MEDIA LITERACY: DEEPFAKES AND TEENAGERS EXPERIENCES IN HOAX PRODUCTION

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ABSTRACT

Communication technology facilitates information dissemination, but it also leads to information pollution. The youth, being the largest users, lacks filtering skills, making them vulnerable to false information. Teenagers in Pekanbaru City, who frequently use the internet, even though they are used to using the internet to produce and disseminate information, they may not realize false information is being spread. This research aims to look at the deep-fake experience among Pekanbaru teenagers. The method used in this research is qualitative with data collection techniques, namely interviews. The results of this study show that the media literacy experience of Pekanbaru teenagers in using the media is not for hoaxes and is at the level of technical skills of teenagers at an advanced level, critical understanding at a medium level, and communicative abilities at a medium level. In environmental factors, teenagers get it from peers and use deepfake not to produce hoaxes.

INTRODUCTION

The sophistication of communication and information technology makes it easier for individuals to communicate with each other, interact, watch entertainment, and conduct commercial activities. This activity allows information pollution, so people, especially adolescents, have difficulty selecting and sorting out information due to too much information circulating.

The results of a survey conducted by the Indonesian Internet Service Providers Association (APJII) in 2021-2022 stated that internet users in Indonesia aged 13–18 were 99.16%. Meanwhile, internet users aged 19–34 are 98.6%. This means that internet users are dominated by teenagers. There are many benefits to the ease of internet use, but it is undeniable that it also has many negative impacts.

The problem that has been encountered along with the swift flow of information is that users are only able to access and use digital media, which is not balanced with the ability to filter and validate information. Moreover, technological advances gave birth to artificial intelligence (AI) technology. Artificial intelligence in recent years has provided many new possibilities in various fields. One of the applications of AI technology is deepfake. Deepfake is a technology that replaces original video or

sound images with artificial ones. This technology is capable of altering videos or sounds that are very similar to the original. So this can be used to spread hoaxes. Through videos or sounds made through deepfake, someone can easily disseminate information that is not yet known to be true.

Teenagers who are inseparable from digital media are adept at producing content on digital media without realizing the consequences of their actions. Nowadays, there are many deepfake contents on social media that go viral, such as changing the singing voice of Korean idol group Blackpink to Dangdut. While this is entertainment, it can be misleading and provide information that is not in line with reality. The emergence of deepfakes has a negative impact that allows people to spread hoaxes and even commit fraud. This is related to the low level of media literacy.

Based on the results of the digital literacy index survey conducted by the Ministry of Communication and Information Technology (Kemenkominfo), Riau Province's digital literacy index is below average with a score of 3.35. Therefore, it is important for teenagers in Pekanbaru-Riau Province to have media literacy skills.

Having an understanding of media literacy will give a person the ability to analyze, evaluate, and communicate the content of messages received through the media. To prevent teenagers from being exposed to and even producing these contents. This makes media literacy very necessary in an effort to provide education for social media users, especially teenagers.

This research aims to find out the deepfake experience among teenagers in Pekanbaru City. This research is very worthy of research because it is hoped that the results of this study can contribute to improving media literacy in Pekanbaru City.

The development of increasingly sophisticated technology requires users to master various things, not only mastering technology but also being good at addressing the issues that accompany these advances. One of the advanced technologies that offers

functions that facilitate life is artificial intelligence (AI). AI technology is very useful and helps with a range of tasks, ranging from electronic devices, transportation, and smartphones to the world of education. Especially in the era of digital media, it must utilize technology that facilitates the work of teachers or students (Tjahyanti & Dkk, 2022).

The presence of AI technology is a breakthrough to facilitate people's activities. However, it can also have a negative impact. One AI technology that also contributes to the hoax problem is Deepfake. This technology provides a new color amid the variety of applications that offer convenience. With just the click of a button, you can change the voice and video of others as you wish, which is very similar to the original. This activity can be done easily and can be downloaded for free, of course, making it easier to spread information. Coupled with the reach and speed of social media, a convincing deepfake can quickly reach millions of people and have a negative impact on society (Westerlund, 2019).

