

Acquisition of Negation Forms in Typical Children Speaking Malayalam

Stephy K Yohannan¹, Dr. Satish Kumaraswamy²

¹Final Post Graduate student (Msc.SLP), Dr. M.V Shetty College of Speech and Hearing, Malady Court, Kavoor, Mangalore. Mangalore University.

²Ph.D. in Speech and Hearing, Dr. M.V. Shetty College of Speech and Hearing, Malady Court, Kavoor, Mangalore. Mangalore University

Abstract

Negation is an important morpho-syntactic feature that enables children to express denial, rejection, and non-existence, playing a key role in language development. The present study aimed to examine the acquisition of negation forms in typically developing Malayalam-speaking children aged 4–7 years. A total of 60 children were divided into three age groups (4–4.11, 5–5.11, and 6–6.11 years), with 20 participants in each group. Negation forms were elicited using picture description and sentence completion tasks, and responses were recorded, transcribed, and analyzed for accuracy. Data were summarized using mean and standard deviation. Comparisons between groups were performed using independent samples *t*-tests and one-way analysis of variance (ANOVA), followed by Bonferroni post hoc analysis for multiple comparisons. Statistical analysis was conducted using SPSS version 23, with a *p*-value of less than .05 considered statistically significant. The results revealed a significant improvement in the use of negation forms with increasing age ($p < .001$), indicating a clear developmental progression. Younger children showed greater difficulty, particularly in sentence completion tasks, while older children demonstrated more accurate and consistent use of negation forms. Simple negation forms such as *illa* and *alla* were acquired earlier, whereas more complex forms, including conditional and double negation, emerged at later stages. These findings highlight the gradual development of negation skills and provide important normative data for clinical assessment and intervention in Malayalam-speaking children.

Keywords: negation forms, Malayalam-speaking children, morpho-syntax, language acquisition, typical development

1. Introduction

Language acquisition is a complex developmental process involving mastery of phonological, morphological, syntactic, semantic, and pragmatic components. Among these, the acquisition of negation represents a critical milestone in children's linguistic and cognitive development. Negation allows speakers to express denial, refusal, non-existence, rejection, and contradiction functions essential for effective communication and social interaction.

The part of morphology that covers the relationship between syntax and morphology is called morpho-syntax. It concerns itself with inflection and paradigms, but not with word formation or compounding. Morpho-syntax encompasses linguistic strategies and operations to represent syntactic features via

morphological marking as opposed to merely combinatorial or syntactic strategies. Morpho-syntactic operations represent the relation between one linguistic form and another that correlates with a conventionalized meaning distinction. The morpho-syntactic aspects include plural markers, case markers, PNG markers, tense markers, and negation forms.

Brown (2009) reported that early word utterances are telegraphic because the utterances contain only content words such as nouns, verbs, and adjectives but miss out inflections and grammatical functional words. The emergence of morpho-syntactic aspects makes utterances more meaningful and better grammatically organized. The acquisition of morpho-syntactic aspects of language is a controversial issue that remains an area of active research interest.

The languages of India belong to different language families like Dravidian, Indo-Aryan, and Tibeto-Burman. There are hundreds of languages in India. The Dravidian languages are highly agglutinative. Words are usually formed by adding suffixes to the root word serially in these languages. When compared with research on morphological development in English speakers, there is a scarcity of studies in Dravidian languages, in both normal and clinical populations.

Malayalam is a language of the Dravidian family and is one of the four major languages of this family with a rich literary tradition. Malayalam has rich morphology, and identifying the morphological suffixes of Malayalam verbs and nouns is a challenging task. Malayalam employs several negation forms that vary in their semantic function, syntactic distribution, and complexity. The primary negation markers in Malayalam include 'illa' (general negation meaning 'is not' or 'does not have'), 'alla' (copula negation meaning 'is not'), 'venda' (prohibition or negative imperative meaning 'should not' or 'must not'), and compound negation forms.

