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Level of Sign Language Between Parents and Students with Hearing Impairments

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Abstract

Students with Special Educational Needs who have hearing impairments face challenges in communicating using sign language. They encounter various issues such as cognitive, intellectual, emotional, social, and behavioral developmental challenges due to the communication problems they often experience. Hearing-impaired students also find it difficult to communicate with family members, especially parents. This study was conducted to identify the level of skill and frequency of parents' communication using sign language with hearing-impaired children. The research instrument was a questionnaire aimed at obtaining quantitative data. Descriptive analysis was used to determine the minimum, standard deviation, frequency, and percentage values. This research involves 50 respondents, comprising parents of students with HI students in Kuala Lumpur. The study findings indicate that the skill level and frequency of sign language communication by parents are at a moderate level. Efforts need to be intensified so that parents can use sign language at an excellent level for the future of hearing-impaired students.

Keywords: Education, Sign Language, Hearing Impairment, Communication, Parents

Introduction

According to the World Federation of the Deaf, there are approximately 200 distinct sign languages currently in use around the globe (Manning et al., 2022). Sign language serves as a vital means of communication for individuals who are deaf or hard of hearing, fostering effective interaction within their community. Among those who benefit from sign language are students with Special Educational Needs (SED) and Hearing Impairment (HI), who often use it as a form of communication. Sign language is a method of communication used by individuals with severe hearing problems (Abushaira, 2023). Sign language is also known as non-verbal communication or nonverbal communication (Stanescu & Tasente, 2021).

The majority of students with HI in special education institutions are born into hearing families, and their parents are not knowledgeable about sign language (Pontecorvo et al.,

2023). Most of these HI students communicate with family members, friends, and teachers using sign language. However, there are difficulties in communicating with family members, especially parents. The difficulty of parents communicating with their children is a constraint faced to convey information (Nancy, 2016). Parents need to always communicate with their children, especially those with HI. Siti Hasnah (2013) explained that parents are the individuals who are most familiar with children to interact with. HI children always need parental guidance and involvement in daily activities. Student success can be significantly improved with the involvement and cooperation of parents in activities as expressed in the Malaysian Education Blueprint 2013-2025 (Ministry of Education Malaysia, 2012).

At the same time, parents need to choose an appropriate approach to always interact such as using sign language or general communication. For parents who only use sign language to communicate with their children, it is necessary to master the language as well as possible so that information can be conveyed. Stanescu & Tasente (2021) explain that communication is important for HI students because it involves emotions. HI students usually feel frustrated and angry when they cannot express their feelings and understand other people's interactions (Nancy, 2016; Rosman, 2012).

Students with HI face various challenges, including developmental and academic issues. Low (2015) explains that the cognitive, intellectual, emotional, social, and behavioral development of HI students is impacted due to the communication problems they often encounter. HI students also experience a lack of language input as they cannot access language like typical children, which affects language acquisition and other developments such as cognitive skills, social-emotional skills, school readiness, and academic outcomes (Hall et al., 2019). Studies on psychopathological development elucidate that HI students are at a higher risk of experiencing emotional, behavioral, and social problems compared to their typical peers (Sealy et al., 2023).

Parents of students with HI who have normally hearing parents often receive less attention. Parental attention is important and relates to interactions, sharing emotions, and conversing on various topics (Beatrijs et al., 2019). Parents also encounter difficulties in capturing their child's attention during communication to convey information effectively (Lieberman et al., 2014). Constraints on giving and receiving are always present for parents who are less proficient in using sign language. Therefore, the purpose of this study is to find out and identify the skill level and frequency of parents communicating using sign language with HI students.

Literature Review

Parents acknowledge the difficulty of learning sign language to communicate with their HI children (Ardzulyna, 2013). According to this study, only two out of six mothers were able to use sign language to communicate with their children. Parents also explain that late identification of their children's hearing issues leads to language mastery problems. This issue stems from parents communicating less with their children compared to those who typically have hearing children.

