

## **Participle Construction in Malayalam Speaking Children with Intellectual Disability**

**Vini Abhijith Gupta, MASLP, Ph.D. Scholar**  
[viniag.85@gmail.com](mailto:viniag.85@gmail.com)

**Dr. T. A. Subba Rao, Ph.D.**

**Achu C Renji, MASLP**

**Dr. M.V. Shetty College of Speech and Hearing  
Maladi Court, Kavour, Mangalore, Karnataka**

=====  
**Abstract**

Malayalam is an agglutinative morphologically rich language in which identifying the morphological suffixes of Malayalam verbs and nouns are tougher task. Morphology is the aspect of language concerned with the rule governing change in word meaning. Morpho syntactical aspects include PNG markers, participle construction, case markers etc. Participle is a form of a verb that is used in a sentence to modify a noun, noun phrase, verb or verb phrase, participle is often identified with a particular tense.

Intellectual disability is a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. The disability originates before the age of 18. Children with intellectual disability may also present with less mature syntax in association with the use of jargon, perseveration and difficulties with presuppositions. Acquisition of participle construction will give an insight of language by the child.

Studies focusing on participle construction in typically developing children have been undertaken in languages like Kannada, Tamil and Malayalam. But studies focusing on children with intellectual disability are limited.

The present study emphasizes comparing the participle construction performance of intellectually disabled children with typically developing Malayalam speaking children enabling the speech language pathologist for a focused assessment, better intervention and monitoring of therapy

progress. The result showed that there is general increase in the usage of participle construction with increase in the mental age of the children. Expression of participle construction was better in typically developing children than children with Intellectual disability.

**Keywords:** Malayalam Speaking Children, Intellectual Disability, Participle Construction

## Introduction

Language is a complex and dynamic system of conventional symbols that is used in various modes for thought and communication.

Contemporary views of human language hold that:

- 1) Language evolves within specific historical, social, and cultural contexts;
- 2) Language, as rule-governed behavior, is described by at least five parameters – phonologic, morphologic, syntactic, semantic, and pragmatic;
- 3) Language learning and use are determined by the interaction of biological, cognitive, psychological, and environmental factors;
- 4) Effective use of language for communication requires a broad understanding of human interaction including such associated factors as nonverbal cues, motivation, and socio-cultural roles. Morpho-syntax is the study of the morphological and syntactic properties of linguistic or grammatical units and concerns itself with inflection and paradigms but not with word formation or compounding. Brown (1973) serves as a foundation for the work on English monolingual morpho-syntactic language development. He has done a longitudinal study of three children acquiring English as their native language and developed the sequence of 14 morphemes. According to Brown, there are five stages which depict the development in children's language. During the first stage of development, the child starts to combine words and semantic roles in linear simple sentences. And later, the utterances will be coordinated, combining the sentences into one.

Participle are best defined as verbal adjectives, i.e. words that behave like adjectives with respect to morphology and external syntax but are regularly derived from verbs. It is used in sentence to modify a noun or noun phrase. Participles may correspond to "passive voice" ("passive participle), where the modified noun represents the `patient` (undergoer) of the action or may correspond to "active voice" (active participles) where the modified noun denotes `agent` of action.

Jia and Fuse (2007) studied the acquisition of English grammatical morphology by native Mandarin-speaking children and adolescents and age related differences. The results indicated that acquisition of some grammatical morphemes by school ages immigrants takes several years to

---

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 19:8 August 2019

Vini Abhijith Gupta, MASLP, Ph.D. Scholar, Dr. T. A. Subba Rao, Ph.D. and Achu C Renji, MASLP

Participle Construction in Malayalam Speaking Children with Intellectual Disability 202

complete. As second learners exhibit some error types and difficulties similar to monolingual children with specific language impairment, caution needs to be taken when interpreting and using morphological errors as indicators of speech/language learning problems in this population.

Dabrowska and Street (2014) provided experimental evidence for the role of lexically specific representations in the processing of passive sentences and considerable education related differences in comprehension of the passive construction. They measured response time and decision accuracy of participants with high and low academic attainment. The results suggested that all participants have verb specific as well as verb general representations, but the latter are not as entrenched in the participants with low academic attainment, resulting in less reliable performance.

Lakshman (2000) investigated the acquisition of relative clause in 27 Tamil speaking children (2-6yrs). The findings indicated that the younger children produced a significantly greater number of pragmatically inappropriate response than the older children. But the younger children are not inferior to the older children with respect to their grammatical competence.