Bloom (1970) conducted seminal work on negation acquisition in English-speaking children, identifying three developmental stages: single-word negation or negation expressed through intonation, negation placed at the beginning or end of utterances, and negation properly integrated within sentence structure. Subsequent research has confirmed that negation development follows universal patterns while exhibiting language-specific variations.

Cameron-Faulkner, Lieven, and Tomasello (2007) examined negation in English-speaking children and found that early negation is often formulaic, with children using fixed phrases before fully analyzing the negation structure. This suggests that negation acquisition involves both item-based learning and rule extraction.

Déprez and Pierce (1993) studied negation in French-speaking children and found that children initially produce sentence-external negation before mastering the adult pattern of pre-verbal negation. Similarly, Drozd (2001) reported that negation in Russian-speaking children shows a developmental progression from simple to complex forms.

In the Indian context, Ravindra (1975) examined negation in Kannada-speaking children and reported that simple negation markers emerge around 2-3 years of age, while complex negation structures develop later. Vijayalakshmi (1981) studied children aged 1-5 years using the Test of Acquisition of Syntax in Kannada and found that children used various morpho-syntactic markers, including negation, with frequency increasing with age.

Rukmini (1994) developed a Malayalam language test for children aged 4-7 years. The test was administered to ninety Malayalam-speaking children, and results indicated that scores increased with age. Children performed better on reception than expression tasks and showed progressive mastery of syntactic structures, including negation.

Sreelakshmi, Nandhu, and Kumaraswamy (2015) examined acquisition of case markers in Malayalam-speaking children and found progressive mastery with age, providing important baseline data on morpho-syntactic development in Malayalam. Research on negation in Malayalam-speaking children specifically remains extremely limited, hindering both theoretical understanding and clinical practice.

Need of the Study

Negation is an important part of language that helps children express denial, refusal, and absence. It is a key component of morpho-syntactic development. Most research on negation has been done in English and other well-studied languages. There is very limited research available on Malayalam-speaking children. Malayalam has different types of negation forms, and their development may not be the same as in other languages. There is a lack of normative data on how these forms are acquired in children. This makes it difficult for clinicians to assess and identify language delays accurately.

The present study aims to understand the development of negation forms in typically developing Malayalam-speaking children aged 4–7 years and to provide useful data for clinical assessment and intervention.

METHODOLOGY

AIM

The aim of the present study was to analyze the acquisition of negation forms in 4 to 7 years old typical children speaking Malayalam .

Objectives:

- 1) To analyze acquisition of different negation forms across age groups
- 2) To examine developmental progression in negation form usage

Subjects:

60 typical children who speak Malayalam in the age range of 4-7 years participated in this present study. They were divided into three age groups: 4-4.11 years, 5-5.11 years, and 6-6.11 years, with 20 children in each group who are native Malayalam speakers with no history of hearing impairments, problems with speech intelligibility or fluency, or any cognitive or neurological deficits.

Procedure:

Speech samples were collected in a sound-treated environment to ensure optimal audio quality. Participants were seated comfortably, and each child's speech was recorded individually using a mobile phone's built-in microphone. The recording device was placed approximately one foot from the speaker to maintain uniform recording conditions across all participants. Subsequently, the speech recordings were processed and prepared for advanced statistical analysis.

DATA COLLECTION:

Picture description task and sentence completion task were used to elicit negation forms. Common negation forms in Malayalam were identified and appropriate picture stimuli and sentence frames were developed. Negation forms assessed included:

- 1) 'illa' (is not / does not have)
- 2) 'alla' (is not)
- 3) 'venda' (should not / must not)
- 4) 'illallo' (negative tag question)
- 5) Compound negation forms
- 6) Double negatives for emphasis

Data Analysis:

The speech samples were recorded. The presence of target negation form was noted and marked as '1,' and absence or usage of inappropriate negation form was noted and marked as '0.' The total number of correct uses of each negation form was tabulated. Percentage of correct usage was calculated for each negation form across age groups.

