction in obtaining information that affects the exchange of views and understanding of something.

Another gratification obtained in using video conferences to interact with friends during the Covid-19 pandemic is a sense of pleasure and comfort as an emotional channel. It is undeniable that the Covid-19 pandemic has made individuals feel bored, stressed, and tired more often due to more activities that can only be done from home. Individuals feel that interacting with friends using video conferences can indirectly reduce boredom, stress, and excessive fatigue. Individuals reveal that the main purpose of using video conferencing is not as a diversion to routine but indirectly has an impact on it.

This can be seen when the resource person explains the interaction process carried out. Resource person 4 said that in joint activities, they often make jokes or funny words to cheer each other up. Then the informant number 3 felt that the activities that were carried out together, often became a consolation so that he made him refresh for a moment. An example given is the activity of watching together and celebrating birthdays virtually via video conference. Informant number 2 clearly expressed his comfort because he could joke with friends which at this time could not be done in person. Last but not least, informant number 1 felt very satisfied because he could play together as a form of self-appreciation after doing routine school assignments.

In the section on personal identity, researchers found the benefits or impacts of using video conferences in meeting the needs for interaction with peers during the Covid-19 pandemic. Three of the four interviewees were satisfied with the use of video conference which has an impact on developing individual values, namely becoming a better person. Resource person number 1 said that in the past, he was a person who rarely interacted with his friends both at school and at home. He feels embarrassed to invite someone to talk to or even play together. However, since the Covid-19 pandemic, which made someone look for media as a means of communication instead of direct contact, informant number 1 felt comfortable which had an impact on his development to become a more open person. He became bolder and often interacted with his friends to play together through a video conference service application. The same thing was expressed by informant number 3, who felt that he was getting a better person when interacting with friends using a video conference service application. His friends, who often asked to do assignments together, made her indirectly be diligent and did not delay the homework assigned. Informant number 4 said that through interaction

with peers using video conferencing, he shared his views and added new insights so that it could become a lesson for self-improvement that led to a better personality.

5. CONCLUSION

The use of computer-mediated communication video conferences by individuals is based on the desire to establish or interact with their peers, especially during the Covid-19 pandemic in which does not allow individuals to meet in person. Video conferencing is a solution to the limitations of face-to-face interactions that cannot be done during the Covid-19 pandemic. Then in meeting the needs of interaction with peers during the Covid-19 pandemic, the gratification sought by individuals in using video conference applications covered the features and convenience of the application as the main consideration. The individual also gets gratification obtained in using communication media mediated by video conference technology such as the amount of information obtained, the relationship between friends is getting better, entertainment when routine boredom, and makes the individual a better person.

ACKNOWLEDGMENT

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