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# **Interpersonal Communication Model for Children with Special Needs**

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Abstract: The emphasis of this study is on how children who have special needs communicate with one another (deaf). Participant observation, interviews, and documentation are among the methods that are used throughout the data-gathering process. According to the findings of the research, the interpersonal communication model for deaf children is made up of two different models, one of which is the dyadic communication model. This kind of dyadic communication does not take place during the teaching and learning process; rather, it takes place outside of regular class hours. The whole communication model comes in at number two. Throughout the teaching and learning process, as well as outside of regular class hours, total communication is used. employing both symbolic interaction theory and ethnography theory as analytic frameworks. This demonstrates that the process of the interpersonal communication model is carried out face to face and at close distances, which makes it simpler to speak with deaf children since they are more accessible.

**Keywords:** Communication, Special Needs, deaf children.

# 1 Introduction

When authors refer to interpersonal communication, what we mean is a face-to-face interaction between two or more individuals. This may be a conversation over the phone or in person. During this kind of communication, the sender may convey messages directly to the receiver, and the receiver may also receive and react directly to the messages that they have received. The great majority of interactions between individuals include some type of verbal exchange, and the vast majority of these verbal exchanges are accompanied by some form of nonverbal signs [1]. Oral communication accounts for the vast majority of these interactions. 4 The purpose of interpersonal communication is to bring about changes in attitudes and behaviors, to create and maintain meaningful relationships, to play and have fun, to provide a helping hand, and to unearth personal or intimate facts. One of the other purposes of this kind of communication is to learn more about the outside world.

Children who fall into the category of having special needs are a subgroup of children who, in comparison to children in general, have an individual and distinct set of criteria that need to be satisfied. According to Eren et al [2] Children who have been given a diagnosis with a handicap are sometimes referred to as extraordinary children. And because of these circumstances, children who have special needs often suffer a range of communication issues, including language disorders, speech disorders, voice disorders, rhythm disturbances, environmental disturbances, perceptual disturbances, and cultural abnormalities. If the two conditions of having social contact and being able to communicate with one another are not satisfied, then the social interaction that takes place won't go off without a hitch. One of the conditions for effective participation in social contact and unhindered communication is the skill to listen carefully. Therefore, the child who is deaf is one of the children who have specialized requirements and have difficulties in their ability to interact socially with



other people.

Deaf children are children who either have a partial loss of hearing function or a whole loss of hearing function, which has a substantial effect on their lives [3]. Deafness may affect a child's development in a variety of ways. According to Peterson et al [4] children who are deaf face several obstacles, especially those that are connected to the development of their linguistic and social abilities. As a consequence of their hearing loss, children who are deaf have difficulties in their capacity to interact with their hearing classmates, which also adds to the children's language difficulties. At first look, it seemed as if the deaf children who attended the school where the research was carried out appeared to have normal physical features. However, when the youngsters were invited to engage in conversation, it became very evident that they had a hearing handicap.

Educating deaf children is difficult work, and as a consequence, instructors require a particular model of interpersonal communication to use with these pupils [5]. This model should be adapted specifically for use with deaf students. For the messages that are sent to deaf children to be realized as well as understood, or for deaf children to be able to respond to or remark on the communications being conveyed.

Both the previous study and the one that is now being conducted are centered on the idea of investigating the interpersonal connections that may be made between children who have special needs and persons who do not have such needs. This is the similarity that links the two different bodies of work together. The topic of interpersonal communication serves as the focal point of both the discussion and the material, even though the two contexts are quite different from one another. The disparity may be attributed to a wide variety of distinct factors. This takes into consideration the cultural features of each region, while previous research did not address the problem of how deaf children's interpersonal communication should be represented in terms of ethnographic communication. This takes into account the cultural aspects of each region.

# 2 Methods

This study makes use of qualitative research methods and adopts an anthropological methodology for its communication procedures. This research will establish a model of interpersonal communication that can be used with deaf kids who are enrolled in junior high school. The purpose of the study is to accomplish this goal. Children that are hard of hearing are often used as participants in research endeavors that make use of sign language. They are members of a group that communicates with one another through sign language, which is their unique kind of specialized language. The investigators of this study have decided to collect their data through the means of observation, interviews, and documentation because they are interested in comprehending the interpersonal communication model of children who have special needs. Specifically, they are interested in understanding how these children interact with one another. A qualitative analysis was used as the technique of data analysis for this specific research study that was carried out. The study is carried out only based on facts or happenings seen in the research area, and the results are then presented in a descriptive way making use of the ethnographic methodology. The viewpoint that the subfield of anthropology known as the ethnography of communication has on how people communicate is the topic that is investigated by the ethnographic research model.

