International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2018): 7.426

Acquisition of PNG Marker in Malayalam Speaking Children with Hearing Impairment

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Abstract: ***Language is a set of arbitrary symbols (mainly conventional) used by people for the purpose of communication. The function of language is informative, expressive and directive. (Subba Rao, 1992)Phonology, Morphology, Syntax, Semantics, and pragmatics make five domains of language. Language plays a crucial role in child's development in order to effectively exchange information with others in meaningful way. Person, Number, Gender (PNG) markers are arrangement that happen between verb and a subject when a word changes from depending on the other word to which it relates. The development of PNG marker starts with the appearance of pronouns. The aim of the present study was to report the acquisition of PNG markers in Malayalam speaking children with Hearing Impairment of age 4-8 years. 40 Malayalam speaking children with Hearing Impairment of the age 4-8 years and who are attending special school in Kerala. Further divided into 2 groups with respect to their age 4-6 years and 6-8 years with 20 members in each group and equal number of males and female participated in the present study. The results shows that the children with Hearing Impairment of age 4-6 years showed significant increase in the percentage of acquisition of PNG markers when compared to that of children with hearing Impairment of age 6-8 years. It is clear that the usage of PNG markers increased as the age increases both in males and females. The present study is I accordance with vijayakshmi (1981), says that 3-4 years of age, third person singular (both masculine and feminine) marker found in normal children. Prema (1979), says that the non-usage of gender and number marker in 5-6 years children indicting their instability of speech in young children. Kaur, Jiji & Subba Rao (2017), says that as age increases the acquisition of PNG markers also increased and also shows that most of these markers developed by 4 years of age. The present study was conducted by Priyanka. M (2018), says that as age increase the acquisition of PNG marker also increased and also shows that most of these markers developed by 4 years of age.***

Keywords: Acquisition, PNG Markers, Children, Hearing Impairment

1. Introduction

Language is a set of arbitrary symbols (mainly conventional) used by people for the purpose of communication. The function of language is informative, expressive and directive. (Subba Rao, 1992)Phonology, Morphology, Syntax, Semantics, and pragmatics make five domains of language. Language plays a crucial role in child's development in order to effectively exchange information with others in meaningful way.

Morph syntax refers to the rules that determine the relation between one linguistic form and another, defined by morphological and syntactic criteria. Solid syntactic skills require an understanding and use of correct word order and organization in phrases and sentences and also the ability to use increasingly complex sentences as language develops with appropriate morphosyntactic operations. The morphosyntactical language includes plural markers, case markers, and PNG markers.

Person, Number, Gender (PNG) markers are arrangement that happen between verb and a subject when a word changes from depending on the other word to which it relates. The development of PNG marker starts with the appearance of pronouns.

Hearing is essential for natural development of speech and language and communication is interfered with the presence of hearing loss. Several authors have reported the effect of hearing loss on the acquisition and maintenance of speech. It has a marked effect on a child's abilityto acquire speech and hence the deaf child is faced with a severe communication handicap, normal speech is intelligible to him and as a result of lack of auditory feedback of his own speech production h has considerable difficulty in learning to speak correctly.

As observed from the literature review, Indian studies of language acquisition of language acquisition, syntactical aspects in general and morphological structures in particular are not frequent. Acquisition of PNG markers in Malayalam language are less studied in children with Hearing Impairment, hence, there is a need for studying those for establishing assessment and management in morpho - syntactical aspects. More morpho – syntactical studies in the Indian context would aid in assessment and help in establishing the baseline to set goals for morphological intervention in children with Hearing Impairment.

2. Need of the Study

Indian studies of language acquisition, syntactical aspects n general and morphological structures in particular are not frequent. Acquisition of PNG markers in Malayalam language are less studied in children with Hearing Impairment, hence, there is a need for studying those for establishing assessment and management I morpho – syntactical aspects. More morpho –syntactical studies in the Indian context would aid in assessment ad help in establishing the baseline to set goals for morphological intervention in children with Hearing Impairment.

3. Aim of the Study

The aim of the present study was to report the acquisition of PNG markers in Malayalam speaking children with Hearing Impairment of age 4-8 years.

Subject Selection

40 Malayalam speaking children with Hearing Impairment of the age 4-8 years and who are attending special school in Kerala. Further divided into 2 groups with respect to their age 4-6 years and 6-8 years with 20 members in each group and equal number of males and female participated in the present study.