Parents of students with HI also struggle to master sign language for communicating with their children at home (Henner et al., 2016; Knoors and Marschark, 2012). This factor arises because sign language serves as a second language for parents, and they need to learn it

(Snoddon, 2015). This difficulty does not solely pertain to parents, as the issue persists and negatively impacts the children as well. The negative impact encompasses problems in the children's formal language mastery and accurate use of sign language codes at school. Parents who are less proficient in practicing sign language tend to use informal language at home. HI students typically lack sufficient explanations and information due to communication challenges (Low, 2015; Rosman, 2012).

Communication is a form of conveying and receiving information involving individuals with one another. This study is based on Wilbur Schramm's Communication Theory. This theory, known since 1954, is a disciplined process for affectively conveying information involving the processes of encoding, translating, and decoding received signal codes (Nuryanto 2011; Natashadora 2013). Koptseva et al (2015) define this theory as a process of information exchange in the form of interaction between humans. This theory is also aligned with the elements of communication for children with HI, involving two-way communication using sign language. These elements include manual hand movements as well as non-manual elements like body parts such as the head, body, and face (Abdullah, 2014).

Epstein's model establishes six types of involvement: parenting, communication, volunteering, learning at home, decision-making, and community collaboration (Nurhayati, 2021; Epstein et al., 2002). This model serves as a guideline because it benefits HI students performance, foster good relationships, and improve the well-being of parents and the community. This model brings together various stakeholders, resulting in positive impacts (Nancy, 2016). HI students require strong support and a conducive environment to enhance their learning. In addition to parenting support and skills, they also need monitoring of hearing aids (ABDs), appropriate services for them, and home-based learning (Zarina, 2018).

Methodology

The design involved a quantitative approach using questionnaire instruments. Data was collected to find out and identify the skill level and frequency of parents communicating using sign language with HI students.

Purposeful sampling was chosen for this study. Chua (2021) defines purposeful sampling as a method where a group of subjects with specific characteristics is selected as respondents for the study. This research involves 50 respondents, comprising parents of students with HI students in Kuala Lumpur. There are only two special education primary schools for HI students in Kuala Lumpur. The questionnaire uses a five-point likert scale. The questionnaire consists of two parts. Part A consists of 11 items of parents' background while Part B consists of 20 items related to the skill level and frequency of parents communicating using sign language with HI students.

Result and Discussion

The results of the questionnaire responses for Part A show background analysis based on frequency and percentage. frequencies and percentages can be referred to in table 1 for the categories of gender, age, race, occupation, academic completion, income, number of children and HI children, hearing status, communication methods at home and causes of children's HI.

Table 1
Respondent Background

Information	Category	Frequency	Percentage(%)
Gender	Male	23	46
	Female	27	54
Age	21-30 years old	6	12
	31-40 years old	22	44
	41 years and older	22	44
Race	Malay	34	68
	Chinese	10	20
	Indian	6	12
Occupation	Private Sector	21	42
	Self-employment	15	30
	Public Sector	14	28
Academic	PMR/SPM	23	46
Qualifications	Diploma/Degree	24	48
	Others	3	6
Income	Under RM2000	20	40
	RM2000-RM4000	15	30
	RM4000-RM6000	10	20
	RM6000 and above	5	10
Number of	1-2	26	52
Children	3-4	19	28
	5-6	5	10
Hearing	1 kid	46	92
Impairment	2 kids	2	4
Children	3 kids	1	2
	4 kids	1	2
Hearing Status	Normal Hearing	48	96
of Parents	Hearing Impairments	2	4
Communication	Speak	12	24
Methods	Sign language	7	14
	Speak and sign	31	62
Cause of	During pregnancy	13	26
Hearing Disability	At birth	12	24
	After birth	25	50

The questionnaire instrument is measured based on a 5-point Likert scale. Abu Halifah and Hanafi (2016) explained that data interpretation was conducted to obtain minimum scores (low, moderate, or high). Table 2 shows the mean scores and data interpretation.