# 3 Results and Discussion

#### **Subject Interpersonal Communication Model**

Deaf children give equal weight to both verbal and nonverbal means of communication [6]. This is something that takes place both within and outside of the educational setting. Researchers found that to interact with deaf children, teachers use both verbal and non-verbal language. This is because deaf children have difficulty understanding speech. This is also the case while communicating with other children who have special needs, with parents who also have deaf children, and with other children who are deaf.

Conversely, when deaf children interact with one another and communicate with one another, they depend more on nonverbal language than spoken language. Through the use of sign language and the movement of their lips, a young kid who is deaf has the same capacity to communicate as any other deaf child. These lip movements are only used in conjunction with sign language since, with the aid of lip movements, it will be a great deal less difficult to communicate with children who have trouble hearing. Napoli et al. [7] that children and adolescents who are deaf rely on vocalizations and signs as their primary means of verbal communication. The term "nonverbal communication" encompasses a wide range of modes of expression, including but not limited to pictures, facial expressions, symbols, and hand gestures.

In the schools that were investigated, developing students' communication skills was seen as one of the most important goals to pursue. This is because students who can do so will have an easier time engaging with other people, which will make them more beneficial to the lives of the wider community. This is because students who can do so will have an easier time dealing with other people. Hall et al [8] stated that when deaf children reach adulthood, society expects that



they will be able to compete successfully in the working world if they have mastered both verbal and non-verbal communication skills. This is because society believes that non-verbal communication is more effective than verbal communication in conveying meaning. Because of this, it is highly important to educate deaf children skills in verbal communication in addition to training them to communicate non-verbally. This is because both forms of communication are equally important. Researchers have shown that even though they have a hearing impairment, deaf children and adolescents are capable of a broad array of skills.

It has been shown, based on observations conducted in the field, that deaf children can communicate and interact with hearing adults, particularly with teachers and other children who have specific requirements (communicators). Razalli et al [9] stated that deaf children can comprehend the message that is being sent to them and may make sense of it by basing their understanding on what is being spoken to them. To restate what was said in the last exchange, the fundamental idea behind communication is the act of conveying one's ideas, emotions, or desires to another person.

Face-to-face contact is essential for all communication activities that take place not just between children who are deaf but also with teachers or other children who have special needs. This applies to all communication activities that take place between children who are deaf. This is done in a one-on-one setting so that deaf children can grasp what is being talked about or what is being communicated to them. The results of the researchers' observations conducted in the field led them to the conclusion that the kind of communication process that took place was interpersonal communication. This conclusion was reached based on the findings. In this situation, the process of communication is carried out using two distinct models: the dyadic communication model and the overall communication model. Both of these models are described in more detail below.

#### **Dvadic Communication Model**

Communication that goes in both directions is referred to as dyadic communication. This kind of communication is characterized by its use of small distances, its sending and receiving of information in an unplanned manner, and its face-to-face nature. It is possible for the sender and the receiver to exchange roles fast within this communication process. For example, the communication that takes place between a teacher and their class, between two friends, between parents and their children, and so on. Both communicators and communicants are in the same position about the nature of their roles, and the communication process may begin and conclude at any given location and at any given time. Since the definition of dyadic communication itself is communication that may take place anywhere and at any time, as long as the communicators and communicators are near one another and communicating face to face, this kind of communication can take place everywhere.

The findings of the observation show that a teacher and a deaf student can communicate with one another via the use of nonverbal language. In this particular instance, a teacher wears a downcast attitude as another instructor watches. One of the students was also aware that their instructor was upset. When talking or interacting with deaf children, both parties must face each other face to face, and their facial expressions and body language must be clear for the deaf children to comprehend what is being said. This interaction between the hearing instructor and the deaf student is an example of nonverbal dyadic communication involving facial expressions.

A youngster who is deaf and his or her instructor is having a conversation with a single interlocutor face to face [10]. It is clear from this example that the deaf student, as well as the instructor, comprehend what is being spoken about or the information that needs to be sent, and that feedback is taking place. Researchers say that to communicate and interact with deaf children face to face deaf children are more focused on the message conveyed by the teacher and can understand the intent and message, so face-to-face communication and interaction with deaf children is necessary. These findings are based on the results of observations made in the field.

According to Kyle [11] because deaf youngsters can read written text, this approach is ideal for those individuals who are unable to utilize sign language. As the researchers themselves found out when they attempted to communicate or engage with hearing-impaired youngsters via the use of spoken language in written form. The researchers found that aside from face-to-face contact between instructors and deaf children, sign language was the most effective mode of communication between teachers and deaf students. When hearing-impaired children communicated or engaged with other hearing-impaired children, this was also done.