RESULTS AND DISCUSSION

The present study aimed to examine the acquisition of negation forms in 4 to 6 years old typically developing Malayalam-speaking children. For this purpose, specific tasks were used to evaluate negation form usage. The obtained results are discussed below.

Table 1

Shows the comparison of performance of negation across age groups

Task	N	Mean	Std. Deviation	ANOVA results to compare age groups		Post hoc analysis - Bonferroni test			
				F value	p	4-5 VS 5-6	4-5 VS 6-7	5-6 VS 6-7	
Picture Description	4-4.11 YEARS	20	3.30	0.801	25.66	0.000, HS	0.000, HS	0.000, HS	0.155, NS
	5-5.11 YEARS	20	4.55	0.887					
	6-6.11 YEARS	20	5.05	0.686					
	Total	60	4.30	1.078					
Sentence Completion	4-4.11 YEARS	20	2.50	1.100	26.20	0.000, HS	0.000, HS	0.000, HS	0.009, HS
	5-5.11 YEARS	20	3.90	1.165					
	6-6.11 YEARS	20	4.95	0.945					
	Total	60	3.78	1.462					

Fig 1
Shows the comparison of performance of negation across age groups

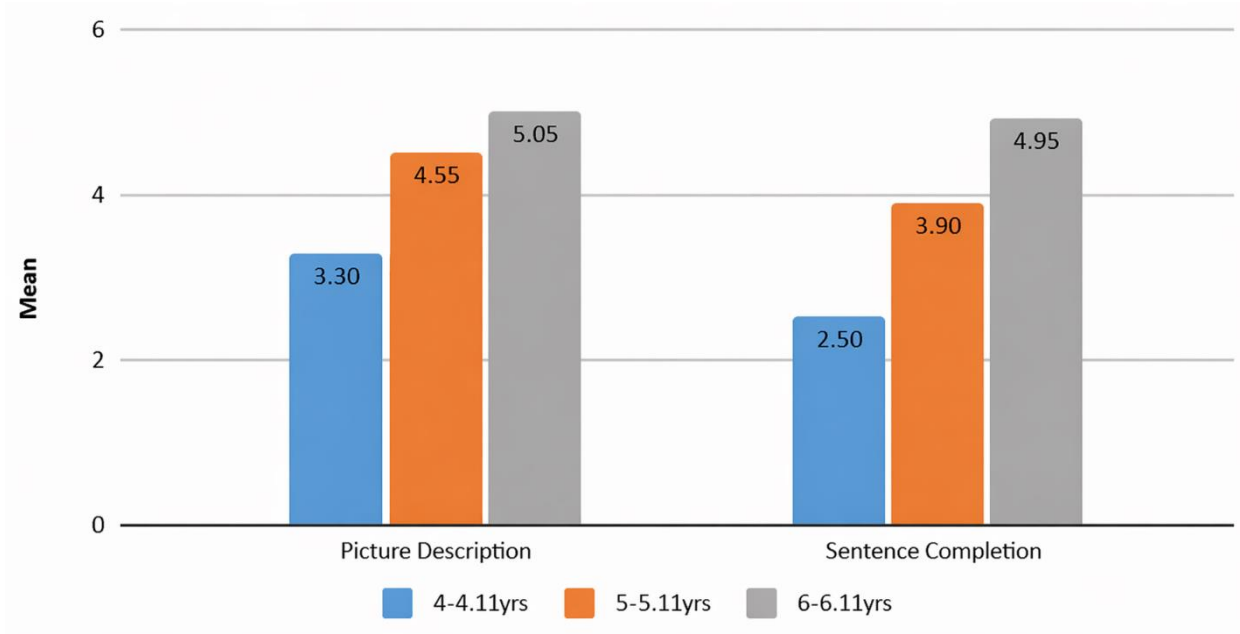


Table 1 and Fig 1 shows the comparison of performance across the age groups 4–5, 5–6, and 6–7 years in Picture Description and Sentence Completion tasks. The results indicate a steady increase in mean scores with age across both tasks. The ANOVA results reveal highly significant differences ($p < .001$). Post hoc analysis shows significant differences between 4–5 vs. 5–6 years and 4–5 vs. 6–7 years in both tasks, whereas the difference between 5–6 vs. 6–7 years is not significant for Picture Description but is significant for Sentence Completion. Overall, the findings indicate a clear age-related improvement in negation acquisition.

