

# Acquisition of Plural Markers in Typical Malayalam-English Speaking Bilingual Children

Ameena Shahanas P.T<sup>1</sup>, Dr. Satish Kumaraswamy<sup>2</sup>

<sup>1</sup>Post Graduate student (MASLP), Dr M.V Shetty College of Speech and Hearing, Malady Court, Kavoor, Mangalore University-15

<sup>2</sup>Ph.D (Speech and Hearing), Professor, Dr M.V Shetty College of Speech and Hearing, Malady Court, Kavoor, Mangalore University-15

## ABSTRACT

Language acquisition signifies the process in which children acquire and systematically use morphological forms to indicate plurality in one or more languages reflecting the influence of linguistic input, cognitive maturation, patterns of exposure across their first (L1) and second (L2) languages. The present study investigates the acquisition of plural markers in Typical Malayalam-English bilingual children systematically comparing their proficiency in the first language (Malayalam, L1) and second language (English, L2) among 30 children aged 6-7 years. Subjects were selected based on consistent bilingual exposure in home and school environments with strict exclusion of any history of neurological, psychiatric impairments, literacy difficulties in either language. Data collection was done in quiet well illuminated room employing picture-naming and description tasks with visual stimuli designed to elicit plural forms naturally. Responses were meticulously analyzed for the presence or absence of plural markers namely /kal/, /mar/, /ar/, unmarked forms with numbers and mass nouns in Malayalam; and -s, -es, -ies as well as irregular plurals in English. Malayalam plural markers showed high proficiency (86%) while English plural forms displayed comparatively lower proficiency with regular forms stronger and irregular forms weaker (62.67%).

**Keywords:** Plural markers, Bilinguals, Morphological forms, Literacy difficulties

## INTRODUCTION

Language acquisition is the process by which children understand and produce spoken language including its sounds, words and grammatical structures (Gleason, 2005). First (L1) and second language(L2) development is the processes by which individuals acquire one or more languages. L1 development occurs naturally and unconsciously in early childhood through exposure and interaction whereas L2 development involves learning an additional language after the first often through both natural exposure and formal instruction. Chomsky (1965) proposed that L1 acquisition is supported by an innate ability, while Krashen (1982) and Ellis (1997) stated that L2 development depends on input, learning context and exposure. Development of grammatical structures in bilingual children for plural markers reflects the influence of both L1 and L2 systems. In Malayalam, pluralization is expressed through a variety of markers such as -kal, -mar and -ar along with unmarked forms and mass noun distinctions. These forms are typically acquired early and used accurately due to continuous natural exposure in the home environment (Asher & Kumari, 1997; Nair, 2012). English as a L2 primarily uses plural markers such as -s, -es and -ies along

with irregular plural forms that do not follow consistent rules (Huddleston & Pullum, 2002). Children generally acquire regular plural forms with relative ease. Irregular plurals often pose difficulty due to their unpredictable nature and reliance on memorization (Pinker, 1999). Bilingual children tend to demonstrate greater proficiency in Malayalam plural forms compared to English highlighting the impact of early exposure and language dominance on morphological development (Genesee, 2006; Bialystok, 2001). Gleason (1958) investigated the acquisition of English plural morphology in children and revealed that many zero responses initially considered random indicated that children relied on pattern based learning rather than strictly applying grammatical rules.

Innes (1974) provided a more extensive dataset on English plural acquisition which was reanalysed using schema theory and cue strength analysis. The results supported the view that children depend on mental patterns or schemata to form plurals rather than strictly following rules.

Vijayalakshmi (1981) reported limited use of plural markers in 3 to 5 years old Kannada speaking normal children but were comprehended by 3 years old children.

Halle and Marantz (1993) critiqued Anderson's Extended Word and Paradigm Theory of morphology. They pointed out that it could not explain irregular plurals such as *oxen* and that its 'blocking' principle restricts plural formation preventing some correct forms like *wives* while disallowing incorrect forms like *oxens*.

Subbarao (1995) investigated on use of regular plural markers, unmarked and marked nouns during natural conversation in children with intellectual disability (ID) and typically developing (TD) Kannada speaking children in the age range of 4-6 years. The result revealed that children with ID (same mental age) performed poorly when compared with TD children.

Kopcke (1998) investigated the acquisition of plural marking in English and German languages. The study revealed that children acquire plurals by creating schematic representations for singular and plural forms rather than applying grammatical rules.

Parimalagantham (2009) conducted a comparative morphological analysis of plural markers in Tamil and Telugu specifically focusing on -kaL and -lu. The results showed a distinctive cross-linguistic variation in the treatment of mass nouns. While Tamil maintains a strict singular concord for uncountable substances like water and milk, Telugu frequently employs plural markers (-lu) for the same categories to indicate quantity or standard usage. This suggests that while both languages share a Dravidian root, their cognitive and grammatical categorization of "countability" has diverged significantly.