Table 2
Mean scores and data interpretation

MEAN SCORE	DATA INTERPRETATION
1.00 – 2.33	Low
2.34 – 3.66	Moderate
3.67 – 5.00	High

Table 3 shows the findings from the questionnaire responses, containing 20 items in Section B, which assess the level of parents' skill in communicating using sign language with with HI students. The study findings indicate a moderate level of sign language proficiency among parents, with an average minimum score of 3.02. Out of the 10 items analyzed, 9 items' minimum scores fall within the moderate range, ranging from 2.34 to 3.66. The highest minimum score within the moderate range is 3.66 for item a6 Parents know their child's name. The lowest minimum score is 2.16, falling within the low range, for item a3 Parents can sign Kod Tangan Bahasa Melayu (KTBM), Malaysian Sign Language (BIM), American Sign Language (ASL), and Sign Exact English (SEE).

Table 3
Level of Parents' Sign Language Proficiency

No.	Statement	Mean	Standard Deviation	Level
a1.	Parents can sign well	2.76	0.92	Moderate
a2.	Parents can understand their child's sign language well	2.92	0.83	Moderate
a3.	Parents can use proper sign language (KTBM/ BIM /ASL / SEE)	2.16	0.98	Low
a4.	Parents can correctly sign the alphabet codes from A to Z	3.56	1.09	Moderate
a5.	Parents can correctly sign the number codes from 0 to 10.	3.54	1.15	Moderate
a6.	Parents know the sign language code for their child's name	3.66	1.26	Moderate
a7.	Parents know the sign language code for their child's teachers' names	2.64	1.06	Moderate
a8.	Parents know the sign language code for their child's friends' names	2.56	1.16	Moderate
a9.	Parents can give instructions to the child using sign language	3.06	1.06	Moderate
a10.	The child responds when parents sign	3.38	0.92	Moderate
	Average min	3.02		

Table 4 presents the findings from the questionnaire responses, containing 10 items in Section B, which assess the frequency of parents communicating using sign language with children with HI. The frequency of parents' use of sign language with HI students is at a moderate level, with an average minimum score of 3.02. Overall, the minimum scores obtained from the 10 questionnaire items indicate moderate findings ranging from 3.16 to 2.52. Parents frequently engaging in conversations using sign language with their child with

special needs indicates the highest moderate level, with a minimum score of 3.16. On the other hand, the lowest moderate level minimum score obtained is 2.52, which corresponds to parents attending sign language classes outside of school.

Table 4
Frequency of Sign Language Usage

No.	Statement	Mean	Standard Deviation	Level
b1.	Parents often communicate using sign language	3.16	1.02	Moderate
b2.	Parents always converse using sign language with HI children and other siblings	2.90	1.04	Moderate
b3.	Parents always teach sign language to their children and other siblings	2.74	1.03	Moderate
b4.	Parents often use sign language to explain something to the child while watching television	2.84	1.02	Moderate
b5.	Parents always use sign language to explain something when family members talk to children	3.06	1.08	Moderate
b6.	Parents attend sign language classes to improve their communication skills with their children	2.62	1.18	Moderate
b7.	Parents always learn sign language with their children's teachers	2.74	1.12	Moderate
b8.	Parents always learn sign language with other parents	2.74	1.17	Moderate
b9.	Parents always attend sign language classes organized by the school	2.74	1.17	Moderate
b10.	Parents regularly attend sign language classes outside of school	2.52	1.31	Moderate
	Average min	2.80		

The purpose of this study is to determine and identify the level of skill and frequency of parents' communication using sign language with HI children. The research findings for parents' sign language communication skill level are moderate. The highest finding for the moderate level is

that parents know the sign language code for their child's name, followed by parents being able to sign the letters A to Z (a4) and numbers 1 to 10 (a5). The research results indicate a moderate level. Parents have a moderate level of familiarity with sign language codes for their child's teachers and friends, as seen in items six (a6), seven (a7), and eight (a8). Snoddon (2015) emphasizes that parents need to learn and master sign language and consistently engage with the community of children with special needs from an early age.

Items one (a1) and two (a2) are related to the parents' ability to communicate through sign language with the HI child and their proficiency in understanding sign language. On the other hand, items nine (a9) and ten (a10) are related to the parents' ability to give instructions to the child with HI using sign language and the responses received from the child when parents use sign language. The findings for all of these items indicate a moderate level. The parents of children with special needs should ideally understand and be capable of giving instructions using sign language at a level higher than moderate. The ability of parents to use sign language is important and has an impact on the life of the child with HI. Geers et al. (2017) explain that parents and families who can interact effectively using sign language have various positive impacts on children with special needs.