Table 2
Shows the comparison of negation across tasks

Task		N	Mean	Std. Deviation	To compare between the tasks		
					t value	p	
4-4.11 YEARS	Picture Description	20	3.30	0.801	2.629	0.012	sig
	Sentence Completion	20	2.50	1.100			
5-5.11 YEARS	Picture Description	20	4.55	0.887	1.985	0.054	NS
	Sentence Completion	20	3.90	1.165			

6-6.11 YEARS	Picture Description	20	5.05	0.686	0.383	0.704	NS
	Sentence Completion	20	4.95	0.945			
Total	Picture Description	60	4.30	1.078	2.203	0.030	Sig
	Sentence Completion	60	3.78	1.462			

Fig 2
Shows the comparison of negation across tasks

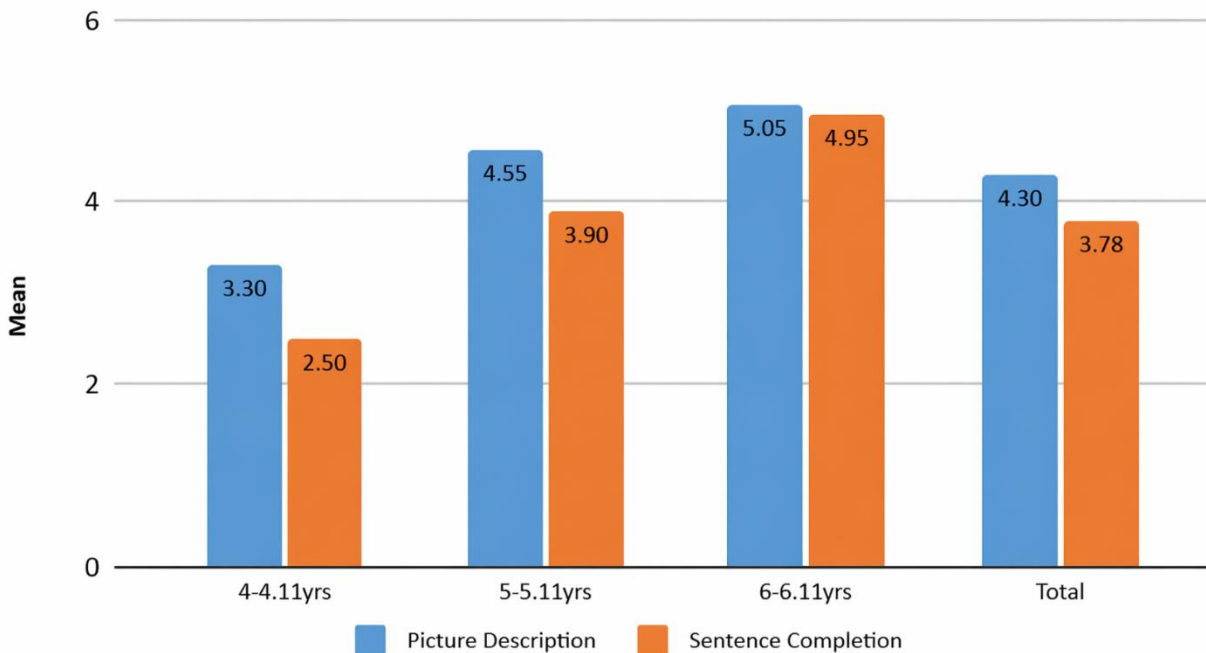


Table 2 and Fig 2 show the comparison between Picture Description and Sentence Completion tasks across the age groups. Picture Description demonstrates higher mean scores than Sentence Completion across all age groups. A statistically significant difference is observed in the 4–5 years group and in the overall comparison ($p < .05$), whereas no significant differences are found in the 5–6 and 6–7 years groups. Overall, task differences decrease with increasing age, indicating improved performance across tasks.

