

Original Paper

An Investigation of Sign Language as a Way of Communication in People with Hearing Impairments

Kyoko MOTOYASU¹⁾ and Rie SATO²⁾

*Department of Child Welfare,
Faculty of Human Life Sciences,
Notre Dame Seishin University¹⁾
Okayama, 700-8516, Japan*

*Kakusan Elementary School²⁾
Tsuyama, 708-0825, Japan
(Accepted Sept. 24, 1997)*

Key words : hearing impairment, sign language

Abstract

The purpose of this investigation was to clarify how sign language is used as a way of communication among people with hearing impairments as compared to other ways such as the oral method, writing and phonetic sign.

A questionnaire concerning frequency of using sign language and the degree of understanding, transmission, and satisfaction with its use was sent to 36 students of a junior and senior high school for the deaf-mute and 43 hearing impaired adults belonging to a communication support group which also included people with normal hearing. The age of the subjects ranged from 13 to 70.

The results showed that sign language and oral communication were used more frequently than other ways of communication such as writing and phonetic sign.

Although the frequency of using sign language to people with a hearing impairment was high (90 %), the degree of transmission was rather low (70 %) in both groups studied. The students' degree of satisfaction was higher when sign language was used with students with hearing impairments and teachers of the school for the deaf-mute. The degree of satisfaction was in direct proportion to the frequency of use.

Introduction

At the 11th World Deaf Mute Conference, held at Tokyo from July 5 to 11, 1991, the following important resolution was passed: "In every country, there are deaf mutes who use sign language as their communication.

Sign language is the basic way by which they can develop their possibilities and show their talents to the full. They can realize fundamental human rights, independence and equality of education and job opportunity." This decision was significant because it recognized "sign language" as a major mode of

communication for deaf and other hearing impaired people.

Sign language received much attention in 1995. People became aware of the necessity and importance of sign language interpretation because of the great Hanshin earthquake disaster. A sign language interpreter was included in the broadcasts of political views by candidates for election. Also, NHK broadcast "Sign Language for Everyone" (Min-na no Shuwa) and "Sign Language News" and several commercial TV stations did serial dramas in which the central characters were hearing impaired. It is said that those programs have given impetus to the sign language boom.

In Japan, there are many sign language circles. In these circles, everybody, including hearing impaired people, communicates by using "sign language". It is clear that "sign language" exists there as an effective means of communication.

However, in their daily life, there are few opportunities for circle members to use the sign. Normal people can communicate smoothly by using oral communication. In the case of hearing impaired people, however, how do they communicate with the people around them and use "sign language" ?

The purpose of the investigation was to clarify how sign language is used as a way of communication among people with hearing impairments as compared to other ways such as the oral method, writing and phonetic sign.

Method

Subjects: Thirty-six junior and senior high school students at O school for the deaf and mute (including students with multiple handicaps) and 43 adults with hearing impairments. The age of the subjects ranged from 13 to 70.

Contents of study: The questionnaire contained four items: ways of communication

and frequency of use, degree of understanding, transmission and satisfaction with the use of sign language.

The people with whom the subjects communicated were classified into five groups: 1) subjects' families 2) people with hearing impairment 3) people with normal hearing 4) subjects' neighbors 5) the students' teachers and colleagues of the adults at their place of work.

Results and Discussion

1 . Ways of Communication and Frequency of Usage (Fig. 1)

The students used the oral method more than 90 % of the time. However, they used sign language frequently to their teachers and people with hearing impairments who could understand sign language well. They used the oral method to people with normal hearing and their neighbors who could not understand sign language. They used sign language more frequently to their families who could understand it well.

Adults used writing more frequently than the students, especially to their colleagues. Adults used sign language most often with their families and, compared to the students, used it more frequently in all cases with the exception of their colleagues.

In contrast, the students used the oral method with people who did not understand sign language.

It seems that sign language has become the language of people with hearing impairments and extends the boundaries of communication when used.

Few students and adults used the phonetic method.

