

Interpersonal Communication With The Deaf In The Metaverse Age

Idegham Dani, Anang Anas Azhar

Universitas Islam Negeri Sumatera Utara

idgham12@gmail.com

Received: Jul 12, 2022 | Revised: Ags 22, 2022 | Approved: Sep 20, 2022

Abstract: Tanjung Selamat Village is one of the villages in Sunggal District, Deli Serdang Regency, Nort Sumatra Province, Indonesia. According to data from the Tanjung Selamat Village population census, this village has a low level of disability. There is only 0.001% of the total population with disabilities. However, technological advancements in the village have advanced, and the community is familiar with the term metaverse; this Cn is seen from the number of internet users in the village because the internet is part of the Metaverse. This study aimed to determine the evolution of metaverse use for deaf people. This study combines descriptive research with an observational approach to provide a comprehensive picture of deaf people's use of the Metaverse. This study included four participants: the village head of Tanjung Selamat Village, two deaf people and their families who are natives of the village of Tanjung Selamat, and one metaverse user who is in the city of Medan. According to the findings of this study, the deaf in Tanjung Selamat Village has not been able to use Metaverse to facilitate communication. However, the seeds of technological progress have been used by the deaf, as evidenced by their use of an application to send messages as an easy way to communicate. On the other hand, there is great hope that technological advancements, particularly the Metaverse, will reach all corners of the globe and be put to good use.

Keywords: *Interpersonal Communication, Metaverse, Deaf*

Introduction

Communication is a fundamental human activity that allows people to interact with one another (Mulyana, 2002). Because humans are social creatures who live in groups and cannot live alone, they require other people to live their lives; one way to establish relationships is through communication. The communication process can take several forms, including language; language can take the form of signs, gestures, writing, pictures, and speech. Communication will run smoothly and successfully if there are no communication barriers in the process and everything goes well (Sarmiati, 2019).

Communication is divided into several types, one of which will be discussed is interpersonal communication. Interpersonal communication is the exchange of information between people. In other words, interpersonal communication is the concept of people expressing their feelings, emotions, and other information directly or through the media. Interpersonal communication focuses on exchanging messages and how you comprehend and discuss the exchange process (Rakhmawati, 2019).

Deaf people have difficulty, deficiency, or loss of hearing ability, resulting in difficulty speaking wholly or partially due to hearing aid malfunctioning, making it difficult to use hearing aids and communicate in everyday life (Sadjaah, 2005). The deaf community typically communicates through sign language, gestures, eye contact, and so on. Communications for deaf people, particularly in Indonesia, are divided into two categories: the Indonesian Sign Language System (SIBI) and the Indonesian Sign Language (ISL) (BISINDO). Both of these sign languages can be used by people who are deaf or have difficulty speaking (Fifi, 2018).

Because technological advancements have diverted people with hearing impairment from being interested in learning about SIBI and BISINDO, SIBI and BISINDO have become less practical. On the other hand, technological advancements have gone too far, and the term "Metaverse" is now well-known to the upper middle class. Metaverse is a digital reality that combines social aspects, online games, Augmented Reality (AR), Virtual Reality (VR), and Cryptocurrencies to enable users to interact virtually. Users in the Metaverse can do whatever they want, just like in the real world, such as interacting, buying and selling transactions, meeting, playing together, and doing group activities. It is no surprise that the Metaverse is sometimes referred to as a real-world simulation. The Metaverse can be said to make human life more accessible; for example, one can go there virtually by activating some hologram feature instead of making a tiring trip to the office. A person can travel worldwide without having to pay expensive fees in the future because he can travel in the metaverse world, where they can connect via the internet network. The Metaverse can be defined as a world that is infinitely connected. With this advancement, even deaf people can communicate verbally in the Metaverse world. People with special needs, such as the deaf, blind, mentally retarded, physically disabled, illiterate, double-impaired, and speech-impaired, can live without limitations in the Metaverse. The researcher's interest in this study is to discover how far the use of Metaverse is for the deaf in Tanjung Selamat Village (Gumelar et al., 2018).

