# LANGUAGE ACQUISITION BY HEARING OFFSPRINGS HAVING PARENTS WITH HEARING IMPAIRMENT: A SELF-REPORTED SURVEY

Dr. Samina Ashraf samina.dse@pu.edu.pk Assistant Professor Institute of Special Education University of Punjab Dr. Muhammad Irfan Arif Research Scholar Institute of Special Education University of Punjab Email: drmirfanarifphd@gmail.com Sayyeda Rabia Basri Lecturer, Special Education Department University of Education, Lahore Email: rabia.basri@ue.edu.pk

# Abstract

The purpose of the study was to identify the efforts of offspring of deaf and hard of hearing D/HH parents in learning verbal and sign language. The study was a descriptive type of research. The population of the study was hearing children of D/HH parents. The sample of the study consisted of 51 hearing children of D/HH parents selected through the purposive sampling technique. The researcher developed a structured questionnaire comprised of 20 items as an instrument of the study for the collection of data. The reliability of the instrument is measured by applying Cronbach alpha (.78). The content validity is estimated through experts' opinions. The data were analyzed by using simple descriptive statistical techniques, frequencies, and percentages. The data analysis revealed that the majority of the hearing offspring' parents help them in learning sign language but their language did not develop at an ideal level. However, the study revealed that the majority of hearing offspring faceddifficulty in learning verbal language skills. The study has given recommendations to public institutions to design a proper mechanism of teaching methodological signs to the hearing impaired parents and their children for better communication.

Keywords: Struggle, children of deaf parents, Language Learning

# Introduction

With or without the aid of amplification, the youngster cannot understand the meaning of what they hear. Using the term "with or without significant since it amplification" is implies that a hearing aid isn't going to be enough accommodation for the kid to be successful in the classroom(Välimaa, et.al.,2022). Having a hearing loss is when you are unable to hear. Speech and other sounds are more difficult to hear when you have a hearing loss (Paul, 2009). Impairment of one's capacity to hear, whether partial or complete, is referred to as hearing loss. A person who is deaf is unable to hear at all but a hard of hearing person can hear due to residual hearing(McCreery & Walker, 2022).

There are different types of deaf people, but they all share a common language, set of experiences, and set of values, as well as a common way of communicating with one another and with individuals who can hear(Rastgoo, et.al.,2021). Research studies explored that learning sign language has a close link with the nature of interaction with the Deaf/hard of hearing (HH) community. Younger individuals when they had their first interaction with the Deaf community (for example, at the Deaf club, with Deaf people, or at events) had more contact with

the Deaf community than those who were older. Additionally, it was similar to having a conversation with your parents' acquaintances when they encountered deaf folks (Okuoyibo, 2006).

Children of Deaf individuals who are bicultural or multilingual frequently act as a link between the Deaf and the hearing communities (Hadjikakou, et. al, 2009). They can also serve as translators and spokespersons for the family when the situation calls for it. They also educate their parents on the importance of hearing culture (Filer & Filer, 2000). As long as the parent's position is clearly defined and the interpretation is limited to the appropriate settings, the additional responsibility can assist children in maturing and developing their independence, while also helping them maintain a close relationship with their parents (Lu, Jones & Morgan, 2016; Filer & Filer, 2000). If the following prerequisites are not met, a child may be exposed to inappropriate interpretive contexts in public places (Searls, M.2021; Singleton & Tittle, 2000). It is possible to employ children as translators in instances where the privacy of the Deaf family member is being breached or when prejudiced communication is taking place (Luey et al., 1995; Preston, 1994).

Deaf parents may interact with one another using sign language, but they will likely communicate with their children using a combination of sign language and speech as well (Clark, 2003; Singleton & Tittle, 2000). Deaf parents may prefer to speak to their children rather than sign to them depending on the circumstances. This may be due to a variety of factors, including the fact that the child is hearing or because of social biases against sign language(Johnson,1991).