Inclusion Criteria

- Malayalam as first language
- Diagnosed children with Hearing Impairment as per school records

Exclusion Criteria

- No neurological problems
- No major health issues
- No associated problems

Stimulus Used

Common PNG markers in Malayalam were identified and listed below

1) Gender markers

പാട്ടുകാരൻ /pattukaran/	പാട്ടുകാരി /pattukari/
അച്ഛൻ /achan/	അമ്മ /amma/
നർത്തകൻ /narthakan/	നർത്തകി /narthaki/

2) Number markers

നായ /naya/	നായ്ക്കൾ /nayakal/
അമ്മ /amma/	അമ്മമാർ/ammamar/

3) Person markers

അവൾപാടുന്നു/aval padunnu/	അവർകുടിക്കുന്നു /avar kudikkunnu/
അവൻവെള്ളംകുടിക്കുന്നു /avan vellam kudikkunnu/	അവൾവെള്ളംകുടിക്കുന്നു /aval vellam kudikkunnu/

Procedure

Initially the tester interacted with the subject to create a rapport and detailed instructions were provided. At a time once child was taken for recording. The subjects were seated in a chair next to the tester at one foot mic distance and presented picture stimuli through PowerPoint presentation using standard DELL laptop and were instructed to identify the pictures.

Analysis

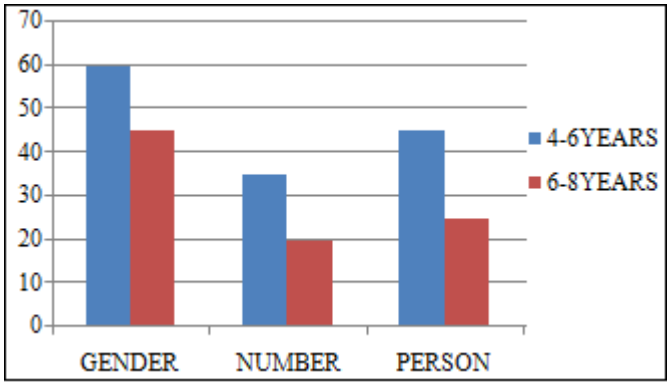
The study aimed at obtaining an audio taped sample of Malayalamspeaking children with Hearing Impairment. The audio taped samples were analyzed at syntactic level primarily focusing on PNG markers. The presence of unit was marked as 1 and absence or usage of inappropriate PNG marker was marked as 0. The total number of each PNG marker was tabulated.

4. Result and Discussion

The aim of the present study was to report the acquisition of PNG markers in Malayalam speaking children with Hearing Impairment of age 4 - 8 years. The obtained data was analyzed for the presence of PNG markers and results are discussed below.

PNG	Age	present Freq	present %	Testing Proportions Z Value	P	
Gender	4-6Years	12	60.0%	.95	.171	NS
	6-8 Years	9	45.0%			
Number	4-6 Years	7	35.0%	1.06	.144	NS
	6-8 Years	4	20.0%			
Person	4-6 Years	9	45.0%	1.33	.092	NS
	6-8 Years	5	25.0%			

The above table showed no significant difference between the age groups for the acquisition of gender markers (p=0.171), number markers (p=0144), and person markers (p=0.092).



From the above figure, it is clearly observed that the acquisition of each PNG markers increases with age.

The children with Hearing Impairment of age of 4-6 years showed acquisition of 60% for gender markers, 35% for number markers, and 45% for person marker.

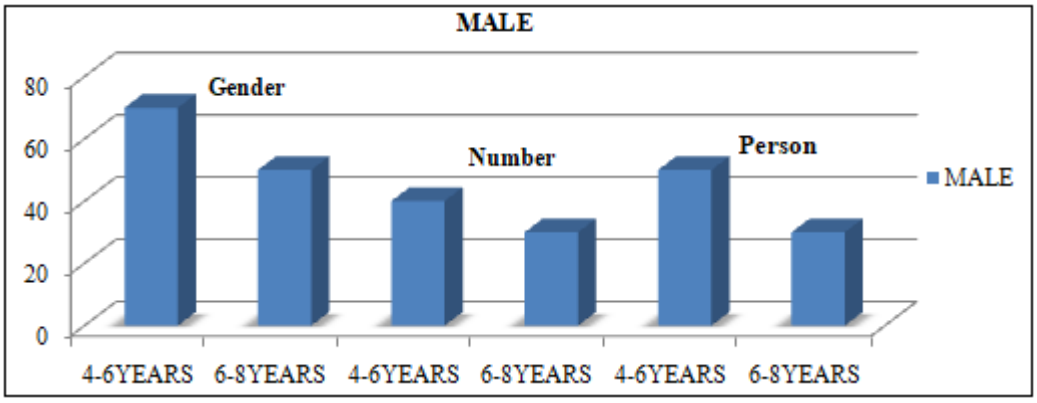
The children with Hearing Impairment of age of 6-8 years showed acquisition of 45% for gender markers, 20% for number markers, and 25% for person marker.