Theoretical Review

Interpersonal communication is communication carried out directly by two or more people so that messages from the communicator to the communicator are received directly, both verbally and nonverbally, and is known as dyadic communication. According to Mulyana (Mulyana, 2002), dyadic communication is a type of interpersonal communication in which only two people participate. The parties involved in dyadic communication are intimate, and the message is received spontaneously and stimulated. Examples of this communication include communication between a husband and wife, two friends, and so on. According to Agus Maulana, interpersonal communication is a direct interaction between two or more people in which the sender gives the message directly, and the recipient receives the message directly. Interpersonal communication is the first stage of humans interacting with other humans through communication, which is realized because humans are social creatures.

A deaf person has severe to total hearing loss and cannot understand what is being said without reading the interlocutor's lips. Deaf children have a partial or total loss of hearing ability due to hearing function damage, making it difficult for them to live their lives. Deaf children have a hearing impairment, which means they cannot hear sounds perfectly or at all. Deaf people are classified as either deaf or hard of hearing (Cahya, 2013).

According to Winarsih, deafness is a broad term for hearing difficulties ranging from mild to severe (Winarsih, 2010). Deaf people are people who have lost their ability to hear, which causes receiving information through sense of hearing difficulties. According to Tin, hearing impairment is a condition in which individuals experience damage to their sense of hearing, causing them to be unable to capture various sound stimuli or other stimuli through hearing (Suharmini, 2009).

The metaverse trend and concept have been around for quite some time. As technology advances, the Metaverse grows in popularity and attracts the attention of technology companies. Metaverse first appeared in Neal Stephenson's 1992 science fiction novel *Snow Crash* and Ernest Cline's *Ready Player One*. The Metaverse is described in both novels as a space that connects the real and virtual worlds. To enter the Metaverse world, you will need appropriate devices, such as AR or VR glasses, as the Metaverse fully utilizes the AR and 3 Dimensional worlds. Like other virtual worlds, the Metaverse is inextricably linked to the internet. This is aided by the advancement of ever-more sophisticated technology.

According to J.P. Morgan, the Metaverse is a seamless convergence of our physical and digital lives, creating a unified virtual community where we can work, play, relax, transact, and socialize (Papagiannidis et al., 2008). The Metaverse is still in its early stages, and no definition encompasses everyone who can turn. However, the theme of what the Metaverse is and could be is emerging. The critical point is that there are many virtual worlds, speaking in a way that allows people to deepen and expand social interactions digitally. It accomplishes this by incorporating immersive three-dimensional layers into the web, resulting in a more authentic and natural experience. Metaverse can enable access from the comfort of one's home, breaking down barriers and democratizing access to critical goods, services, and experiences.

Research Method

This is a case study investigation. A case study, according to (Creswell, 2007), is research that investigates a related case. This study employs a qualitative descriptive analysis method that eliminates the need for numbers. According to (Nugrahani & Hum, 2014), qualitative research produces discoveries that cannot be obtained through statistical data or other quantitative research. As the data source for this research, all data obtained are based on observations, interviews, oral and written data, or the perpetuation of the moment in images.

Tanjung Selamat Village is the subject of this study, with research subjects consisting of four resource persons, including the Village Head, two deaf people and their families, and one metaverse user. This study was carried out in May 2022. Data was gathered through interviews, observations, and documentation. Following that, the researchers documented the study's findings by writing what had been discovered in the field descriptively, ultimately, and clearly. Data validation using a triangulation model involves a three-step checking process that includes check, re-check and cross-check. This is done to ensure that the data obtained is correct (Nugrahani & Hum, 2014).

Result And Discussion

Tanjung Selamat Village is one of the villages in North Sumatra's Sunggal District, Deli Serdang Regency. According to Sapir Andinata, the Head of Tanjung Selamat Village, of the total population of 5,843 people in the 2021 data, as many as six residents experienced cases of disability, with two of them having hearing loss/deafness, one having Down syndrome, and three being physically disabled from birth. This data shows that the number of disabled people in Tanjung Selamat Village is minimal, accounting for only about 0.001% of the total number of disabled people in Tanjung Selamat Village.

When asked what programs the village government has developed for people with disabilities, particularly the deaf, to assist them in communicating, the village head responded that the programs that have been implemented include creating the Healthy Indonesia Card (KIS) and providing proper education by sending them to Extraordinary Schools (SLB) and conducting periodic checks at the village PUSKESMAS.