The lowest moderate level finding, item three (a3), pertains to parents' ability to sign specific signs such as Kod Tangan Bahasa Melayu (KTBM), Malaysian Sign Language (BIM), American Sign Language (ASL), and Sign Exact English (SEE). Base on this findings, it is possible that parents are learning sign language passively or are not aware of its importance for the communication development of a HI chlid. The study by Siti Muhibah & Zetty (2018) indicates that there are parents who are not responsible and unwilling to learn sign language. Parents are obligated to learn and master sign language in order to communicate and convey information to their HI child.

The research findings for frequency of parents' communication using sign language with HI children are moderate. The highest finding for the moderate level, based on item one (b1), is that parents frequently engage in casual conversations with their child using sign language. However, this result indicates that the frequency of sign language usage is at a moderate level rather than a high level. Items four (b4) and five (b5) are related to the frequency of parents acting as interpreters by explaining things while watching television or when family members are having conversations. Item two (b2) pertains to how often parents engage in sign language conversations with the child with HI and their siblings, while item three (b3) is about the frequency of parents teaching sign language to the other siblings.
Items seven (b7) and eight (b8) pertain to the frequency of parents learning sign language from teachers or other parents. The findings obtained for these items are also at a moderate level, with only a few parents meeting with teachers to inquire about specific sign codes. It's possible that parents may lack awareness about the importance of mastering sign language. Proficiency in sign language requires a high level of commitment and time to reach an advanced level. The access of children with HI to spoken language and communication skills is limited, and a significant challenge for parents is to adapt and select methods to interact with their children (Majorano et al., 2019).
Item six (b6) is related to the frequency of parents attending sign language classes to enhance their communication skills with their child with special needs. Items nine (b9) and ten (b10) are about the frequency of parents attending sign language classes organized by schools or outside of school. For item ten, the findings indicate a low to moderate level. Parents seem to dedicate less time or effort towards learning sign language. Sign language classes recommended by schools also receive

limited enthusiasm from parents, even when they are held on weekends. Children with special needs who possess good communication skills are proven to have a higher quality of life and experience less stress (Snoddon, 2015).

Suggestions to improve the communication development of HI students and parents are The Ministry of Education (KPM) and Bahagian Pendidikan Khas (BP Khas) should collaborate with relevant organizations in sign language, such as the Malaysian Federation of The Deaf (MFD), The National Association of The Deaf (NAD), and various other associations, as teaching resources. The purpose of this collaboration is to allow KPM and BP Khas establish sign language classes or courses for parents of children with HI. These classes or courses would offer formal sign language education. The classes would be organized in stages, requiring qualification exams and granting certificates upon successful completion. These certificates could then be submitted to schools as a requirement for enrolling children with special needs.

Conclusion

The level of parents' sign language communication skills with HI students indicates a moderate level. The frequency of parents' use of sign language with HI child needs also shows a moderate level. The research findings obtained from the questionnaire demonstrate that parents of children with HI have not yet mastered sign language well enough to effectively communicate with their children.

HI students require parents who can proficiently communicate using sign language as interpreters and providers of information for them. This study is based on Wilbur Schramm's Communication Theory and Epstein's Parental Involvement Model. These theories and models serve as guidelines for parents to communicate using sign language with their HI children at an optimal level. The research findings reveal that some parents have not yet achieved a good level of sign language proficiency, and the frequency of sign language use is at a moderate level. The impact of these factors results in students with HI facing various challenges in learning Satiah (2009), developmental issues Low (2015); Nancy (2016), and negative effects on their lives (McCullough and Duchesneau, 2016). Therefore, parents should learn sign language for the future of the kids. Parents who have learned sign language have a strong positive belief in the value and benefits for their HI children and their families (Lieberman et al., 2022).

Reference

Yusuf, A. (2014). *Memahami Komunikasi Orang Pekak*. Ulang cetak. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Abdul Rahman, A. b. (2014). *Penglibatan ibu bapa dalam pelaksanaan rancangan pendidikan individu (RPI) murid berkeperluan khas.* Tesis tidak diterbitkan. Universiti Pendidikan Sultan Idris.