PNG	Sex	Age	Present Freq	Present %	Testing Proportions Z Value	P	
Gender	Male	4-6Years	7	70.0%	.91	.181	NS
		6-8 Years	5	50.0%			
	Female	4-6 Years	5	50.0%	.45	.327	NS
		6-8 Years	4	40.0%			
Number	Male	4-6 Years	4	40.0%	.47	.320	NS
		6-8 Years	3	30.0%			
	Female	4-6 Years	3	30.0%	1.12	.132	NS
		6-8 Years	1	10.0%			
Person	Male	4-6 Years	5	50.0%	.91	.181	NS
		6-8 Years	3	30.0%			
	Female	4-6 Years	4	40.0%	.98	.165	NS
		6-8 Years	2	20.0%			

The above table showed no significant difference between the age groups in male children with Hearing Impairment for the acquisition of gender markers (p=0.181), number markers (p=0.320), and person markers (p=0.181).

The result also showed no significant difference between the age groups in female children with Hearing Impairment for

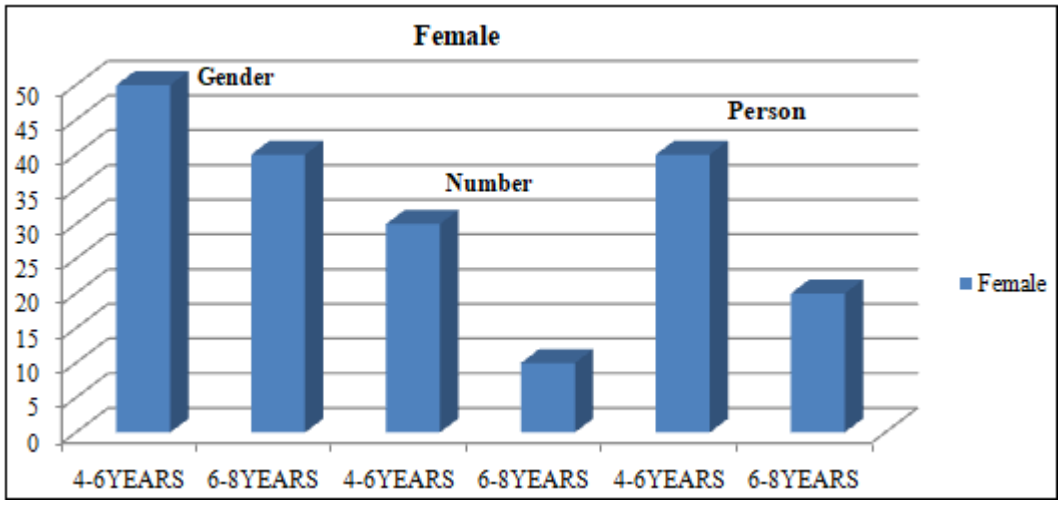
the acquisition of gender markers (p=0.327), number markers (p=0.132) and person markers (p=0.165).



From the above figure, it is clearly observed that the acquisition of each PNG markers increases with age in males.

The male children with Hearing Impairment with age of 4-6 years showed acquisition of 70% for gender markers, 40% for number markers, and 50% for person markers.

The male children with Hearing Impairment with age of 6-8 years showed acquisition of 50% for gender markers, 30% for number markers, and 30% for person markers.