This practice may result in an inaccurate spoken language model and a lack of communication between parents and children (Clark, 2003; Singleton & Tittle, 2000). They use sign language to communicate with one another regularly. Pakistan sign language (PSL) is used by the deaf community in Pakistan. Pakistan Sign Language (PSL) is believed to be the native tongue of Pakistan's deaf population, and it is taught in schools. In the same way that spoken languages have several dialects in different parts of the country, PSL has many dialects in the same way. Total Communication (TC) philosophy employs a range of ways to educate children who are deaf or hard of hearing, including signs, gestures, fingerspelling, and body language, as well as listening and lip-reading (Mayer, 2016).

A small number of studies have revealed that children with hearing parents

who are both Deaf exhibit spoken language deficits. However, these studies are few and far between. Researchers discovered that a culturally appropriate method (such as spending time with relatives who speak the language or attending preschool) can enhance a child's exposure to spoken language by as much as 200%. (Singleton & Tittle, 2000). A lack of incidental learning and bad connections with their hearing parents may prevent Deaf parents from having equal access to information about optimal parenting practices or exposure to positive parent models (Hadjikakou & Nikolaraizi, 2008).

The research reveals that Deaf parents can nurture their children in the best way they know how (due to the limitations listed above) despite their inability to communicate vocally (Clark, 2003; Mallory & Schein, 1992; Preston, 1994; Singleton & Tittle. 2000). According to current research, the ties between families with Deaf parents and hearing children and those with hearing parents and hearing children appear to be the same (Mattock & Crist, 1989; Jones & Dumas, 1996).

## Statement of the problem

The study was conducted to identify the struggle of children of deaf parents in learning the language.

**Objectives of the study** 

The objectives of this study were to:

- Find out the efforts made by the offspring of hearing-impaired parents in learninga language.
- Identify the challenges faced by offspring of hearing-impaired parents in learning and using verbal language.
- Explore the challenges faced by offspring of deaf parents in learning or using sign language.

# **Questions of study**

The questions of the study were as follows:

- What types of efforts are made by the offspring of deaf parents in learning a language?
- 2. What kinds of challenges are faced by offspring of deaf parents in learning or using verbal language?
- 3. What kinds of challenges are faced by offspring of deaf parents in learning or using sign language?

# Significance of the study

This study would help in identifying the struggle of offspring of hearing-impaired parents in learning a language. Through this study, an insight into the way children of deaf parents learn to sign or verbal language is gained. This may help professionals and researchers to further explore the field and find out a support system to cater to the language learning needs of children whose parents are deaf.Hence, the study may reduce the communication gaps with and outside deaf communities and promote their social inclusion.

### Methodology & Procedure

The study was carried out to gather information on how hearing children of deaf parents learned sign language, as well as the challenges they encountered along the way. In this study, we conducted a descriptive form of investigation. It was decided to create an instrument following a review of the literature. It was determined that the study's participants were hearing children of deaf parents. The study's sample comprised 50 hearing children who were raised by deaf parents. To collect data, the researcher devised a questionnaire, which was then distributed to participants. The first section of the questionnaire asked for demographic information (e.g., name, age, gender, and so on), while the second section contained 20 items about the subject of the questionnaire. The questionnaire was completed by the hearing offspring of deaf parents. Following data gathering, the information was collated and examined to conclude the research. The frequency and percentages tabulated are presented below.

**Q.No.1:** Do you think that you may have full command of sign language if your parents were also able to speak a little bit?

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 26        | 51.0    |
| Yes       | 25        | 49.1    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 1 indicates that 51% of respondents reported that they may have full of command of sign language if their parents were also able to speak a little bit, while 49% said "No" to this question.

**Q. No.2:** What medium do you prefer to communicate? Table. No.2:

| Frequency | Percent        |
|-----------|----------------|
| 21        | 41.1           |
| 30        | 58.9           |
| 51        | 100.0          |
| 51        | 100.0          |
|           | 21<br>30<br>51 |

Table 2indicates that 58% of respondents reported that they prefer to communicate in verbal language and 41% prefer sign language to communicate.

| Q No.3: Any | other challenge | that you face | in learning | sign lang | uage? |
|-------------|-----------------|---------------|-------------|-----------|-------|
|-------------|-----------------|---------------|-------------|-----------|-------|

| Table.3. |
|----------|
|----------|

Table.1:

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 27        | 52.9    |
| Yes       | 24        | 47.1    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 3indicates that 52% of respondents did not face any challenge in learning sign languagebut 47% of children faced some challenges in learning sign language.