Sri Wahyuni, a 23-year-old deaf woman who was the speaker, lives at Jalan Perjuangan Dusun 1b. The resource person has had hearing loss since he was six months old and began having convulsions; however, due to limited financial resources, his family did not take him to the hospital until he was one year old. When the interviewee was a year old and able to walk, his family tried to call his name but was never answered; it was then that his family realized his son had a hearing loss. The interviewee had total hearing loss until now, so he could not hear anything. According to his family

"After the incident, we called him, and he did not respond; we realized he had hearing loss and immediately took him to the health center, where he was examined and found to be deaf; from there, he was immediately referred to the hospital, but we brought him home because we did not have any money." back then, until now, and finally, let us be honest about the current situation."

The surrounding community is very accepting of the presence of an informant with hearing loss in his neighborhood. The community understands the informant's limitations, though it was discovered that the local community admitted to having difficulties communicating with the resource persons. One way that the informant's interpersonal communication with the community is not hampered is by using paper media; usually, the resource person writes what he is saying, and sometimes the resource person also uses sign language. The resource person is also knowledgeable enough to read the interlocutor's mouth movements. One way informants can reduce barriers to communicating with the public is by using the digital world.

Informant people are aware of technological advancements. The resource person typically uses a cell phone to communicate with his family for interpersonal communication through technology. Informants learn about technological advances from their families; this is done in order for families and the surrounding community to communicate with resource persons. The sources have no information about progress in the Metaverse itself. The resource persons hope that if the Metaverse assists the resource person in communicating, the resource person will want to use the Metaverse.

Tedi, a 25-year-old deaf person, is the second resource person. Since the age of one year, the informant has had hearing loss. The informant was sick at the time and was given medicine; however, because too much medicine was taken, the doctor eventually sentenced

the informant to drug poisoning. The second interviewee, unlike the previous ones, had a moderate hearing loss because the source could still hear the sound even when it was weak. The resource person can still communicate verbally, but it is not always clear. The resource person gained an understanding of how to communicate verbally because she had studied at the Markus Special School (SLB) for two years at the Elementary School level. The interviewees received a slightly negative response in their neighborhood. The surrounding community maintains distance from the resource person. They do not want to interact directly with the resource person because they are thought to have communication disorders.

The resource person is an active participant in the digital world and frequently communicates through it. The digital world can also be used to find friends and groups you are interested in. Resource people prefer to communicate using the VideoCall feature because it allows them to express their faces. The resource persons' access to the digital world cannot be separated from their family's support for the resource person. The family believes that by giving sources access to the digital world, they will be able to obtain more open information about the outside world.

Moreover, this hope can be said to have come true because the informant once asked to purchase a VR device for internet access. This time, the resource person is keenly aware of the advancements in metaverse technology, even though the speakers only use VR to play games. Researchers attempt to explain the usefulness of VR in the Metaverse, with the positive impact being much more significant for people with disabilities. His family only recently learned of this information, but the main barrier, according to his family, is the market's high price for VR.

A metaverse user is the following resource. Juliando Syam is from Aviation Street in the Medan Tuntungan District of Medan City. Researchers are looking for data on this informant because only this informant, as a metaverse user, is closest to the research location. When the resource person heard that Facebook was changing its name to Meta, he discovered information about the Metaverse for the first time. In the news, Mark Zuckerberg, the founder of the Facebook application, stated that the name change was inspired by the word Metaverse, which according to Facebook, means "beyond." According to Mark Zuckerberg, Meta is a reminder that there is always more to build on.

The resource person followed the news until the source became curious about what is known as the Metaverse. The narrator investigates further and eventually enters the Metaverse.

"I had an interesting experience when I entered the metaverse world." In the same container, I can meet many people. People around me think my activities are a waste of my time; they are unaware that I can earn money in the Metaverse by selling NFT (Non-Fungible Tokens). There are various types of metaverses and their applications. There is a metaverse for gaming and a simulation of the natural rich world that went viral yesterday. There is a Lesral Metaverse, now used for simulations of the natural world, where we can build houses and other structures. The price of land in the Metaverse has risen to 170 million."