Deepfake technology can create a manipulated piece of content that renders a person's image or voice. For example, a person's face is pasted into a show, like the person is on vacation. In reality, the image is the result of deep-fake technology. Deepfake technology is a hyper-realistic video using face swapping that leaves little trace of manipulation (Chawla, 2019). Deepfakes are the product of artificial intelligence applications that combine, replace, and superimpose images and video clips to create fake videos that appear genuine (Maras & Alexandrou, 2019).

The sophistication of AI technology makes it difficult for internet users to distinguish between real and fake. Deepfake is evidence of AI in creating and manipulating videos as if the video is actually done or acted by the person in the video (Khusna & Pangestuti, 2019). Initially, this technology was used for filmmaking and entertainment. However, many now abuse

the sophistication of deepfake as a tool for spreading hoaxes.

Moreover, the habits of media users, especially teenagers, do not filter and validate information, and often it will be directly forwarded to other friends. Even though they think they can distinguish news, teenagers still have difficulty distinguishing between fake and real news (Veeriah, 2021). Teenagers, as active users who cannot be separated from digital media so that they are adept at producing content, must at least have media literacy skills. Now everyone can use media to disseminate information, so an understanding of media literacy is needed. Media literacy skills are needed to avoid the threats of hoaxes, fraud, and crime in digital media. Digital media literacy can help improve the ability to identify hoaxes or prevent the further spread of hoaxes (Pradekso et al., 2018).

Likewise, teenagers in Pekanbaru City, in their social media usage activities, are exposed to the emergence of deepfakes. Given that deepfakes are popping up a lot on social media pages. It is undeniable that the high curiosity of teenagers will encourage them to find out about deepfakes. In this case, what the author wants to see here is more about how the deepfake experience among teenagers can create a gap for the spread of hoaxes.

Before writing this research, the author searched for several references to similar studies related to media literacy, deepfake, and those that are related to this research. Among them is research that has been conducted by Itsna Hidayatul Khusna and Sri Pangestuti researching Deepfake New Challenges for Netizens. In this article, it is explained why deepfake can be a new challenge for netizens and why technological advances in the field of information and communication have become a special concern for all groups so that they can react wisely. This research states that deepfakes are dangerous because they can spread hatred, become propaganda tools, and become political tools. So it is a new challenge for netizens who often use social

media. Netizans must have self-control and hone their emotional intelligence. In addition to digital media literacy, it is also necessary for social media service providers to monitor and make regulations for the use of deepfakes (Khusna & Pangestuti, 2019).

Another similar research was conducted by Haryadi Mujianto and Zikri Fachrul Nurhadi examining the impact of digital-based media literacy on anti-hoax spreading behavior. In this article, it is explained that the ease of accessing and exchanging information has led to the phenomenon of spreading hoaxes. This study aims to determine the impact of digital-based media literacy on anti-hoax spreading behavior among adolescents. The results show that digital-based media literacy has a fairly strong positive relationship with anti-hoax spreading behavior. This means that if media literacy skills are high, then adolescents have a high ability to counteract hoaxes (Mujianto & Nurhadi, 2022).

Based on several previous similar studies that the author describes related to public communication, it can be concluded that the deepfake phenomenon is very dangerous if misused and can have long-term consequences for digital media users. This research was conducted to see the experiences of teenagers in conducting media literacy with the concept of individual competence. According to the European Commission (2011), individual competence is defined as an individual's capacity to practice certain skills. This competence draws on a variety of abilities in using and utilizing information and communication technology, including the ability to use, analyze, and communicate messages. Three criteria are used to look at an individual's digital literacy experience. The three criteria are as follows: 1) *Use (technical skill), the* technical ability to use digital media, including the ability to operate digital media and understand all instructions in it, such as the ability to use information technology and use it actively. 2) *Critical understanding* is the cognitive ability to use digital media,

such as knowledge and the ability to understand the content and its functions, as well as regulation and user behavior when using digital media. 3) *Communicative abilities* are the ability to interact and participate through digital media, such as the ability to communicate and build social relationships and the ability to create creative content. This research aims to look at the deep-fake experience among Pekanbaru teenagers.