Q. No. 4: Which language ruleswere more difficult for you to learn?

| Table. | 4: |
|--------|----|
|--------|----|

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| Verbal    | 40        | 78.4    |
| Sign      | 11        | 21.6    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 4indicates that 78% of respondents reported that verbal language rules like grammar skills were more difficult to learn and 21% of respondents reported that sign language skills were more difficult to learn.

**Q No.5:** Which systems of communication took more time to learn? **Table.5:** 

| Frequency | Percent        |
|-----------|----------------|
| 29        | 56.9           |
| 22        | 43.2           |
| 51        | 100.0          |
| 51        | 100.0          |
|           | 29<br>22<br>51 |

Table 5indicates that 56% of children reported that sign language took more time to learn and 43% of children feel verbal communication took more time.

Q. No. 6: Did your parents help you in learning sign language?

# Table. 6:

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| Yes       | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 6indicates that 100% of children's parent helps in learning sing language.

Q. No. 7: Who was most helpful in language learning?

# Table. 7:

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| Parents   | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 7 indicates that 100% of respondents reported that parents help in language learning.

Q.No.8: Did you face humiliation from others on sign language use?

| Table. 8. |
|-----------|
|-----------|

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 28        | 54.9    |
| Yes       | 23        | 45.1    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 8Indicates that 45% of children face humiliation from others and 54% of respondents reported that they did not face humiliation from others on language use,

Q. No. 9: Did you face difficulty in language learning due to the disability of your parents? Table. 9:

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 34        | 66.7    |
| Yes       | 17        | 33.4    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 9indicates that 33% of children face language learning difficulty due to their parents' disability and 66% of respondents reported that they did not find language learning difficulty due to their parents' disability.

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 16        | 31.4    |
| Yes       | 35        | 68.6    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Q .No. 10: Did your language learning problems disappear after you entered school?Table. 10:

Table 10indicates that 68% of children's language learning problems disappeared after their entrance into school but 31% of children's problems have not disappeared after their entrance into school.

Q. No. 11: Till which grade did you face problems in language learning?

**Table. 11:** 

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| Primary   | 41        | 80.4    |
| Secondary | 10        | 19.6    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 11indicates that 80% of children face problems with language during their primary schooling and 19% of children face problems with language during their secondary schooling.

**Q. No. 12:** Did you face any challenges in the academic environment due to limitations in using language?

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| Yes       | 28        | 54.9    |
| No        | 23        | 45.1    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

# Table.12:

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Table 12indicates that54% of children have faced a challenge in the academic environment due to limitations in using sign language but 45% of children do not face any challenge in the academic environment due to limitations in using language.

Q.No.13: Did you find any gap between you and your parents?

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 32        | 62.7    |
| Yes       | 19        | 37.3    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

| Table. | 13: |
|--------|-----|
|--------|-----|

Table 13 indicates that 37% of children feel the gap between them and their parents but 62% of children do not find any gap between them and their parents.

No.14: Did you struggle in communicating with your parents?

| Table | 14.          | 0:         |
|-------|--------------|------------|
| Labic | <b>T</b> -10 | <u>۲</u> • |

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 24        | 47.1    |
| Yes       | 27        | 53.0    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table No 14 indicates that 53% of respondents reported that they do struggle in communicating with their parents and 47% of children do not struggle in communicating with their parents.

**Q.No.15:** Did you ever wish your parents were different from what they are? **Table. 15:** 

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 35        | 68.6    |
| Yes       | 16        | 31.4    |

| Total | 51 | 100.0 |
|-------|----|-------|
| Total | 51 | 100.0 |

Table 15 indicates that 31% of children have wished that their parents were different than they are but 68% of children do not have any wish like this.

# Q.No16: When did you start using sign language?

# Table.16:

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| Primary   | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 16indicates that 100% of children start using sign language from primary school.