2 . Frequency of Usage and Degree of Understanding of Sign Language (Fig. 2, Table 1)

The students used sign language most often

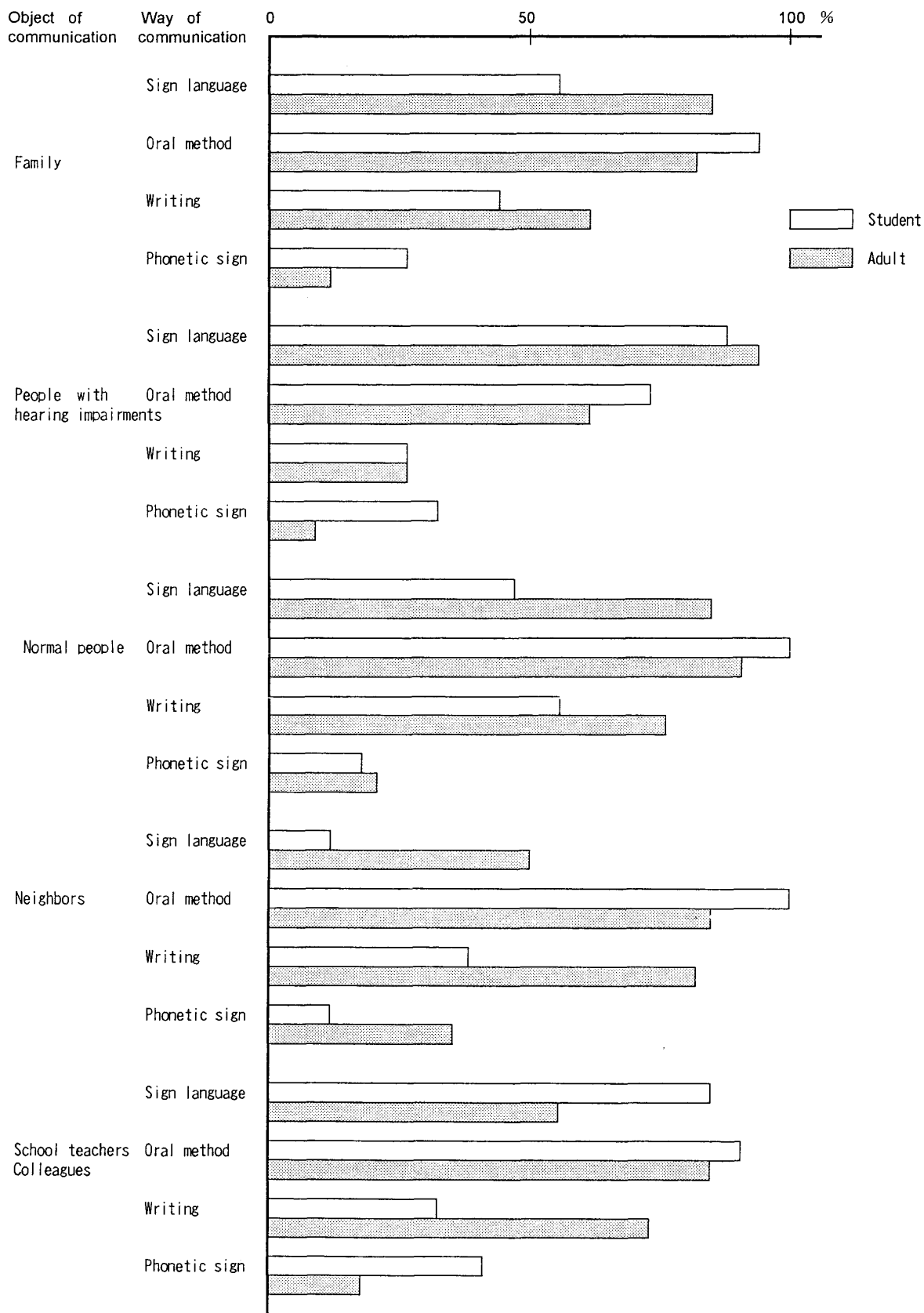


Fig. 1 Ways of communication and frequency of usage (often and sometimes)