Radhika and Kumaraswamy (2010) Compared acquisition of developmental of plural markers in Malayalam speaking TD children and children with ID. The result suggested both the groups used all the 4 plural markers. The frequency of occurrence of all plural markers was less in children with ID when compared to TD children.

Vishnu, Sreelakshmi, Mohan and Kumaraswamy (2015) Studied the acquisition of plural markers in TD Malayalam speaking children aged 3-8 years. The study provided descriptive normative data regarding the development of plural marker usage among children. The findings revealed that older children performed better than younger children in using plural markers correctly indicating the grammatical abilities improve with age.

Salleh, Kawaguchi, Jones and Biase (2016) investigated the development of plural expression in a Malay-English bilingual child. The study followed the child over a six-month period using audio and video recordings to examine how plural forms are acquired in two structurally different languages. In Malay language plurality mainly occurs through reduplication while English uses morphological markers such

as -s. The findings revealed that the child was able to develop two distinct systems of pluralization in each language, although there was a noticeable cross-linguistic influence between them. The study suggests that bilingual children can handle different grammatical systems simultaneously but interaction between the two languages is a natural part of their language development.

## METHODOLOGY

### Aim

The aim of the study was to analyse the acquisition of plural markers in Typical Malayalam-English speaking bilingual children.

### Subjects

30 Typical Malayalam-English speaking bilingual children in the age range of 6-7 years participated in the present study.

### Inclusion criteria

- Children speaking Malayalam and English at home and school in day to day activity.
- Malayalam as first language.

### Exclusion criteria

- No speech and language problem.
- Children with a history of psychiatric and neurologic impairments.
- Children unable to read or understand Malayalam and English.

### Procedure

Data collection was done in a quiet well illuminated room through one-on-one interactions between the tester and children. During these sessions each child was individually presented with visual stimuli designed to elicit plural markers in both languages. The tasks included picture description and picture naming activities focusing on plural forms. The children were encouraged to respond naturally allowing the researcher to observe and record their use of plural markers in Malayalam and English. This approach helped in assessing their accuracy, patterns of usage and any cross linguistic influence in plural expression.

### Statistical analysis:

The categorical data were summarized using frequencies, percentages and comparison was performed using the Binomial test. The p value of  $<0.05$  was considered as significant. Data analysis was conducted with SPSS version 23 with a significance level set at 5%.

## RESULT

The aim of the study was to analyse the acquisition of plural markers in typical Malayalam-English bilingual children. The obtained data was statistically analysed and the results are discussed below.

**Table 1**  
*Shows the development of Malayalam plural markers in children.*

|       | Absent |         | Present |         | Total | Binomial test |    |
|-------|--------|---------|---------|---------|-------|---------------|----|
|       | Count  | Row N % | Count   | Row N % |       | p             |    |
| /kal/ | 3      | 10.0%   | 27      | 90.0%   | 30    | 0.000         | HS |
| /mar/ | 3      | 10.0%   | 27      | 90.0%   | 30    | 0.000         | HS |

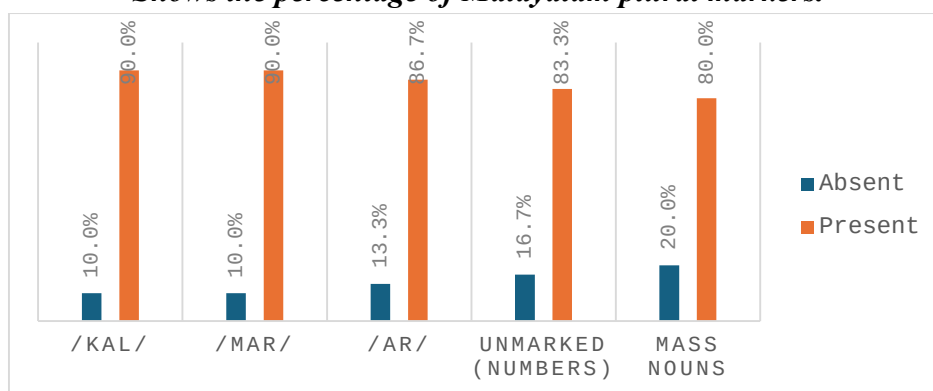
|                   |   |       |    |       |    |       |    |
|-------------------|---|-------|----|-------|----|-------|----|
| /ar/              | 4 | 13.3% | 26 | 86.7% | 30 | 0.000 | HS |
| Unmarked(numbers) | 5 | 16.7% | 25 | 83.3% | 30 | 0.000 | HS |
| Mass nouns        | 6 | 20.0% | 24 | 80.0% | 30 | 0.001 | HS |

\*HS: Highly significant

Table 1 shows the presence and absence percentage of children using plural forms. All the five plural markers were frequently used by the children. The frequency of occurrence of plural markers for /kal/ and /mar/ were same. The frequency of occurrence of plural marks for /ar/, unmarked (numbers) and mass nouns comes in almost the same range with present percentage of 86.7%, 83.3% and 80.0% respectively.