Q.No.17: Did you take special classes to learn sign language?

# **Table. 17:**

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 26        | 51.0    |
| Yes       | 25        | 49.1    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 17 indicates that 49% of children took classes to learn sign language but 51% of children do not take any classes to learn sign language.

Q.No.18: What kind of language do your parents use?

# **Table. 18:**

| Responses     | Frequency | Percent |
|---------------|-----------|---------|
| Sign Language | 51        | 100.0   |
| Total         | 51        | 100.0   |

Table 18 indicates that 100% of children's parents use sign language.

| Frequency | Percent        |
|-----------|----------------|
| 12        | 23.5           |
| 39        | 76.5           |
| 51        | 100.0          |
| 51        | 100.0          |
|           | 12<br>39<br>51 |

**Q.No.19:** Did your parents talk to you only using sign language? **Table 19:** 

Table 19 indicates that 23% said that their parents did not use sign language to talk to them but 76% of respondents reported that their parents only use sign language to talk to them.

**Q.No.20:** Were your parents' signs different from professional sign language? **Table.20.** 

| Responses | Frequency | Percent |
|-----------|-----------|---------|
| No        | 20        | 39.2    |
| Yes       | 31        | 60.8    |
| Total     | 51        | 100.0   |
| Total     | 51        | 100.0   |

Table 20 indicates that 60% of respondents reported that their parents' signs are different from professional sign language but 39% of respondents said that their parents' signs do not different from professional sign language.

### Findings

Based on data analysis, the following findings were drawn for the study of the struggle of children of deaf parents in learning the language.

## Efforts were made to learn sign language

52% of the respondents reported that their parental hearing impairment motivates them to learn sign language but they did not have mastery of sign language due to the communication gap between them and their parents.Besides the hearing status of the parents, 100% of respondents reported that their deaf parents helped them in learning sign language.More than half percent of the respondents (51%) reported that they have put a great struggle in communicating with their parents. 74% of therespondents reported that their parents use sign language to talk with them.58% of the respondents reported that their parents' signs are different from theirs and methodological or professional sign language. A large number of respondents (68%) expressed that they learned proper sign language after entering primary school.

### Challenges in learning sign and verbal language.

Around 56% of the respondents reported that they prefer to communicate in verbal language and 40% of the respondents reported that they have faced more difficulties in learningand using sign language.80% of the respondents reported that theyare facing problems with language from primary school. However, 68% of respondents reported that their language learning problems disappeared after their entrance to the school. All of the respondents reported that they are using sign language since the primary level. Perhaps (62%) of the respondents said that they are learning sign language on their own, rest of the respondents said that they did not attend any proper class to learn sign language. According to (33%) of respondents, they face problems while switching from verbal language to sign language. More than half of the respondents said that their parents' sign language did not match with professional and methodological signs, and they did not face problems in learning verbal and sign language. 54% of the respondents reported that they do not face any challenge in the academic environment due to their parents hearing impairment. All of the respondents (100%) reported that their parents use sign language.

### **Conclusions and discussion**

It is concluded based on the findings of the study that the majority of the children's parents help in learning sign language. The majority of children feel that they could have full of command of sign language if their parents were also able to speak a little bit. These findings are aligned with a research study conducted by (Tomblin, et.al, 2014) as the study shows that hearing-impaired persons overall lack language skills, particularly when interacting with the hearing community. The majority of the children reported that they have faced more difficulty in sign language. Learning a language is not so simple process, it includes sociolinguistic and cultural factors too. In the case of hearing-impaired persons, due to variations in sociolinguistic factor, their signs mostly lacks the quality of standard signs (Hodge & Goico,2022). Particularly in a multilingual society like Pakistan, the problem to acquire standardized signs increased as compared to monolingual or bilingual societies. The majority of the children's parents use sign language to talk to them. It is concluded based on the findings of the study. The majority of the hearing child of deaf adults said that their deaf parents helped them in learning sign language. They also reported that language learning problems disappeared after they pass the primary level of schooling. This finding conforms with the study conducted by Caselli, Pyers, and Lieberman (2021) as the study has proven that early learning of sign language develops the competency in the sign and verbal/written language at a later age. A reasonable number of respondents have faced difficulty in learning language rules during their primary school period. Children do not find any gap between them and their parents due to their impairment. The difference in language due to deafness did not create an emotional gap in the relationship between parents and children. Besides, the fact that deaf and hard of hearing person lives in an environment where linguistic access and social interaction is compromised but some the studies have shown a similar level of social and emotional functioning among normal and D/HH persons(Tsou, et.al., 2021).