Abushaira, M. I. (2023). The impact of attitudes related to knowledge, skills, and emotion on the understanding of sign language among medical students. *Social Space*, *23*(1), 100-119.

Beatrijs, W., Kristiane, V. L., & Mieke, V. H. (2019). Parental strategies used in communication with their deaf infants. *Child Language Teaching and Therapy*, *35*(2), 165-183.

Piaw, C. Y. (2021). *Kaedah Penyelidikan*. Edisi keempat. Kuala Lumpur: McGraw-Hill Education (Malaysia) Sdn Bhd.

Epstein, J. L., Sanders, M. G., Simon, B. S., Salinas, K. C., Jansorn, N. R., dan Voorhis, F. L. (2002). *School, family, and community partnerships: Your handbook for action.* California: Corwin Publishers.

Geers, A. E., Mitchell, C. M., Warner-Czyz, A., Wang, N. Y., Eisenberg, L. S., & CDaCI Investigative Team. (2017). Early sign language exposure and cochlear implantation benefits. *Pediatrics*, *140*(1), e20163489.

Hall, M. L., Hall, W. C., & Caselli, N. K. (2019). Deaf children need language, not (just) speech. *First Language*, *39*(4), 367-395.

Henner, J., Caldwell-Harris, C. L., Novogrodsky, R., & Hoffmeister, R. (2016). American sign language syntax and analogical reasoning skills are influenced by early acquisition and age of entry to signing schools for the deaf. *Frontiers in psychology*, *7*, 1982.

Kementerian Pendidikan Malaysia. (2012). *Prelimanary report malaysia eduation blueprint 2013-2025*. Kementerian Pendidikan Malaysia : Putrajaya.

Knoors, H., & Marschark, M. (2012). Language planning for the 21st century: Revisiting bilingual language policy for deaf children. *The Journal of Deaf Studies and Deaf Education*, *17*(3), 291-305.

Lieberman, A. M., Mitchiner, J., & Pontecorvo, E. (2022). Hearing parents learning american sign language with their deaf children: a mixed-methods survey. *Applied Linguistics Review*, (0).

Majorano, M., Guerzoni, L., Cuda, D., & Morelli, M. (2019). Mothers' emotional experiences related to their child's diagnosis of deafness and cochlear implant surgery: Parenting stress and child's language development. *International Journal of Pediatric Otorhinolaryngology*, 109812.

Manning, V., Murray, J. J., & Bloxs, A. (2022). Linguistic human rights in the work of the world federation of the deaf. *The Handbook of Linguistic Human Rights*, 267-280.

McCullough, C. A., and Duchesneau, S. M. (2016). *Oralism, Psychological Effects of: The SAGE Deaf Studies Encyclopedia.* California: SAGE Publications, Inc.

Nurhayati, S. (2021). Parental involvement in early childhood education for family empowerment in the digital age. *Empowerment: Jurnal Ilmiah Program Studi Pendidikan Luar Sekolah*, *10*(1), 54-62.

Nuryanto. (2011). Ilmu Komunikasi dalam Konstruksi Pemikiran Wilbur Schramm. *Jurnal Komunikasi Massa Vol 4 No 2 Juli 2011.* Program Studi Ilmu Komunikasi Fakultas Ilmu Sosial dan Ilmu Politik Universitas Sebelas Maret Surakart.

Pontecorvo, E., Higgins, M., Mora, J., Lieberman, A. M., Pyers, J., & Caselli, N. K. (2023). Learning a sign language does not hinder acquisition of a spoken language. *Journal of Speech, Language, and Hearing Research*, *66*(4), 1291-1308.

Sealy, J., McMahon, C., & Sweller, N. (2023). Parenting deaf children: exploring relationships between resolution of diagnosis, parenting styles and morale, and perceived child vulnerability. *Journal of Child and Family Studies*, 1-15.

Snoddon, K. (2015). using the common european framework of reference for languages to teach sign language to parents of deaf children. *Canadian Modern Language Review*, 270-287.

Stanescu, N., & Tasente, T. (2021). Healing words-emotional intelligence, the role of communication in the relationship with hypoacusic children. *Technium Soc. Sci. J.*, *16*, 140.