Because this kind of communication is carried out face to face and at a close distance, it is simpler for a youngster who is hard of hearing to notice the gestures made by the other person. This kind of dyadic communication is likewise carried out by two individuals who take turns transmitting messages, with the sender of the message having the ability to switch roles and become a receiver at any moment [12]. message as well as vice versa, the receiver of the message can switch roles and become the sender of the message at any moment. When it comes to dyadic communication, this is not something that takes place during the teaching and learning process; rather, dyadic communication is something that only takes place outside of class hours.



#### **Total Communications Model**

The purpose of total communication is to meet communication goals, which implies that the sender and receiver of communications understand each other to the extent that they are not confused by one another. Total communication is a concept that tries to build an effective community between deaf or deaf children and the larger community by employing the mediums of speaking, reading lips, listening, and gesturing in an integrated way. This is done to reach the goal of total communication.

According to Yasin et al [13], the complete communication process makes it simpler for instructors and deaf students to speak with one another, which is very helpful in terms of the teaching and learning process.

During the teaching and learning process, a teacher and a deaf kid employ entire communication. This means that the instructor explains things in the vocal language and uses books as a tool, while the deaf child only uses hand motions to answer inquiries from the teacher.

The complete communication model is the one that is used to facilitate communication between the instructor and the deaf student. Because it seems like the instructor instructs students on how to pray by having them do various hand gestures. While reading a prayer and utilizing written media, specifically a paper holding the text of the prayer that will be provided to the deaf kid so that the child can see the text, the prayer will be read to the child.

Aside from the use of sign language in the process of teaching and learning, there are other media used for writing tools, reading books, and other media that may be used in teaching materials. These can all be included in teaching materials. In the context of teaching and learning, communication is regarded to be a type of whole communication when it serves the purpose of facilitating the transmission of messages to deaf children while communicating. Especially when it comes to learning, since this comprehensive form of communication encompasses all facets of spoken language, including spoken, written, and nonverbal components [12]. The actual use of complete communication when the instructor is preparing the lesson is shown by the fact that the educator has prepared teaching materials [14].

Teachers must communicate in full with deaf students while they are in the process of learning [15]. This means that they should not only use verbal communication but also use gestures, body language, expressions, and other tools as a supplement to learning material so that deaf students can comprehend what is being taught to them. According to Ngobeni et al [16] when talking with deaf children through whole communication, there are many times also instructors present in addition to the teaching and learning process that takes place.

According to the findings of observations made in the field, schools employ complete communication as a means of communication, particularly for students who are deaf, to ensure that reception and delivery go off without a hitch. One of the advantages of comprehensive communication is that it helps deaf children accept themselves as they are while simultaneously teaching them language skills at the earliest possible age to suit their requirements in a manner that is tailored to their level of ability.

The authors conclude that the total communication model is a communication model that is implemented by combining verbal and nonverbal language using several tools to make it easier for deaf children to understand, particularly during the learning process. This conclusion is based on the explanation that was provided above. During the teaching and learning process, this complete communication is used. However, in addition to its use within the context of learning, this communication paradigm may also be utilized in other contexts.

The researchers noticed that the deaf children's verbal communication took the shape of sounds, but the articulation was not obvious. This was based on the findings of field observations, which showed that the researchers. In addition to this, you need to be aware that the sound that is produced by a deaf child's lips is the sound that is uniquely associated with him.

The process of communication between instructors and deaf children, fellow deaf children, children with special needs, and deaf children takes place face-to-face and intensively to make it simpler since, as is well known, deaf children depend only on sight to understand what is being said to them. If there is even one of these people there, whether it is a teacher with a deaf kid, fellow deaf children, or a child with special needs with a deaf child who is not focused, then it will cause a failure to receive the information or message that is to be delivered.

When it comes to the teaching and learning process, the teacher must interact directly with deaf children. This is done so that the deaf kid may observe the instructor's motions unobstructed and directly throughout the process. Children that are hard of hearing can comprehend what their instructor is saying in this setting. If a kid who is deaf is in the class, the instructor must take extra care to enunciate each word properly and carefully so that the student can have a full grasp of what is being said.



# 4 Conclusion

Dyadic communication, in which information is exchanged in two directions simultaneously, is employed in the classroom. Interactions between the sender and the receiver that are not part of the original message are common throughout this stage of communication. In other words, the process of this communication model is carried out in an alternating form so that it may deliver messages in which the sender of the message may at any moment change to become the recipient of the message and vice versa. This enables the provision of communications in which the receiver may, at any time, switch roles and become the sender. The teaching and learning process does not allow for dyadic communication or conversation between two, to take place; rather, dyadic communication takes place solely outside of class time.