# Recommendations

- 1. Teachers should pay extra attention to the academics of the offspring of hearingimpaired persons.
- 2. Teachers should encourage the offspring of deaf adults to participate in speech activities and activities that can boost their confidence and improve their speaking skills/ability.
- 3. Govt schools should make policies and give extra focus to the offspring of deaf adults and their language and communication abilityso they can communicate with the hearing community alike their fellows with great confidence.
- 4. Special teaching facilities should be provided to the hearing impaired adolescents for the development of their methodological sign language skills in a professional manner

and also provide sign language learning facilities to the children having hearingimpaired parents.

5. The oral language skills should also be developed for the parents with a mild level of hearingimpairment and their children.

#### REFERENCES

- Abang, T. B. (1992). Special education in Nigeria. International Journal of Disability, Development, and Education, 39(1), 13-18.
- Allen, T. (1992). Subgroup differences in educational placement for deaf and hard of hearing students. *American Annals of the Deaf, 135*(7), 381-388.
- Allsop, L., & Kyle, J. (1997). Deaf parents and their hearing children. Unpublished report. Bristol, UK: The Deaf Studies Trust.
- Bouvet, D. (1990). The Path to Language: Toward Bilingual Education for Deaf Children. Multilingual Matters Ltd., 1900 Frost Road, Suite 101, Bristol, PA 19007 (ISBN-1-85359-079-7, hardback; 1-85359-078-9, paperback).
- Buchino, M. A. (1993). Perceptions of the oldest hearing child of deaf parents: On interpreting, communication, feelings, and role reversal. American Annals of the Deaf, 138(1), 40-45.
- Clark, T. (2003). Psychological evaluation of deaf children. *Mental health care of deaf people*, 109-144.
- Fernandes, J. (1997). Deaf education today: A state of emergency. Gallaudet University Pre-College National Mission Programs: Washington, D.C.
- Filer, R. D., & Filer, P. A. (2000). Practical considerations for counselors working with hearing children of deaf parents. *Journal of Counseling & Development*, 78(1), 38-43.
- Hadjikakou, K., & Nikolaraizi, M. (2008). The communication experiences of adult deaf people within their family during childhood in Cyprus. *Deafness & Education International*, 10(2), 60-79.
- Jones, E. G., Roberts, E. G., & Dumas, R. E. (1996). Deaf and hearing parents' interactions with eldest hearing children. *American annals of the deaf*, 278-283.
- Killion, M. C., & Fikret-Pasa, S. E. L. D. A. (1993). The 3 types of sensorineural hearing loss: Loudness and intelligibility considerations. *Hearing Journal*, 46, 31-31.
- Kral, A., & O'Donoghue, G. M. (2010). Profound deafness in childhood. New England Journal of Medicine, 363(15), 1438-1450.