Language acquisition or language development plays a crucial role in children reading and writing. Acquisition of participle construction will give an insight of language by the child. Studies focusing on participle construction in typically developing children have been investigated in languages like Kannada, Tamil and Malayalam. But studies focusing on children with intellectual disability are limited. The present study emphasizes comparing the participle construction performance of intellectually disabled children with typically developing Malayalam speaking children thus enabling the speech language pathologist for a focused assessment, better intervention and monitoring of therapy progress.

## **Review of Literature**

Language is a dynamic system of conventional symbols that is used in various modes of thought and communication. It is a complex, specialized skill, which develops in the child spontaneously, without conscious effort or formal instruction, is developed without awareness of its underlying logic, is qualitatively the same in every individual, and is distinct from more general abilities to process information or behave intelligently.

Language is governed by certain rules and is described by five parameters such as phonology, morphology, syntax, semantics and pragmatics. The development of language starts with the first cry of the child and goes on up to late childhood. Learning of language is determined by interaction of biological, cognitive, psychological and environmental factors. The areas of semantics, syntax, phonology and morphology of language are extremely complex. Out of all the parameters of language development, syntax has enticed more attention.

Syntax is a dominant component of language. It governs how morphemes and words are correctly combined. It refers to the branch of grammar dealing with the ways in which words, with or without appropriate inflections, are arranged to show connections of meaning within the sentence.

---

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 19:8 August 2019

Vini Abhijith Gupta, MASLP, Ph.D. Scholar, Dr. T. A. Subba Rao, Ph.D. and Achu C Renji, MASLP

Participle Construction in Malayalam Speaking Children with Intellectual Disability 203

Words are assigned to syntactic categories, words head or project phrases, and these syntactic phrases organize the linear string of words that makes up a sentence into a hierarchical structure. After learning the rules governed for connecting words it is possible to create number of infinite meaningful sentences. Hence it is possible to construct many novel and different sentences. Traditionally, it refers to the branch of grammar dealing with the ways in which words, with or without appropriate inflections, are arranged to show connections of meaning within the sentence. By learning the finite number of rules for connecting words it possible to create an infinite number of sentences, all of which are meaningful to a person who knows syntax. Thus, it is possible to construct many sentences that the speaker never heard before.

Participle clauses are shortened dependent clauses that use a present or past participle. Participles are verbal adjectives. They have some features of verbs and some of adjectives. But they are most basically a type of adjective. As adjectives, participles can modify nouns or pronouns. In this way, we can include a lot of information in a sentence without making it too long or complicated. In the present participial construction (ing-form), we show that both actions are taking place the same time and with the passive participle and with past participle, we can shorten a passive clause. We use the perfect participle to indicate that the action in the participle clause took place before the action in the main clause. In English, the perfect participle can express actions in both the active and the passive voice. Other English participles are created periphrastically to imitate the richer array of classical participles, but they often seem formal or even awkward.

### **Language Acquisition in Malayalam**

Malayalam is a Dravidian language spoken in India. Dravidian languages have a rich system of overt case marking of noun phrases. It also has a relatively free word order. The language has basic Subject-Object-Verb word order. The interesting fact about Malayalam is that, instead of adjectives, it makes elaborate use of relative clause like structures for nominal modification. In Dravidian languages, pronoun can be readily omitted in a context where its referent can be easily guessed. Relatively little research has been conducted on children's grammatical development in Malayalam context, especially in the area of Participle construction. The present study highlights the need to compare the performance of participle construction of intellectual disabled children with age matched typically developing Malayalam speaking children enabling the speech language pathologist for a focused assessment and better intervention and monitoring of therapy progress.

The condition of intellectual disability has attracted attention of speech language pathologist steadily over the years. Both 2001 census of India and census by NSSO (national Sample Survey Organization) in 2002 indicate about 10% prevalence of intellectual disability in India, further studies have shown that intellectual disability results in disorders such as hearing, speech, locomotion, (Ganesh et al 2008). It is also indicated by Patel (2009) that the disabilities predominately exist in below sixteen age group considering this data it can be reason that

- 1) The impact of research in communication disorders will have a significant impact.

- 2) The data in Indian language will expand the existing knowledge of language development in typically developing children's and deviant development in the population of children with mental retardation.