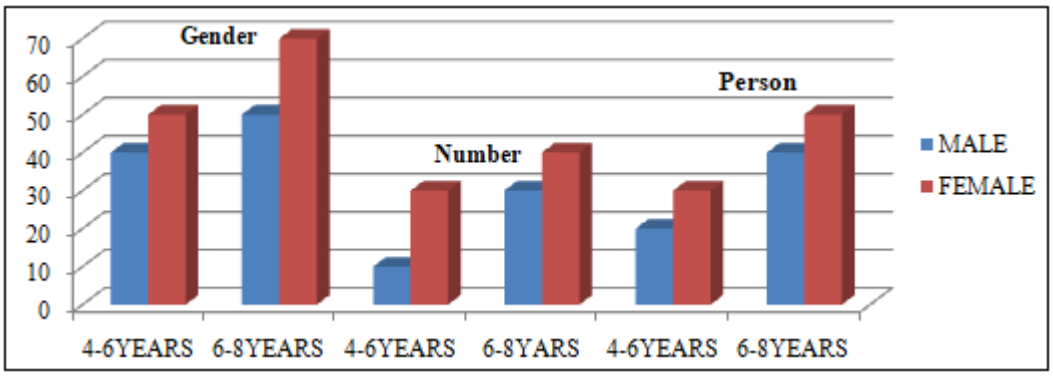


From the above figure, it is clear observed that the acquisition of each PNG markers increases with age in females. The female children with Hearing Impairment with age of 4-6 years showed acquisition of 50% for gender marker, 30% for number markers, and 40% for person marker.

The female children with Hearing Impairment with age of 6-8 years showed acquisition of 40% for gender marker, 10% for number markers, and 20% for person marker.

			Present		Testing Proportions		
PNG	Sex	Age	Freq	%	Z Value	P	
Gender	Male	4-6 Years	4	40.0%	.45	.327	NS
		6-8 Years	5	50.0%			
	Female	4-6 Years	5	50.0%	.91	.181	NS
		6-8 Years	7	70.0%			
Number	Male	4-6 Years	1	10.0%	1.12	.132	NS
		6-8 Years	3	30.0%			
	Female	4-6 Years	3	30.0%	.47	.320	NS
		6-8 Years	4	40.0%			
Person	Male	4-6 Years	2	20.0%	.52	.303	NS
		6-8 Years	3	30.0%			
	Female	4-6 Years	4	40.0%	.45	.327	NS
		6-8 Years	5	50.0%			

From the above table, there is no significant difference for the acquisition of PNG markers in male and female children with Hearing Impairment.



From the above figure, it is clearly observed that the group of male children with Hearing Impairment of age 6-8 years should significant increase in the percentage of acquisition I gender marker, number marker, and person marker when compared with that of females in the same age group.

Among 4-8 years old male children with Hearing Impairment showed significant increase in the percentage of acquisition in gender marker, number marker, and person marker when compared with that of females in the same age group.

The result revealed that there is a general increase in the acquisition as well as frequency of usage of PNG markers with the age of children with Hearing Impairment.

5. Discussion

The present study aimed at reporting the acquisition of PNG markers in Malayalam speaking children with Hearing Impairment of age 4-8 years. The results showed that there is a general increase in the acquisition of PNG markers with the increase in the age of the children.

From the above results the children with Hearing Impairment of age 4-6 years showed significant increase in the percentage of acquisition of PNG markers when compared to that of children with

Hearing Impairment of age 6-8 years. It is clear that the usage of PNG markers increased as the age increases both in males and females. The present study is I accordance with vijayakshmi (1981), says that 3-4 years of age, third person singular (both masculine and feminine) marker found in normal children. Prema (1979), says that the non-usage of gender and number marker in 5-6 years children indicting their instability of speech in young children. Kaur, Jiji& Subba Rao (2017), says that as age increases the acquisition of PNG markers also increased and also shows that most of these markers developed by 4 years of age.

6. Conclusion

Morphology deals with the structure of word and its generation from the root. The morphemic structure of language differs from other at various levels. Morphologically, words in Malayalam are classified into different groups considering the way they make inflectional forms. The agglutinative language like Malayalam is rich in infections, in which detecting the morphological suffixes of Malayalam nous and verbs are harder task.

The morpho – syntactical aspects include plural markers, case markers, PNG markers etc. Acquisition of morph – syntax structures is still the area which needs lots of research explanations.

The present study was conducted by Priyanka. M (2018), says that as age increase the acquisition of PNG marker also increased and also shows that most of these markers developed by 4 years of age.

7. Limitations

- Limited sample size was selected for the study
- Subjects are taken from single dialectal community
- The analysis was mainly based on picture identification, data could not be collected during natural conversation context.

8. Future Implications

- Can take more subjects
- Study can be done on other Indian languages
- More research work needed in other disordered population
- Effect of dialectal variations can be considered

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