- Lasak, J. M., Allen, P., McVay, T., & Lewis, D. (2014). Hearing loss: diagnosis and management. *Primary Care: Clinics in Office Practice*, *41*(1), 19-31.
- Luey, H. S., Glass, L., & Elliott, H. (1995). Hard-of-hearing or deaf: Issues of ears, language, culture, and identity. *Social Work*, 40(2), 177-182.
- Mallory, B. L., Schein, J. D., & Zingle, H. W. (1992). Improving the validity of the PSNI in assessing the performance of deaf parents of hearing children. *American Annals of the Deaf*, 137(1), 14-21.
- Meadow, K. P. (2005). Early manual communication about the deaf child's intellectual, social, and communicative functioning. *Journal of Deaf Studies and Deaf Education*, *10*(4), 321-329.
- Nadol Jr, J. B. (1993). Hearing loss. New England Journal of Medicine, 329(15), 1092-1102.
- Okuoyibo, J. M. (2006). Educating the child with hearing impairment: The place of the educational audiologist. *Special education in Nigeria: A search for a new direction*, 281-293.
- Padden, C. A. (2005). Talking culture: Deaf people and disability studies. *PMLA*, 120(2), 508-513.
- Paul, P. V. (2009). Language and deafness. Jones & Bartlett Learning
- Rienzi, B. M. (1990). Influence and adaptability in families with deaf parents and hearing children. *American Annals of the Deaf*, 402-408.
- Roizen, N. J. (2003). Nongenetic causes of hearing loss. *Mental retardation and developmental disabilities research reviews*, 9(2), 120-127.
- Sajid, S. (2008). Special Education. Ilmi Kitab Ghar: Lahore.
- Sandler, W., & Lillo-Martin, D. (2006). *Sign language and linguistic universals*. Cambridge University Press.
- Sataloff, J., & Sataloff, R. T. (Eds.). (2005). Hearing loss. CRC Press.
- Schein, J. D. (1989). *At home among strangers: exploring the deaf community in the United States.* Gallaudet University Press.
- Schirmer, B. R. (1994). Language and literacy development in children who are deaf.Macmillan Publishing Co., 100 Front St., Box 500, Riverside, NJ 08075-7500.
- Singleton, J. L., & Tittle, M. D. (2000). Deaf parents and their hearing children. *Journal of Deaf Studies and Deaf Education*, 5(3), 221-236.
- Sulman, D. N., & Zuberi, S. (2000). Pakistan sign language-a synopsis. Pakistan., June.
- Willems, P. J. (2000). Genetic causes of hearing loss. New England Journal of Medicine, 342(15), 1101-1109.

- Välimaa, T. T., Kunnari, S., Aarnisalo, A. A., Dietz, A., Hyvärinen, A., Laitakari, J., ... & Löppönen, H. (2022). Spoken Language Skills in Children With Bilateral Hearing Aids or Bilateral Cochlear Implants at the Age of Three Years. Ear and Hearing, 43(1), 220-233.
- McCreery, R. W., & Walker, E. A. (2022). Variation in auditory experience affects language and executive function skills in children who are hard of hearing. Ear and Hearing, 43(2), 347-360.
- Rastgoo, R., Kiani, K., Escalera, S., & Sabokrou, M. (2021). Sign language production: A review. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (pp. 3451-3461).
- Hadjikakou, K., Christodoulou, D., Hadjidemetri, E., Konidari, M., & Nicolaou, N. (2009). The experiences of Cypriot hearing adults with deaf parents in family, school, and society. Journal of deaf studies and deaf education, 14(4), 486-502.
- Lu, J., Jones, A., & Morgan, G. (2016). The impact of input quality on early sign development in native and non-native language learners. Journal of Child Language, 43(3), 537-552.
- Searls, M. (2021). Self-concept among deaf and hearing children of deaf parents. Available online.
- Johnson, R. E. (1991). Sign language, culture & community in a traditional Yucatec Maya village. Sign Language Studies, 73(1), 461-474.
- Tomblin, J. B., Oleson, J. J., Ambrose, S. E., Walker, E., & Moeller, M. P. (2014). The influence of hearing aids on the speech and language development of children with hearing loss. JAMA Otolaryngology–Head & Neck Surgery, 140(5), 403-409.
- Hodge, G., & Goico, S. A. (2022). Natural and elicited: Sign language corpus linguistics and linguistic ethnography as complementary methodologies. Journal of Sociolinguistics, 26(1), 126-136.
- Caselli, N., Pyers, J., & Lieberman, A. M. (2021). Deaf children of hearing parents have agelevel vocabulary growth when exposed to American Sign Language by 6 months of age. The Journal of Pediatrics, 232, 229-236.
- Tsou, Y. T., Li, B., Eichengreen, A., Frijns, J. H., & Rieffe, C. (2021). Emotions in deaf and hard-of-hearing and typically hearing children. Journal of deaf studies and deaf education, 26(4), 469-482.