A participle is a form of a verb that is used in a sentence to modify a noun, noun phrase, verb phrase, and thus plays a role similar to that of an adjective or adverb. It is one of the types of non-finite verb forms. Its names comes from the Latin *participium*, a claue of Greek and Latin participles share some of the categories of the adjective or noun (gender, number, case) and some of those of the verb (tense and voice).Adjectives may be derived from verbs, generally, by adding /il/ or /kal/ to the verb stem. Participle constructions in Malayalam includes 3 types. They are verbal, relative and negative relative. The scan again is made for the presence or absence of the structure. Examples are:

**Verbal participle:** /kal/

1) Pakshigalparannupogunn  
pakʃikalpaɾaɳɳupo:kunnu

2) Kuttikalvariyaipogunnu  
kuttikalvaɾivaɾijaipo:kunnu

**Relative participle:** /lla/

1) Kiliullakoode  
kiliullaku:tʃ^

2) Kodyullakar  
kotijullaka:r

**Negative relative:** / tha/

1) Vellamnirayathapathram  
vellamnirajattapaɾam

2) Kanak cheyatha al  
kanakk^ tʃejjattaa:l

**Western Studies**

Turner and Ronmetveit (1967) analyzed the imitation task, comprehension task, production task, active voice sentences, passive voice sentences, reversible sentences and non-reversible sentences in primary grade children and concluded that children were able to respond correctly in the order of imitation task before comprehension task -before production task. Active voice sentences were better than passive voice sentences, Nonreversible sentences were better than reversible sentences. The effect of sentence voice was better than the effect of sentence reversibility. The actual

---

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 19:8 August 2019

Vini Abhijith Gupta, MASLP, Ph.D. Scholar, Dr. T. A. Subba Rao, Ph.D. and Achu C Renji, MASLP

Participle Construction in Malayalam Speaking Children with Intellectual Disability

order of difficulty of sentence type was: Nonreversible active less than reversible active less than non-reversible passive less than reversible passive.

Harris and Flora (1982) examined children's use of 'get' in passive like constructions and the study reveals that children use more 'get' than 'be' passives and more truncated passives than full passives.

Kernan, Sharon and Sabsay (1996) studied linguistic and cognitive ability of adults with down syndrome and mental retardation of unknown etiology. They assessed different types of participle construction and results showed that the adult with down syndrome exhibited significantly poorer linguistic ability than the adult with mental retardation.

Israel, Johnson and Brooks (2001) evaluated the development of passive participles in the spontaneous speech of seven English speaking children. The procedure followed a consistent pattern, whereby children gradually extend the use of participles to equivocal contexts that are compatible with either a stative or an eventive reading. The results indicated that all seven children regularly used participles in equivocal contexts before they begin to master true verbal passives.

Babby (2002) investigated the deep structure and the transformations involved in the syntactic derivation of long and short forms of adjectives and participles in Russian language. The results indicated that the active participle in modern Russian is a deeper verb transformational introduced into the constituency of an NP.

Stromswold and Karin (2002) examined in both children and adults in interpreting sentences. In the first experiment, 59 children were asked to interpret sentences with one, two, three, or no passive participle cues. The second experiment used college graduates and an almost identical procedure was used. Results suggested that children interpret passive sentences correctly but were not processed like adults.

Redmond (2003) investigated Children's productions of the affix *-ed* in past tense and past participle contexts (e.g., *the boy kicked the ball* vs. *the ball was kicked*) were examined in spontaneous conversations and elicited productions. The performances of 7 children with specific language impairment (SLI) were compared with those of 2 control groups of typically developing children (age matches, MLU matches). Children with SLI produced fewer obligatory contexts for both past tense and past participle forms than did the control children and were more likely to omit past tense affixes. In contrast, few omissions of the past participle were observed across all 3 groups. Implications for theories regarding the morphological deficits associated with SLI are discussed.

Savage, Lievan, Theakston and Tomasello (2003) investigated on abstractness of early syntactic constructions in children of ages 3, 4, and 6 years and the results reveals that 6 year old children showed both lexical and structural priming for both active transitive and passive constructions

whereas 3 and 4 year-old children showed lexical priming only. These results revealed that children develop abstract linguistic representations in their pre-school years.

Heather and Lely (2013) compared the acquisition and underlying syntactic representation of passive sentences in specifically language impaired (SLI) children and normally developing children. The study concluded that SLI children were significantly worse at interpreting transitive verbal passive sentences than the normal children they also concluded that both groups may have problem deriving the syntactic representation underlying a verbal passive sentence but not the less complex adjectival –stative passive.