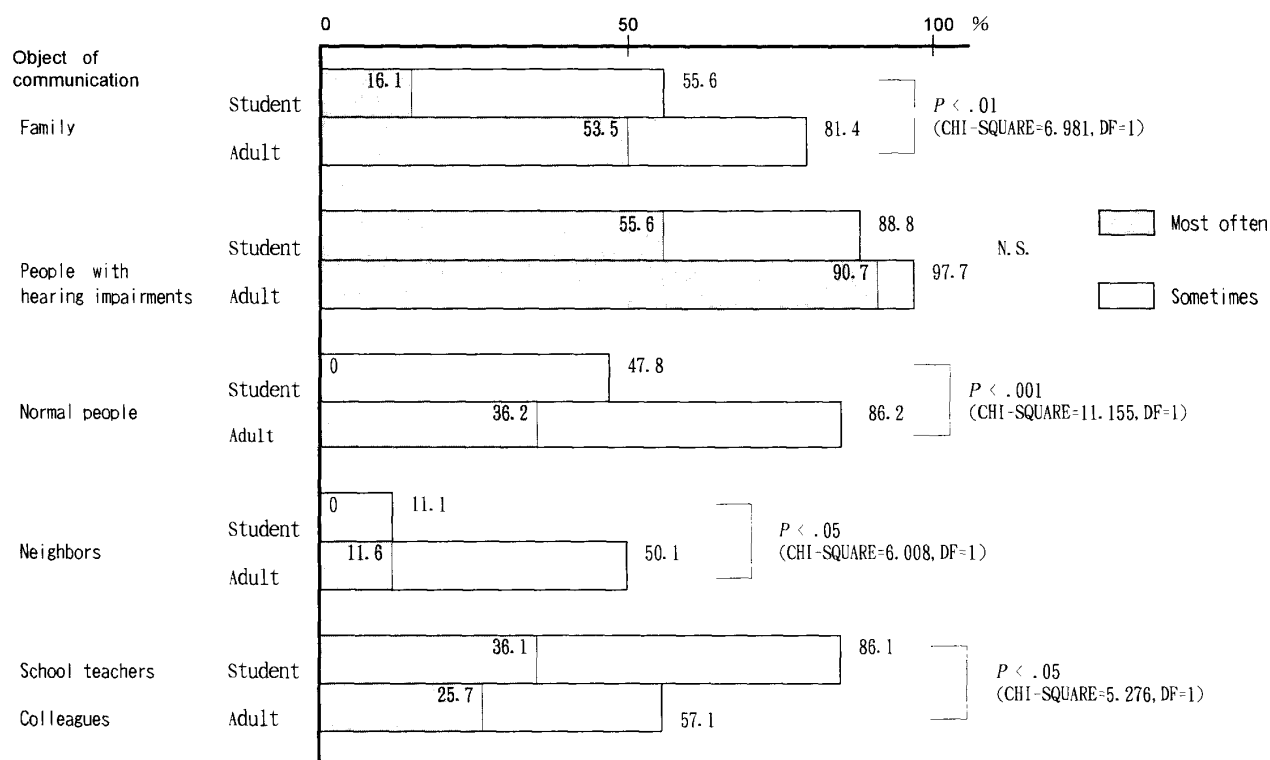


Fig. 2 Frequency of using sign language

Table 1 Understanding of sign language

Object of communication	Subject	N ()%			
		Enough	Some	Not enough	None
Family	Student	20 (55.6)	13 (36.1)	1 (2.7)	0 (0)
	Adult	23 (53.5)	16 (37.2)	4 (9.3)	0 (0)
People with hearing impairments	Student	20 (55.6)	12 (33.2)	0 (0)	2 (5.6)
	Adult	33 (76.7)	8 (18.6)	2 (4.7)	0 (0)
Normal people	Student	7 (30.5)	11 (47.8)	2 (8.7)	1 (4.3)
	Adult	7 (19.4)	20 (55.6)	9 (25.0)	0 (0)
Neighbors	Student	3 (16.7)	9 (50.0)	5 (27.8)	1 (5.5)
	Adult	3 (11.5)	13 (50.0)	7 (27.0)	3 (11.5)
School teachers	Student	15 (41.7)	17 (47.2)	1 (2.7)	0 (0)
	Adult	9 (25.7)	20 (57.1)	1 (2.9)	2 (5.7)

(Student: CHI-SQUARE=23.265, DF=8, $P < .001$ Adult: CHI-SQUARE=52.253, DF=8, $P < .001$)

with the following three groups of people in descending order: hearing impaired people, school teachers and their families. They did not use it with normal people and their neighbors at all. Sign language was understood equally well by other hearing impaired people and their families, followed in order by school

teachers, normal people and neighbors. The frequency of using sign language with their families was less than 20 %, but understanding was greater than 50 %. Although the frequency of usage to normal friends and their neighbors was low, the rate of understanding of their normal friends was 30 %, and that of

Table 2 Communication through sign language

Object of communication	Subject	N ()%			
		Enough	Some	Not enough	None
Family	Student	26 (72.2)	8 (22.2)	0 (0)	0 (0)
	Adult	19 (44.2)	20 (46.5)	3 (7.0)	0 (0)
People with hearing impairments	Student	26 (72.2)	7 (19.5)	0 (0)	1 (2.7)
	Adult	29 (67.4)	11 (25.7)	1 (2.3)	1 (2.3)
Normal people	Student	7 (30.4)	12 (52.2)	0 (0)	1 (4.3)
	Adult	5 (13.9)	22 (61.1)	7 (19.4)	2 (5.6)
Neighbors	Student	4 (22.2)	12 (66.7)	2 (11.1)	0 (0)
	Adult	2 (7.7)	15 (57.7)	7 (26.9)	2 (7.7)
School teachers Colleagues	Student	28 (77.8)	6 (16.6)	0 (0)	0 (0)
	Adult	9 (25.8)	16 (45.7)	6 (17.1)	2 (5.7)