**Figure 1**

*Shows the percentage of Malayalam plural markers.*



The above figure shows the presence and absence percentages of plural markers in five different categories: /kal/, /mar/, /ar/, unmarked (numbers) and mass nouns.

**Table 2**

*Shows the overall performance of children for Malayalam plural forms.*

|                                    | N  | Minimum | Maximum | Mean | Std. Deviation | Overall Performance |
|------------------------------------|----|---------|---------|------|----------------|---------------------|
| Plural expression Score (out of 5) | 30 | 3       | 5       | 4.30 | 0.794          | 86.00               |

The Malayalam plural markers scores was measured out of 5 and it ranged from a minimum of 3 to a maximum of 5 with a mean score of 4.30. The Standard deviation was 0.794 indicating some variability in the performance but generally high scores. Overall, the subjects achieved an 86% performance level in using Malayalam plural forms reflecting strong proficiency in plural expression within this group.

**Table 3**

*Shows the performance of children for English plural markers.*

|     | Absent |         | Present |         | Total | Binomial test |     |
|-----|--------|---------|---------|---------|-------|---------------|-----|
|     | Count  | Row N % | Count   | Row N % |       | p             |     |
| s   | 2      | 6.7%    | 28      | 93.3%   | 30    | 0.000         | HS  |
| es  | 4      | 13.3%   | 26      | 86.7%   | 30    | 0.000         | HS  |
| ies | 8      | 26.7%   | 22      | 73.3%   | 30    | 0.016         | Sig |

|                       |    |       |    |       |    |       |    |
|-----------------------|----|-------|----|-------|----|-------|----|
| irregular noun plural | 12 | 40.0% | 18 | 60.0% | 30 | 0.362 | NS |
|-----------------------|----|-------|----|-------|----|-------|----|

\* NS: No significance, S: Significance and HS: Highly significance

Table 3 shows the presence and absence of different English plural markers among 30 subjects along with the results of the Binomial test. The regular plural suffix **-s** was the most frequently present 93.3% followed by **-es** suffix (86.7%) both yielding highly significant result. Whereas the presence of **-ies** suffix was lower at 73.3% with a statistically significant result ( $p = 0.016$ ). In contrast irregular plurals were produced correctly only 60.0% of the time and this difference was not statistically significant ( $p = 0.362$ ).

**Figure 2**

*Shows the percentage of children in English plural forms.*

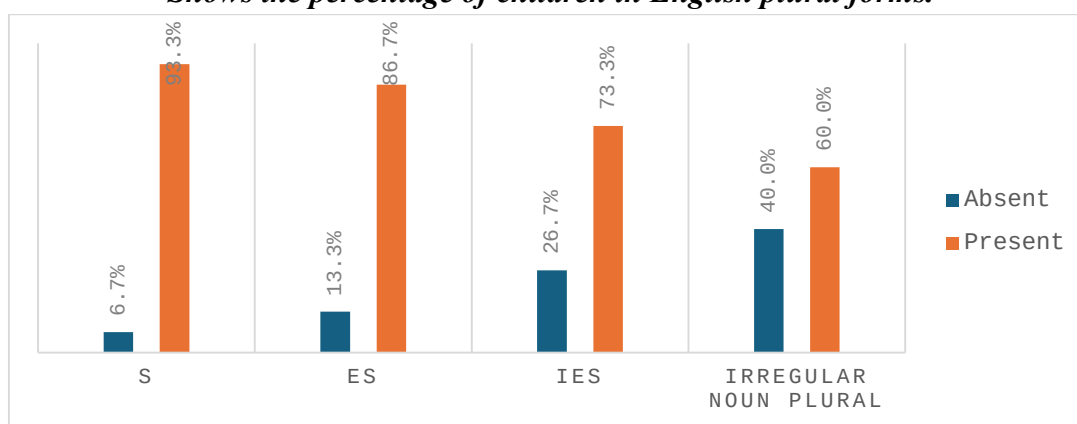


Figure 2 shows the presence and absence percentages of plural markers in four different categories: (-s, -es, -ies) and irregular noun plural.

**Table 4**

*Shows the overall performance of children for English plural forms.*

|                                    | N  | Minimum | Maximum | Mean | Std. Deviation | Overall Performance |
|------------------------------------|----|---------|---------|------|----------------|---------------------|
| Plural expression Score (out of 4) | 30 | 1       | 4       | 3.13 | 0.776          | 62.67               |

The mean score of English plural expression was 3.13 out of the possible maximum of 4. The standard deviation was 0.776, indicating moderate variation in the subject performance. Overall the performance level of 62.67% indicates a moderate degree of proficiency.