### **Indian Studies**

Indian studies on language acquisition are very limited. Most of the studies mainly include master's dissertation with few doctoral and post doctoral research studies. Vijayalakshmi (1981) examined the Test of Acquisition of Syntax in Kannada (TASK) in children within the age range of 1 to 5. She concluded the result as the use of case, tense, gender, plural, number and person markers as well as positions, determiners, adverbs and adjectives improve with the age.

Sudha (1981) developed and administered syntax screening test for children in Tamil in the age range 2-5yrs. The test was administered for 56 normal children and the results showed an increase in the overall performance on all the grammatical categories observed as a function of age.

Kathyayani (1984) examined the development of morphological categories in children between 6 to 8 yrs in Kannada. The result showed the correct use of genders, plurals and tenses by the children.

Rukmani (1994) has developed and administered Malayalam Language Test for children in the age range of 4-7yrs. The results showed that the scores increase as the age increases. Also, the Children performed better in reception task than expression task and syntactic tasks than semantic tasks.

Rao (1995) investigated on development of syntax in children with intellectual developmental disorder and found that there was delay in the development of syntax when compared to normals.

Ranjan (2006) did a study on syntactic skills in children with intellectual developmental disorder with the mental age of 3-7 years and the results revealed that children with 5-7 years mental age shown an increase in percentage of use in all plurals forms mainly regular plurals.

Nitha (2010) investigated on development of tense markers in typically developing Malayalam speaking children and children with intellectual developmental disorder and the results revealed that the present tense markers is poor in children with intellectual developmental disorder when compared to normals.

---

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 19:8 August 2019

Vini Abhijith Gupta, MASLP, Ph.D. Scholar, Dr. T. A. Subba Rao, Ph.D. and Achu C Renji, MASLP

Participle Construction in Malayalam Speaking Children with Intellectual Disability 207

Sreelakshmi (2015) investigated on acquisition of case markers in typically developing Malayalam speaking children in the age range of 3-8 years and the results reveals that nominative, locative and acquisitive case markers are the most developed type of case markers were as instrumental, genitive and dative are least developed case markers in the earlier ages.

Nandhu (2015) investigated on acquisition of case markers in Malayalam speaking down syndrome children of mental age range 3-8 yrs and results showed that there is a general increase in acquisition as well as frequency of usage of some type of case markers with increase in the mental age of the children.

### **Need of the Study**

Language acquisition or language development plays a crucial role in children reading and writing. Acquisition of participle construction will give an insight of language by the child. Studies focusing on participle construction in typically developing children have been investigated in languages like Kannada, Tamil and Malayalam. But studies focusing on children with intellectual disability are limited. The present study emphasizes comparing the participle construction performance of intellectually disabled children with typically developing Malayalam speaking children enabling the speech language pathologist for a focus assessment, better intervention and monitoring of therapy progress.

### **Aim of the Study**

The aim of the present study was to report the usage of participle construction in children with Intellectual disability of mental age 4-6 yrs and age matched typically developing child.

### **Methodology**

#### **Subject Selection**

40 children with Intellectual disability further classified into 20 children with mental age 4-5 yrs and 20 children with mental age 5-6 yrs.

40 typically developing Malayalam speaking children further classified into 20 children of age matched 4-5 yrs and 20 children of age matched 5-6 yrs participated in the study.

The mental age details were obtained from their school records. Children with mild to moderate intellectual disability were taken for the study.

### **Inclusion Criteria**

1. Children who were attending special school for at least 3-4 years were taken for the study.
2. Native Malayalam speakers were taken.
3. Children with mild to moderate intellectual disability as per them school records.
4. All typically developing children were performing above average as per their academic records.

---

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 19:8 August 2019

Vini Abhijith Gupta, MASLP, Ph.D. Scholar, Dr. T. A. Subba Rao, Ph.D. and Achu C Renji, MASLP

Participle Construction in Malayalam Speaking Children with Intellectual Disability 208

## Exclusion Criteria

- 1) Children with any physical or sensory handicap were excluded from the study.
- 2) Children with severe intellectual disability were excluded from the study.

## Stimuli Used

Selected participle construction structures were taken from Malayalam – descriptive grammar (Asher 2013), Grammar of Malayalam (Nair 2012).