It is possible for deaf people to use Metaverse to communicate fluently. In the Metaverse, you translate verbal language into nonverbal language and vice versa. This

procedure is carried out in the metaverse world with the assistance of Artificial Intelligence (AI). This enables deaf people to communicate "normally" in the Metaverse. For example, when a deaf person communicates in the Metaverse, the interlocutor will communicate verbally. AI will translate the verbal discussion into non-verbal language, which can be in the form of writing, pictures, or symbols seen by the deaf, and the deaf person will only need to type what he wants to say, after which the AI will translate non-verbal language into the verbal language (voice). This process gives the impression that the deaf can speak, even though AI is speaking. According to the researcher, people with disabilities will appear "normal" in the Metaverse.

However, more devices, such as speakers, portable keyboards, and others, are required to achieve the desired results. Because of the high cost of accessing the Metaverse, not all levels of society can enjoy its use for the time being. Only large corporations, such as Meta, Microsoft, Google, NVIDIA, Unity, Shopify, and Qualcomm, have dared to enter the Metaverse. Because there are still very few companies developing metaverses, this is most likely what drives the high cost of all metaverses.

Conclusion

For the time being, Metaverse appears to be the dominant force among young internet users. The Metaverse allows one to simplify all of the people's affairs; as the saying goes, "keep away the near," which may also be what the creator of the saying means. Although there are numerous advantages and disadvantages to the development of the Metaverse, it cannot be denied that the positive impact caused by the Metaverse is significant. According to this study, it positively impacts metaverses for people with hearing impairments.

Researchers discovered that the use of Metaverse is currently relatively undeveloped, particularly in Tanjung Selamat Village. However, the seeds of the Metaverse have been seen in the above research related to interpersonal communication in the metaverse era for the deaf. Although communicating via digital is not monotonous, all resource persons use technology. This is highly beneficial to the surrounding community regarding communicating with the deaf. When deaf people communicate using digital media, the community benefits greatly; it may be even more beneficial when deaf people already know about and use the Metaverse; it is believed that no communication disorders occur when they use the Metaverse. Despite the high cost of accessing the Metaverse for deaf people, the Metaverse is extremely useful for deaf people in communicating.

Recommended

The Metaverse is a popular trend among the general public, but the fact is that few people know or understand how to access it. Furthermore, getting tools to access the digital world remains prohibitively expensive, with large and heavy items that we cannot use in our daily lives. In the future, more in-depth research on using the Metaverse is required. Let us wait; no one knows about the times; perhaps in the future, there will be a simpler VR, at a lower cost, that can be enjoyed by all levels of society, particularly the deaf.

Bibliography

- Cahya, L. S. (2013). Buku Anak untuk ABK. *Yogyakarta: Familia*.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, California: Sage Publication. Inc.
- Fifi, N. (2018). *Problematika anak tunarungu dan cara mengatasinya*. Quality.
- Gumelar, G., Hafiar, H., & Subekti, P. (2018). Bahasa isyarat indonesia sebagai budaya tuli melalui pemaknaan anggota gerakan untuk kesejahteraan tuna rungu. *Inf. Kaji. Ilmu Komun*, 48(1), 65–78.
- Mulyana, D. (2002). *Ilmu komunikasi suatu pengantar*.
- Nugrahani, F., & Hum, M. (2014). Metode penelitian kualitatif. *Solo: Cakra Books*, 1(1).
- Papagiannidis, S., Bourlakis, M., & Li, F. (2008). Making real money in virtual worlds: MMORPGs and emerging business opportunities, challenges and ethical implications in metaverses. *Technological Forecasting and Social Change*, 75(5), 610–622.
- Rakhmawati, Y. (2019). Komunikasi Antarpribadi Konsep dan Kajian Empiris. *Surabaya: CV. Putra Media Nusantara*.
- Sadjaah, E. (2005). Pendidikan bahasa bagi anak gangguan pendengaran dalam keluarga. *Jakarta: Depdiknas Dirjen Dikti*.
- Sarmiati, E. R. R. (2019). *Komunikasi Interpersonal Elva Ronaning (elva R. Roem (ed.))*. CV IRDH.
- Suharmini, T. (2009). Psikologi anak berkebutuhan khusus. *Yogyakarta: Kanwa Publisher*.
- Winarsih, M. (2010). Pembelajaran Bahasa Bagi Anak Tunarungu. *Perspektif Ilmu Pendidikan*, 22(XIII), 103–113.