## DISCUSSION

Acquisition of plural markers is the developmental process by which children learn to use language-specific grammatical elements to indicate plurality in nouns, verbs or related forms, distinguishing singular from plural concepts. The findings of present study indicate that Malayalam-English bilingual children aged 6-7 years showed strong mastery of plural markers in Malayalam (86% accuracy) and only moderate proficiency in English (62.67%). High and significant use of Malayalam plural markers reflects

consolidated first language acquisition whereas lower accuracy on irregular English plurals. Regular English plurals (-s, -es, -ies) are used more consistently than irregular forms highlighting the influence of frequency, regularity and input quality. Vishnu et.al, (2015) found that regular markers in Malayalam are typically acquired with 100% accuracy by age 5 in TD children while irregular forms may take until age 7-8 to fully master which is according with the present Study. Overall the results support that first language acquisition leads to more stable grammatical competence while second language plural marking remains partial and sensitive to complexity and exposure.

## SUMMARY AND CONCLUSION

Language acquisition is the process by which children learn to understand and use language including grammatical forms. The aim of the study was to identify the acquisition of plural markers in Typical Malayalam (L1) and English (L2) speaking bilingual children in the age range of 6-7 years. The study included 30 Malayalam-English bilingual children and data was collected using picture naming and description tasks to elicit plural forms in both languages. The results revealed that children showed higher proficiency in Malayalam plural markers (86%) compared to English (62.67%) with better performance in regular forms than irregular ones. Overall the study concludes that first language acquisition results in stronger and more consistent grammatical skills while second language acquisition leads to relatively lower proficiency especially in complex forms emphasizing the role of exposure and order of language learning.

### Limitation:

- Sample size is limited
- Selection of participants were random

### Future direction:

- Can be done in different populations
- Can be done more sample size

## Reference:

1. Asher, R. E., & Kumari, T. C. (1997). *Malayalam*. Routledge.
2. Bialystok, E. (2001). *Bilingualism in development: Language, literacy, and cognition*. Cambridge University Press.
3. Chomsky, N. (1965). *Aspects of the theory of syntax*. MIT Press.
4. Ellis, R. (1997). *Second language acquisition*. Oxford University Press.
5. Genesee, F. (2006). Bilingual first language acquisition in perspective. In E. Hoff & M. Shatz (Eds.), *Blackwell handbook of language development* (pp. 324–342). Blackwell Publishing.
6. Gleason, J. B. (2005). *The development of language* (6th ed.). Allyn & Bacon.
7. Gleason, J. B. (1958). The child's learning of English morphology. *Word*, 14(2–3), 150–177. <https://doi.org/10.1080/00437956.1958.11659655>
8. Halle, M., & Marantz, A. (1993). Distributed morphology and the pieces of inflection. In K. Hale & S. J. Keyser (Eds.), *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger* (pp. 111–176). MIT Press.
9. Huddleston, R., & Pullum, G. K. (2002). *The Cambridge grammar of the English language*. Cambridge University Press.
10. Innes, J. (1974). *The acquisition of English plural morphology by children*.



11. Köpcke, K.-M. (1998). The acquisition of plural marking in English and German revisited: Schemata versus rules. *Journal of Child Language*, 25(2), 293–319. <https://doi.org/10.1017/S0305000998003439>
12. Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press.
13. Nair, R. B. (2012). Morphological development in Malayalam speaking children. *Language in India*, 12(3), 45–58.
14. Parimalagantham, S. (2009). Comparative morphological analysis of plural markers in Tamil and Telugu. *Indian Linguistics*, 70(1–2), 89–102.
15. Pinker, S. (1999). *Words and rules: The ingredients of language*. Basic Books.
16. Radhika, P., & Kumaraswamy, K. G. (2010). Development of plural markers in Malayalam speaking typically developing children and children with intellectual disability. *Journal of All India Institute of Speech and Hearing*, 29, 56–63.
17. Salleh, R. M., Kawaguchi, S., Jones, C., & Di Biase, B. (2016). The development of plural expression in a Malay-English bilingual child. *International Journal of Bilingual Education and Bilingualism*, 19(5), 1–15.
18. Subbarao, K. V. (1995). Use of plural markers in Kannada speaking children with intellectual disability and typically developing children. *Journal of Communication Disorders*, 28(2), 101–110.
19. Vijayalakshmi, B. (1981). Acquisition of plural markers in Kannada speaking children. *Mysore Journal of Speech and Hearing*, 10(1), 23–29.
20. Vishnu, K., Sreelakshmi, K., Mohan, M., & Kumaraswamy, K. G. (2015). Acquisition of plural markers in typically developing Malayalam speaking children aged 3–8 years. *Journal of All India Institute of Speech and Hearing*, 34, 78–85.