### 1. Relative Participle Construction

SENTENCE	IPA FORMAT
Present: kiliullakoode Negative: kiliellathakoode	kiliullaku:t̪^ kiliellattaku:t̪^
Present: thoppivacha al Negative: thoppivakathaaal	ṭoppivet̪ʃʃaa:l̪ ṭoppivejkkattaa:l̪

### 2. Verbal Participle Construction

SENTENCE	IPA FORMAT
Kuttigalvarivariyayipogunnu Kuttigalkutamayipogunnu	kuttikaḷvarivar̪ijajipo:kun̪nu kuttikaḷku:t̪tamj̪:jipo:kun̪nu
Pakshigalparannupogunnu Pakshigalnindhipogunnu	pakṣikaḷparannupo:kun̪nu pakṣikaḷPakshikalni:n̪tipokun̪nu
Mean murichukodukunnu Mean Murikathekodukunnu	mi:n̪mur̪it̪ʃʃ^ koṭukkun̪nu mi:n̪mur̪ikka:t̪ekoṭukkun̪nu

## Procedure

Detailed instructions were given to the children regarding the procedure. During picture description task, the children were stimulated with few picture cards before presenting the actual stimuli to get the appropriate responses. Among 3 sets of picture cards depicting relative participle

---

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 19:8 August 2019

Vini Abhijith Gupta, MASLP, Ph.D. Scholar, Dr. T. A. Subba Rao, Ph.D. and Achu C Renji, MASLP

construction, the children were instructed to explain ‘what is happening’ (present participle) and ‘what is not happening’ (negative participle). Among 6 sets of verbal participle construction, the children were instructed to explain ‘what is happening’ (positive verbal participle) and ‘what is not happening’ (negative verbal participle). Responses with appropriate participle construction were considered as correct response. Absence of participle construction were considered as incorrect responses.

**Analysis**

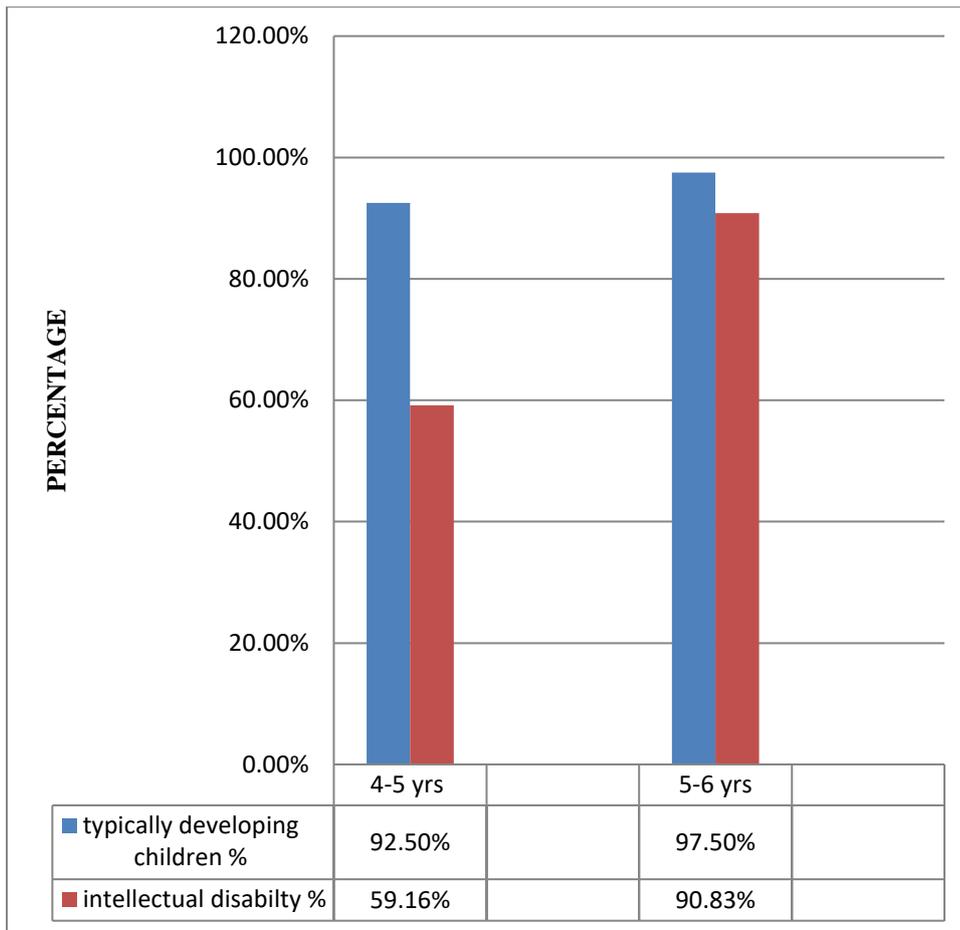
The video recorded samples were analyzed at syntactic levels focusing on participle construction. The presence of unit of analysis was noted and marked as ‘1’ and absence of participle construction was noted and marked as ‘0’. The total number of participle construction were tabulated.