Discussion

The present study examined the acquisition of negation forms in Malayalam-speaking children aged 4–7 years using picture description and sentence completion tasks. The findings indicate that older children performed better than younger children across both tasks, demonstrating a clear developmental progression. Younger children (4–5 years) showed greater difficulty in sentence completion compared to

picture description; however, this difference reduced with increasing age, suggesting improvement in task performance over time. In terms of negation types, simple forms such as *illa* and *alla* were acquired earlier, whereas more complex forms, including conditional and double negation, emerged at later stages. This developmental pattern is consistent with previous research across languages, indicating a universal progression from simple to complex negation structures. Overall, the findings suggest that negation skills develop gradually with age in Malayalam-speaking children and emphasize the importance of establishing age-specific norms for accurate identification of language difficulties.

Summary and Conclusion

The present study focused on the acquisition of negation forms in typically developing Malayalam-speaking children aged 4–7 years. The findings revealed a clear age-related improvement in the use of negation forms, with older children performing better than younger children across both picture description and sentence completion tasks. Younger children showed more difficulty, particularly in sentence completion, whereas performance improved with increasing age. The study also found that simple negation forms such as *illa* and *alla* were acquired earlier, while more complex forms emerged at later stages of development.

In conclusion, the acquisition of negation forms follows a gradual developmental pattern, progressing from simple to complex structures. Age plays a significant role in the mastery of negation, and task type may influence performance, especially in younger children. These findings highlight the importance of considering developmental stages while assessing language skills and emphasize the need for age-specific normative data for accurate clinical evaluation and intervention in Malayalam-speaking children.

Limitations

The present study has several limitations. The sample size was relatively small and limited to a single geographic region. Only children from Malayalam-medium schools were included, excluding those from bilingual or English-medium backgrounds. The study focused on a restricted age range (4–7 years), limiting understanding of earlier emergence and later mastery of negation. Children with language disorders or delays were not included, restricting the clinical applicability of the findings.

Future Implications

Future research should include larger samples across different regions. Extending the age range to include younger and older children would provide a more comprehensive understanding of negation development. Longitudinal studies are recommended to track developmental changes over time. Studies involving children with language disorders would help in understanding atypical development patterns. Comparative research between bilingual and monolingual Malayalam-speaking children may provide insights into the influence of language exposure.

References

1. Bloom, L. (1970). *Language development: Form and function in emerging grammars*. MIT Press.
2. Brown, R. (2009). *A first language: The early stages*. Harvard University Press.

3. Cameron-Faulkner, T., Lieven, E., & Tomasello, M. (2007). A construction-based analysis of child directed speech. *Cognitive Science*, 27(6), 843-873.
4. Déprez, V., & Pierce, A. (1993). Negation and functional projections in early grammar. *Linguistic Inquiry*, 24(1), 25-67.
5. Drozd, K. F. (2001). Children's weak interpretations of universally quantified questions. In M. Bowerman & S. C. Levinson (Eds.), *Language acquisition and conceptual development* (pp. 340-376). Cambridge University Press.
6. Ravindra, K. R. (1975). Negation in Kannada-speaking children: A developmental study [Unpublished master's dissertation]. University of Mysore.
7. Rukmini, A. P. (1994). Malayalam language test [Unpublished doctoral dissertation]. University of Mysore.
8. Sreelakshmi, R., Nandhu, S. M., & Satish Kumaraswamy. (2015). Acquisition of case markers in typically developing Malayalam speaking children. *Language in India*, 15(6), 195-207.
9. Vijayalakshmi, A. R. (1981). Development of a test for acquisition of syntax in Kannada in children [Unpublished Ph.D. thesis]. University of Mysore.