METHOD

The method used in this research is qualitative. Qualitative research methods generally focus more on interpreting phenomena or events, both general phenomena and those in social and individual life (Rosyada, 2020). This research will use a phenomenological approach that will capture the entire experience of the subject so that it will get objective data sourced from the experiences of informants who experience events directly.

Qualitative research is conducted to observe experiences in detail using specific methods such as in-depth interviews, focus group discussions (FGDs), observation, content analysis, virtual methods, and life histories (Haryono, 2020). Therefore, the data collection techniques used are in-depth interviews and observations with five informants. As for sampling using the purposive sampling technique, the subject is determined based on certain criteria, such as teenagers in Pekanbaru City who have been active in media for at least 2 years and are in senior high school. This selection is considered because they have been active in the media, so adolescents are able to understand the experiences that occur when using the media.

Researchers will ask several questions to research informants. In this case, research informants are teenagers who will provide answers to the questions asked. During the interview, the researcher will make a number of statements about the deepfake phenomenon, the spread of

hoaxes, media literacy, and other questions related to this research. Semi-structured interviews aim to obtain information more openly, where informants are asked to provide their views and ideas. In conducting interviews, researchers must pay close attention and record any information conveyed by informants (Sugiyono, 2018).

In this study, the data analysis technique used was the analysis of the interactive model of Miles and Huberman. This analysis is carried out interactively and takes place continuously from the beginning of the research to the end of the research until it gets the data needed and is complete. Activities in this analysis include data reduction, data presentation, and conclusion drawing or verification. These activities are interrelated, both before data collection, during data collection, and after data collection.

The data validity technique uses triangulation. The triangulation technique used in this research is source triangulation. Source triangulation is a technique for testing data by checking data obtained from various data sources, such as in-depth interviews, observation results, and other documents.

RESULT AND DISCUSSION
Teenagers' Experience in Media in Pekanbaru City

Social media is a platform that is very helpful for communicating and sharing information. The use of social media provides various facilities to its users, so that media users have different experiences when using the media. In this study, there are two categories of media user experience for teenagers, including those based on the type of social media application and media purpose.

First, the category of types of social media. The five interviewees who have passed the interview results said that all interviewees have many social media applications. These applications include: WhatsApp, Instagram, TikTok, Telegram, YouTube, and Line. All five applications are

on the smartphones of all interviewees. Furthermore, researchers also found that not only the five applications above, but there are other applications such as photo and video editing applications such as capcut, vsco, vn, inshot, and lightroom (Figure 1). Furthermore, the media experience of teenagers in this study also found that in accessing social media, all informants used personal data packages and, on average, spent 20–40 gigabytes per month outside of wifi usage when the informants were at home. In addition, it was also found that there are teenagers who still use the Facebook application to see information about their parents. Although the intensity of using Facebook isn't as much as using other social media. In this study, there was also one informant who had used the faceapp application with the aim of giving birthday greetings to his friend by changing his friend's face to a Korean artist.
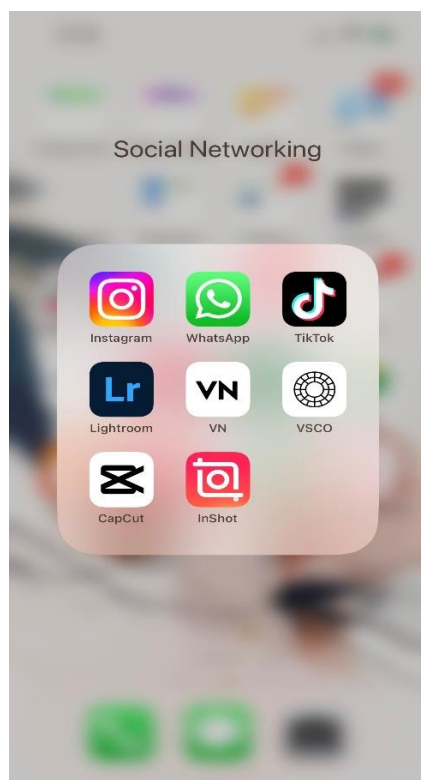

Figure 1. Application owned by one of the Informants.