**Results**

The aim of the present study was to report the usage of participle construction in children with intellectual disability of mental age 4-6 yrs and age matched typically developing Malayalam speaking children. The obtained data was analyzed for the presence of participle construction and results are discussed below.

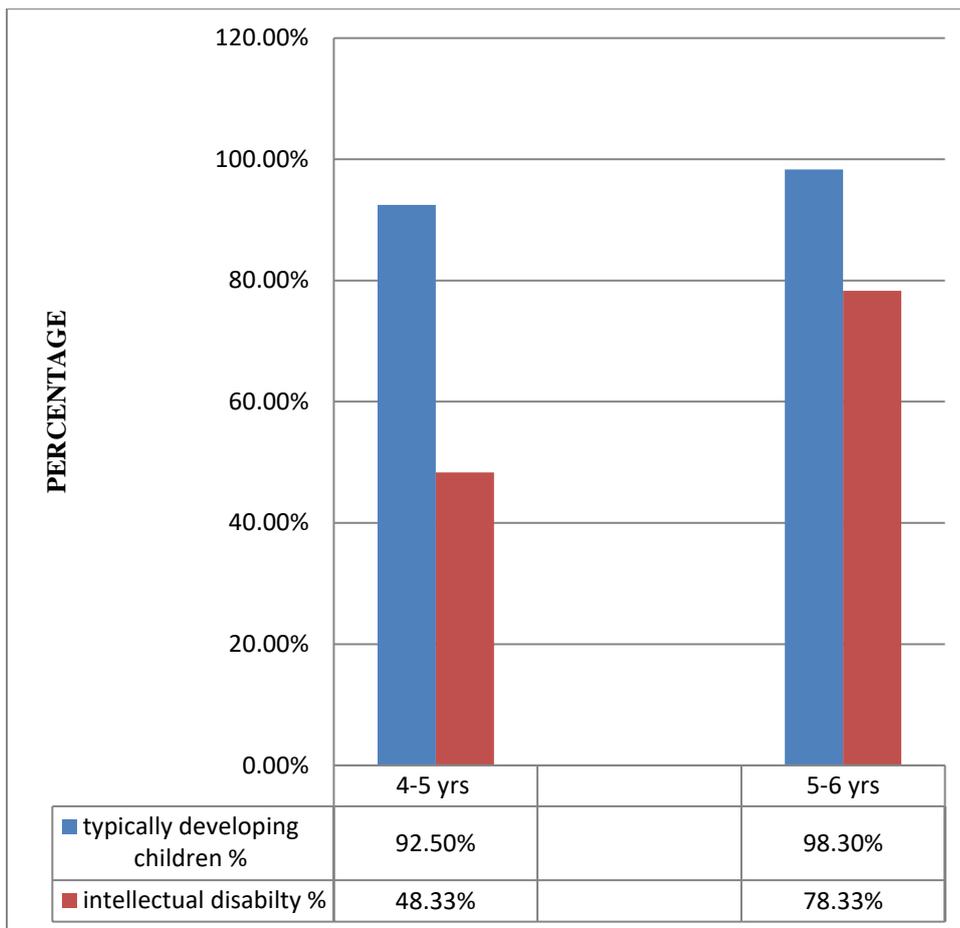
	Typically developing children		Children with intellectual disability	
	4-5 yrs	5-6 yrs	4-5 yrs	5-6 yrs
Relative participle construction expression %	90.83 %	97.50 %	59.16 %	90.83 %
Verbal participle construction expression %	92.50 %	98.99 %	48.33 %	78.33 %

**Table 1: Showing the percentage value for development of Participle construction ( in percentage) in 4-6 yrs age groups.**



**Fig 3: Showing the percentage value for Expression of Relative participle construction in Intellectual disability children (Mental Age 4-6 & 5-6yrs) with Age matched typically developing children.**

From the above graph it is clear that more variation can be noticed in the expression of relative participle construction in the age group of 4-5 yrs, whereas slight variation is noticed in the age group of 5-6 yrs.



**Fig 4: Showing the percentage value for Expression of Relative participle construction in Intellectual disability children (Mental Age 4-5 & 5-6yrs) with Age matched typically developing children.**

From the above graph it is clear that more variation can be noticed in the expression of verbal participle construction in the age group of 4-5 yrs whereas slight variation is noticed in the age group of 5-6 yrs.