The phrase "total communication" is often used when talking about how to teach deaf youngsters. This phrase refers to a method of communication that makes use of both spoken language and signed language at the same time. Deaf children frequently benefit from the employment of several specialized tools in this kind of communication, particularly throughout the learning process. This comprehensive style of communication is employed at different moments during the teaching and learning process. However, this kind of interaction may be used in contexts other than the classroom as well.

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# **Conflict of interest**

The authors declare that there is no conflict regarding the publication of this paper.

#### References

- [1] Mavridis, N. (2015). A review of verbal and non-verbalhuman-robot interactive communication. Robotics and Autonomous Systems, 63, 22-35. https://doi.org/10.1016/j.robot.2014.09.031.
- Eren, F., Çete, A. Ö., Avcil, S., & Baykara, B. (2018). Emotional and behavioral characteristics of gifted children and their families. Archives of Neuropsychiatry, 55(2), 105. 10.5152/npa.2017.12731.
- Hall, M. L., Eigsti, I. M., Bortfeld, H., & Lillo-Martin, D. (2018). Executive function in deaf children: Auditory access and language access. Journal of Speech, Language, and Hearing Research, 61(8), 1970-1988. https://doi.org/10.1044/2018 JSLHR-L-17-0281.
- Peterson, C., Slaughter, V., Moore, C., & Wellman, H. M. (2016). Peer social skills and theory of mind in children development. Developmental with autism, deafness, typical psychology, 52(1), or https://doi.org/10.1037/a0039833.
- Dorn, B. (2019). The changing role of teachers of students who are deaf or hard of hearing: Consultation as an increasing part of the job. Journal of Educational and Psychological Consultation, 29(2), 237-254. https://doi.org/10.1080/10474412.2018.1502087.
- Dewani, A., Bhatti, S., Memon, M. A., Arif, W. A., Arain, Q., & Zehra, S. B. (2018). Sign Language e-Learning system for a hearing-impaired community of Pakistan. International Journal of Information Technology, 10(2), 225-232. https://doi.org/10.1007/s41870-018-0105-4.
- [7] Napoli, D. J., Mellon, N. K., Niparko, J. K., Rathmann, C., Mathur, G., Humphries, T., ... & Lantos, J. D. (2015). Should all deaf children learn sign language? Pediatrics, 136(1), 170-176. https://doi.org/10.1542/peds.2014-1632.
- Hall, M. L., Hall, W. C., & Caselli, N. K. (2019). Deaf children need language, not (just) speech. First Language, 39(4), 367-395. https://doi.org/10.1177/0142723719834102.
- Razalli, A. R., Thomas, R. O., Mamat, N., & Yusuf, N. (2018). Using text with pictures in primary school to improve reading comprehension for hearing-impaired students. Journal of ICSAR, 2(1), 19-27. http://dx.doi.org/10.17977/um005v2i12018p019.
- [10] Horton, L., & Singleton, J. (2022). Acquisition of turn-taking in sign language conversations: An overview of language modality and turn structure. Frontiers in Psychology, 4413. https://doi.org/10.3389/fpsyg.2022.935342.
- [11] Kyle, F. E. (2015). Research methods in studying reading and literacy development in deaf children who

- sign. Research methods in sign language studies: A practical guide, 300-318. https://doi.org/10.1002/9781118346013.ch16.
- [12] Mishra, S. K., & Mishra, P. (2020). Functional aspects of communication skills for professional empowerment. *Journal of English Language and Literature (JOELL)*, 7(1), 79-85.10.333329/joell.7.1.79.
- [13] Yasin, M. H. M., Tahar, M. M., Bari, S., & Manaf, F. N. (2017). Sign language learning in deaf students and special education teacher in integration program of hearing problem. *Journal of ICSAR*, 1(2), 166-174. <a href="http://dx.doi.org/10.17977/um005v1i22017p166">http://dx.doi.org/10.17977/um005v1i22017p166</a>.
- [14] Navarro, S., Zervas, P., Gesa, R., & Sampson, D. (2016). Developing teachers' competencies for designing inclusive learning experiences. *Educational Technology and Society*, 19(1), 17-27. https://www.jstor.org/stable/jeductechsoci.19.1.17.
- [15] Swanwick, R. (2017). Translanguaging, learning, and teaching in deaf education. *International Journal of Multilingualism*, 14(3), 233-249. <a href="https://doi.org/10.1080/14790718.2017.1315808">https://doi.org/10.1080/14790718.2017.1315808</a>.
- [16] Ngobeni, W. P., Maimane, J. R., & Rankhumise, M. P. (2020). The effect of limited sign language as a barrier to teaching and learning among Deaf learners in South Africa. South African Journal of Education, 40(2), 1-7. <a href="https://hdl.handle.net/10520/EJC-1de1cc6910">https://hdl.handle.net/10520/EJC-1de1cc6910</a>