Second is the category of media purposes. The findings in this study show that teenagers use media for four main purposes: making friends, entertainment, searching for information, and fear of missing out (fomo). All interviewees said that the main purpose of using social media is to make friends. They recognize that social media is very helpful in making friends. Social media is able to bind, strengthen friendships, and make friends with new people. Social media activities can be done over long distances. Making it easier for them to communicate and interact with each other. In line with the results of Marchellia & Siahaan's research (2022), it is said that social media really helps humans establish friendships, either with people they already know or people they just met.

In addition, media purposes are also carried out to find entertainment through the media, for example, watching YouTube shows. Another application used to find entertainment that is most widely used by informants is TikTok. In the TikTok application, the informants said that they got very interesting entertainment, so they were able to spend a long time scrolling through the content on TikTok. The presence of social media brings various functions to its users, including the media entertainment function (Whiting & Williams, 2013). Another media goal is to find certain information needed. This information is both for general information purposes and for school purposes and activities. All interviewees said that the media was very helpful in finding the various information needed. Many school assignments were also helped by easy access to information. Finally, the purpose of using the media was because the interviewees experienced the fear of being left behind by trends. This is commonly referred to as fomo (the fear of missing out). Most of the interviewees said that they would download a social media application if they saw that their friends also had the latest social media application. Fomo is the fear of missing out or missing important experiences or information if not involved in certain activities or interactions on social media and feeling compelled to

participate so as not to feel left behind (Sachiyati et al., 2023).

Teenagers' Experiences with *Deepfake* in Hoax Production Based on *Individual Competence Framework*

a. Technical Skill

In individual competence, the first indicator is technical skill, which is the technical ability of individuals to conduct media literacy. This technical skill includes several criteria, namely the ability to use media actively, utilize media features, and utilize social media for learning, business, and work. Adolescents' experience in using media technically in this study indicates that adolescents have good technical skills. Based on the research results, all interviewees stated that they created their own email and social media accounts. Some interviewees also stated that they have more than one social media account. They also stated that they know the functions of various features on social media and even spend a lot of time just accessing social media. Furthermore, the results stated that three out of five interviewees had the FaceApp application and knew the deepfake-making feature contained in the application. In addition, it was also found that some of the interviewees utilized social media as a tool to express themselves, such as uploading stories, feeds, and reels on Instagram. This shows that the interviewees already have the ability to access and operate digital media and platforms. The European Commission 2009 states that someone with advanced literacy has the characteristics of being very active in the use of media and has in-depth knowledge of the techniques of operating the media.

b. Critical Understanding

Critical understanding is the ability to understand, analyze, and evaluate media content. In addition, critical ability towards media functions, knowledge of media regulations, and media usage behavior. The results of this study also show the critical abilities of informants when using social media as a forum for exchanging information. Social media such as Instagram, Facebook, TikTok, and YouTube are applications that allow users to exchange information very quickly and easily (Waliulu, 2022).

In this study, it was found that the informants were able to distinguish between hoaxes and true information. Some informants also follow the development of information that appears through social media. This research also looks at the behavior of social media users in using the media and the behavior of users in responding to information and knowledge obtained from social media. The results of interviews with all informants also stated that they always verify or check for news obtained through social media. They do not immediately believe what is presented on social media. This activity is a process of rechecking the information that has been obtained to determine whether the information is appropriate and correct (Purnama, 2021). However, this is done if the information is still related to their environment. If the information has nothing to do with their environment, they do not care whether the information is a hoax or not.

Furthermore, this research also looks at whether the interviewees who have the faceapp application make deepfakes for the purpose of hoax production. The results showed that 3 out of 5 interviewees who have the application have never produced hoaxes or made deepfake videos for hoax purposes. The interviewees have the faceapp application because Fomo follows the existing trends. They try to make deepfake videos with their own faces to look beautiful and handsome, but they have no element of producing hoaxes. The informants also stated that they had made deepfake videos for friends; this was done to give birthday greetings only and did not include elements of producing hoaxes. The informants have understood what is good and what is not in doing activities on social media.