### Discussion

From the above results it is evident that the performance of typically developing children is better than children with intellectual disability in the expression of participle construction.

In expression of relative participle construction, children with intellectual disability shows 56.16% in 4-5 yrs and 90.83% in 5-6 yrs. Typically developing children shows 92.50% in 4-5 yrs and 97.50% in 5-6 yrs.

In expression of verbal participle construction, children with intellectual disability shows 48.33% in 4-5 yrs and 78.33% in 5-6 yrs. Typically developing children shows 92.50% in 4-5 yrs and 98.30% in 5-6 yrs.

The present study is in accordance with previous studies like Vijayalakshmi (1981), Sudha (1981), Rukmani (1994), Subba Rao (1995) Which revealed that as the age increases the performance of the usage of language increases.

### Summary and Conclusion

Malayalam is an agglutinative morphologically rich language in which identifying the morphological suffixes of Malayalam verbs and nouns are tougher task. Morphology is the aspect of language concerned with the rule governing change in word meaning. Morpho syntactical aspects include PNG markers, participle construction, case markers etc. Participle is a form of a verb that is used in a sentence to modify a noun, noun phrase, verb or verb phrase. Participles are often identified with a particular tense

Intellectual disability is a disability characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. The disability originates before the age of 18. Children with intellectual disability may also present with less mature syntax in association with the use of jargon, perseveration and difficulties with presuppositions.

The present study aimed at reporting the usage of participle construction children with intellectual disability of mental age 4-6 yrs and age matched typically developing children.

The result showed that there is general increase in the usage of participle construction with increase in the mental age of the children. Expression of participle construction was better in typically developing children than children with Intellectual disability.

### Limitations of the Present Study

1. The sample size was small
2. The subjects were taken from the similar community. i.e. from a single dialectal population in Kerala.

### Future Implications

1. To include larger number of subjects
2. To include various dialectical community in Kerala
3. Detailed research work is needed in other disordered population.

=====

## Acknowledgement

We thank all the participants for their participation and cooperation. The present study is a part of Ph.D. research program in Dr. M.V. Shetty College of Speech and Hearing, Mangalore University under the guidance of Dr. T.A. Subba Rao, Ph.D.

---

---

## References

- Babby, L. H. (2002). Subjectlessness, external subcategorization, and the Projection Principle. *Journal of Slavic Linguistics*, 10(1/2), 341-388.
- Bailoor, P., Mathew, K., & Subba Rao, T. A. (2013). Semantic intentions and relations in children with intellectual disability (ID) in the mental age range of 4 to 7 years. *Advances in life Science and Technology*, 13.
- Brown, R. (1973). Development of syntax. In R. C. Narenure, R. Hopper. *Children Learning Language. A practical introduction to communication development (3<sup>rd</sup> edition)*, (pp.49-56). Singular publishing group, MIT press, Cambridge.
- Dabrowska, E. & Street, J. (2014). Individual differences in language attainment: Comprehension of passive sentences by native & non- native English speakers.
- Ganesh, K, S., Das, A. & Shashi, J, S. (2008). Epidemiology of disability in rural community of Karnataka, *journal of public health*,52,125-129.
- Harris, F. N., & Flora, J. A. (1982). Children's use of Get passives. *Journal of Psycholinguistic Research*, 11(4), 297-311.
- Heather, Lely, Ramus, F., Marshall, C. R., Rosen, S., & van der. (2013). Phonological deficits in specific language impairment and developmental dyslexia: towards a multidimensional model. *Brain*, 136(2), 630-645.
- Israel, M., Johnson, C., & Brooks, P. J. (2001). From states to events: The acquisition of English passive participles. *Cognitive linguistics*, 11(1/2), 103-130.
- Jia, G & Fuse, A. (2007). Acquisition of grammatical morphology by native Mandarin speaking children & adolescents: Age related differences. *Journal of speech, language & hearing*,5.11-14

---

---

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 19:8 August 2019

Vini Abhijith Gupta, MASLP, Ph.D. Scholar, Dr. T. A. Subba Rao, Ph.D. and Achu C Renji, MASLP

Participle Construction in Malayalam Speaking Children with Intellectual Disability 214