(Student: CHI-SQUARE=27.621, DF=8, $P < .001$ Adult: CHI-SQUARE=44.303, DF=8, $P < .001$)

Table 3 Satisfaction of sign language usage

Object of communication	Subject	N ()%			
		Satisfied	Not satisfied	In some cases	No answer
Family	Student	21 (58.3)	6 (16.7)	9 (25.0)	0 (0)
	Adult	26 (60.5)	9 (20.9)	7 (16.3)	1 (2.3)
People with hearing impairments	Student	30 (83.3)	1 (2.8)	5 (13.9)	0 (0)
	Adult	34 (79.1)	3 (7.0)	6 (13.9)	0 (0)
Normal people	Student	8 (34.8)	4 (17.4)	11 (47.8)	0 (0)
	Adult	12 (33.3)	15 (41.7)	9 (36.0)	0 (0)
Neighbors	Student	2 (11.1)	6 (33.3)	10 (55.6)	0 (0)
	Adult	5 (19.2)	15 (57.7)	6 (23.1)	0 (0)
School teachers Colleagues	Student	23 (63.9)	5 (13.9)	8 (22.2)	0 (0)
	Adult	11 (31.4)	15 (42.9)	9 (25.7)	0 (0)

(Student: CHI-SQUARE=32.234, DF=8, $P < .01$ Adult: CHI-SQUARE=38.359, DF=8, $P < .001$)

their neighbors was 20 %. This rate is considered rather high because the frequency of usage was rather low. It is thought that the rate of understanding is related to closeness of relationship rather than the rate of usage. For the degree of understanding, objective judgement is difficult, thus, it is difficult to correlate the relationship between the rate of usage and the degree of understanding.

In the adults, the rate of usage of sign language to the hearing impaired was the highest at 90 %, followed, in order, by the families, normal friends and occupational

colleagues. The order of the rate of understanding was the same except that the order of normal friends and occupational colleagues was reversed. A correlation between frequency of using sign language and the degree of understanding was apparent.

3. Frequency of Usage and Degree of Transmission of Sign Language (Fig. 2, Table 2)

Students' frequency rate of using sign language to the hearing impaired was the highest. However, the degree of transmission was highest with their teachers. The following

reasons could be the causes of this difference.

1) Ability of using sign language was different among the students.

2) Understanding of the content of sign language varied among the students. The reason for this variation was that the students started to learn sign language at different times because sign language education was not required.

3) Evaluation of the transmission was a subjective judgement and thus could be somewhat unreliable.

In the adults, frequency rate of using sign language was about 90 %. However, the degree of transmission was under 70 %. Possible reasons may be differences in the sign languages used and wide variations in the sign language abilities among individuals.

There are two types of sign language, a traditional one and a simultaneous one. Elderly hearing impaired people use the former and younger people use the latter. An interchange between these two types is not necessarily easy. Furthermore, there are dialects among sign languages which can occasionally result in failed communication even among hearing impaired people.

4. Frequency of Usage and Usage with Satisfaction of Sign Language (Fig. 2, Table 3)

The students use sign language most frequently with fellow hearing impaired students and their teachers in the school. However, teaching sign had been prohibited in the school education for the deaf in order to promote the oral method. The question of introducing sign language into school education is still under discussion. Although sign language is not permitted officially, it is actually prevalent in the schools. It seems that sign language is very useful and necessary as a means of communication.

In the adults, the degree of satisfaction increased in proportion to the frequency of use when used to various groups such as other hearing impaired people, their families, normal people who can use sign language, etc.

This survey revealed that sign language was the best means of communication for students and adults with hearing impairments.

Conclusion

The results of this research showed that sign language and oral communication were used more often than other methods. But it is a matter of discussion as to which is better as a means of communication for people with hearing impairments. In the past, the inferior points of sign language have been emphasized. However, at the present time, the effectiveness and importance of sign language have been reevaluated and the use of sign language has been accepted. Sign language is being introduced into school education. Accepting the actual circumstances of students with respect to communication is more important than choosing between sign language and the oral method. Such considerations would have an important meaning for people with hearing impairments when they go out into the world.

It is important for the hearing impaired that sign language is recognized as their language, and that they have more opportunities to use it for communicating. If they are able to communicate with more people in more places by using sign language, they will have a better social life and feel much more satisfied. This study reaffirms that sign language is essential to communication among hearing impaired people, because it is used frequently and with great satisfaction.