This shows that the results of the research get media literacy experience on

the indicator of critical understanding of sources at the medium level. Adolescents evaluate and verify when getting information through social media. The informants have enough cognitive abilities to use the media, such as the ability to understand, analyze, and evaluate media content. The informants also have enough knowledge about media regulation and know how to behave as good social media users.

c. *Communicative Abilities*

Communicative abilities are a person's ability to communicate, build social relations through the media, and produce media content. This ability includes the ability to build social relationships and participate in the digital media environment. In this category, there are several questions that are of concern in determining the communication skills of the informants, namely the ability to compose good messages and information in captions when posting photos or videos on social media, to first look for facts from news or information obtained before spreading news on social media, and to actively seek information such as knowledge related to school assignments and other important general knowledge.

In addition, this study also looks at the interviewees' experiences in responding to comments they get when they post photos or videos on social media. So that the function of social media is not only to obtain information but also to interact.

The results showed that the informants have a good ability to find information related to general knowledge, school assignments, and other information. They also have the ability to respond to comments obtained when posting a photo or video on social media. However, all interviewees stated that they had some difficulty and confusion in creating good captions when posting photos or videos. They stated that they have to look for inspiration or examples of interesting captions first and can spend a long time just stringing together an interesting caption according to the uploaded photo or video.

People are competing to upload photos and write captions to explain the meaning of the photo; some are in accordance with the photo, and some write wise words to decorate the photo (Rosdiana, 2019).

According to the communicative abilities category, the informants also do not produce hoaxes when uploading photos and videos on their social media. They actively seek the truth of news seen through social media. This shows that the informants, as active teenagers on social media in the communicative abilities category, are at a medium level. Based on the research results described above, the informants have a moderate level of ability to create good content and do not try to produce hoaxes or deepfakes using social media applications. This means that teenagers are able to compose good communication messages through social media.

In this study, the media literacy experience in producing hoaxes and deepfakes is seen at the level of individual competence only, which consists of technical skills, critical understanding, and communicative ability. The majority of the informants have a very good ability to operate and utilize social media. They are also able to communicate and interact actively through social media. The ability to understand and know the current issues faced by teenagers through social media is also quite good. The informants have the motivation to utilize, process, and analyze information, which is not an easy thing to do. However, some of the informants have different knowledge structures about what is discussed, which causes them to have different abilities to digest and analyze incoming information. All interviewees stated that when using social media, they did not intend to produce hoaxes; they only used social media features for entertainment and fun. However, they do not do bad things, such as producing hoaxes. This shows that the informants are teenagers who have good media literacy knowledge.

CONCLUSION

Based on the results of the study, it can be concluded that the experience of Pekanbaru City teenagers in media consists of two categories, namely the type of social media and the purpose of use. Based on the type of media used by teenagers, there are social media applications. These applications include WhatsApp, Instagram, TikTok, Telegram, FaceTime, Facebook, YouTube, and Line. These applications are on all informants' smartphones, and they prefer to use social media via cellphones with personal internet data packages. As for media purposes, it is found that the purpose of teenagers using social media is to make friends, entertainment, search for information, and fear of missing out, or what is commonly referred to as fomo (fear of missing out).

Teenagers' Experience with Deepfake in Hoax Production Based on the Individual Competence Framework for teenagers in Pekanbaru City, the first category, namely technical skills, shows that Pekanbaru City teenagers are included in the advanced level; the ability to operate and utilize the media is very good. While seen from the ctirical understanding category, it is included in the medium level. Teenagers have the ability to analyze and verify the media content they receive on social media. While the level of communicative abilities included in the medium level. Teenagers are quite active in using social media and are aware of and interested in various regulations that affect the use of digital media.

Teenagers also have good knowledge of techniques and language and can interact and create messages. Based on the overall results, it can be concluded that teenagers in Pekanbaru City have media literacy skills, especially in producing hoaxes. Teenagers utilize the faceapp application that can make deepfakes to produce photos and videos for personal entertainment and pleasure, not to produce hoaxes. Factors that encourage teenagers to use social media are environmental and individual factors. Environmental factors such as peers and individual factors to be able to socialize and add information for themselves.

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