- Johnson, A., & Kumaraswamy, S. (2015). Acquisition of Participial Construction in Typically Developing Children. *Language in India*, 15(10).
- Journal of Child language, 27, 587-617
- Journal of Sciencedirect, 28, 604-615
- Kathyayani, H. N. (1984) Language test in Kannada for expression in children. Unpublished Masters dissertation submitted to University of Mangalore.
- Kernan, K. T., & Sabsay, S. (1996). Linguistic and cognitive ability of adults with Down syndrome and mental retardation of unknown etiology. *Journal of communication disorders*, 29(5), 401-422.
- Lakshmanan, U. (2000). Acquisition of clause in 27 Tamil speaking children (2-6yrs)
- Lightfoot. & David (2010) Language acquisition and language change, Wiley, Wiley Interdisciplinary reviews: Cognitive science 1(5): 677-684.
- Mohan, N. S., Vishnu, V. K., Sreelakshmi, R., & Kumaraswamy, S. (2015). Acquisition of Case Markers in Down's Syndrome Children with Mental Age 3-8 Years. *Language in India*, 15(10).
- National Simple Survey Organization (2002) disabled person in India NSS 58<sup>th</sup> Round. Report no.485, New Delhi, Ministry of statistics and program Implementation, government of India.
- Nitha, T. C. (2010). Development of tense markers in typically developing Malayalam speaking children and children with intellectual development disorder. Unpublished Masters dissertation of University of Mangalore.
- Owens, R.E. (2008). Language development: An introduction. Boston, M A: Pearson.
- Patel, S. (2009). An empirical study of causes of disability in India, Internet Journal of Epidemiology,6(2).
- R Asher. (2013) Malayalam descriptive grammar.
- Redmond, S. M. (2003). Children's productions of the affix-ed in past tense and past participle contexts. *Journal of Speech, Language, and Hearing Research*, 46(5), 1095-1109.

- Ranjan, M. (2006). Syntactic skills of Hindi speaking children with mental retardation. Unpublished Masters dissertation of University of Mangalore.
- Rao, T. A. (1995). A comprehensive language analysis of Kannada speaking mentally retarded children. An unpublished doctoral thesis submitted to University of Mysore.
- Rao T A. (1992) Manual of developing communication skills in mentally retarded persons.
- Rukmini, A. P. (1994). Malayalam language test. Unpublished Masters dissertation submitted to University of Mysore.
- Roopa, N. (1981). Some aspects of syntax in 4-5 years old children. A descriptive study in Hindi. Unpublished Master's dissertation, University of Mysore, Karnataka.
- Satish, K., & Subba Rao, T. A. (2016). Tense Markers in Kannada Speaking Intellectual Disabled Children. *Language in India*, 16(10).
- Savage, C., Lieven, E., Theakston, A. & Tomasello, M. (2003). Testing the abstractness of children's linguistic representations: lexical and structural priming of syntactic constructions in young children. *Developmental Science*, 6(5), 557-567.
- Sreelekshmi. (2015). Acquisition of case markers in typically developing Malayalam speaking children. Unpublished Masters dissertation submitted to university of Mangalore.
- Stromsworld., & Karin, P. (2002). *Use and combination of three cues that differentiate active from passive verbs. Education Resource Centre, 24, 123-130*
- Sudha, K. M. (1981). A syntax screening test in Tamil. Unpublished Masters dissertation submitted to university of Mysore.
- Turner, E. A., & Rommetveit, R. (1967). The acquisition of sentence voice and reversibility. *Child development*, 649-660.
- Vijayalakshmi, A. R. (1981). Development of a test for acquisition of syntax in Kannada in children. A doctoral thesis submitted to University of Mysore.

**Retrieved from:**

<http://www.asha.org/policy/RP1982-00125.html>  
<https://www.google.co.in/search?q=Google&oq=Goo&aqs=syntax>  
<http://en.wikipedia.org/wiki/participleooloo>  
<http://www.englisch-hilfen.de/en/grammar/partizipien.htm>

=====

**Language in India** [www.languageinindia.com](http://www.languageinindia.com) ISSN 1930-2940 19:8 August 2019

Vini Abhijith Gupta, MASLP, Ph.D. Scholar, Dr. T. A. Subba Rao, Ph.D. and Achu C Renji, MASLP

[http://www.dugdale.homepage.t-online.de/4\\_ParInt.htm](http://www.dugdale.homepage.t-online.de/4_ParInt.htm)

<https://en.wikipedia.org/wiki/Participle>.

<http://dictionary.reverso.net/english-definition/participial%20construction>

<https://www.thoughtco.com/participle-verb-form-1691586>