



# Relationship between Comprehension Skills in English and Mother tongue: A study among higher secondary school students of Kerala

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## Abstract

The present study investigated the relationship between comprehension skills in Second language (English) and Mother tongue (Malayalam) among higher secondary school students of Kerala. The sample was consisted of 1013 students from various higher secondary schools in Kasaragod district of Kerala. The results showed that, the higher secondary school students' comprehension skills in English is positively correlated with their comprehension skills in Mother tongue. There were significant positive relationships found between students' comprehension skills in English and Mother tongue also for the sub-samples selected for the study viz. Gender, Locale and Type of Institution. The findings of the present study suggests a significant impact of students' mother tongue or home language in the acquisition of skills in a second language.

**Keywords:** Reading comprehension, Mother tongue, Second language

## 1. Introduction

Language is an important means of communication. It enables a person to express his thoughts, ideas and feelings effectively. In addition, it is a way to learn and understand about the environment. Language is used as the medium for assimilation and transaction of information and knowledge. Thus, language plays a crucial role in the process of learning.

Language is the medium of transacting curriculum in the classrooms. The language across the curriculum (LAC) is the concept that emphasizing the role of language in all subject-matter learning. It links all languages as subjects (mother tongue education, second language education, third language education etc.) and the language dimension in all other subjects (Corson et.al., 1990).

Language plays a fundamental role in shaping educational experiences and outcomes. It serves not only as a means of communication but also as a tool for cognitive development, social interaction, and cultural expression. Researches indicate that children learn most effectively when instruction is delivered in their mother tongue or a language familiar to them, as it enables better comprehension, engagement, and retention of information. Moreover, language is closely intertwined with one's identity and cultural heritage.

The National Education Policy of India (NEP 2020) emphasizing the importance of mother tongue or regional language as the medium of instruction in the early years of schooling. This policy directive rooted in research based evidence that highlights the cognitive, linguistic, and socio-cultural advantages of learning in one's mother tongue. Under NEP 2020, the language policy aims to promote multilingualism and linguistic diversity while ensuring equitable access to quality education for all students, regardless of their linguistic background.

Reading is a complex process between the reader and the text to construct, create, and drive meaning. The goal of reading a text is to successfully extract the meaning from the text. In this sense, reading comprehension is an understanding in which the reader can successfully draw the meaning of a text. The learners are expected to have good comprehension in instructional language because the learners who have strong reading comprehension are generally perform well in their academics (Shahrokhi & Jalili, 2017).

According to Kerala Curriculum Framework (KCF 2007), one of the major objectives of language teaching is to equip learners with the ability to read and write with understanding, communicate effectively and to make them use language with ease in different situations. Accordingly, the teaching of languages in schools has been revised on the basis of the objectives and principles envisioned in KCF 2007. The existed model of language teaching was that ignores discourse level transactions narrowing itself to the transmission of isolated language items. This can be brought about only through meaningful and need-based linguistic discourses ensuring the recurrence of language items at the phonological, morphological and syntactic level, thus providing a continuum of language experience (KCF 2007).

English as a universal language cannot be ignored in the era of globalisation. But, it is observed that, most of our school going children in Kerala are less proficient in English language. They face difficulties in all aspects of English language such as reading, writing, listening and speaking. The lack of vocabulary knowledge and grammatical understanding creates hurdles in front of the students in easy comprehension of the language. The major challenge we face in enhancing English language proficiency in school children is limited available resources.

The present study tried to explore whether the mother tongue of the students has any influence on the acquisition of a second language like English. If so, it will be a great breakthrough in our efforts to enhance the English language proficiency among the students. Because, the available resources are high in mother tongue in compared to the English language, which can be effectively utilized in enhancing English language proficiency. The researcher investigated whether the competency in students' mother tongue or home language can facilitate their competency in a second language and whether their mother tongue acts as a strong foundation in learning a second language.

## **2. Objective**

2.1 To study whether there exists any significant relationship between comprehension skills in English and Mother tongue of higher secondary school students of Kerala for the total sample and sub-samples selected for the study.

## **3. Hypothesis**

3.1 There is no significant relationship between comprehension skills in English and Mother tongue of higher secondary school students of Kerala for the total sample and sub-samples selected for the study.

## **4. Methodology**

### **4.1 Variables**

The dependent variable of the study is 'Higher Secondary School Students' Comprehension skills in English'.

The independent variable of the study is 'Higher Secondary School Students' Comprehension skills in Mother tongue'.

The following variables were treated as criterion variables for identifying the sub-samples.

1. Gender (Male/Female)
2. Locale (Rural/Urban)
3. Type of Institution (Govt./Govt.-Aided/Un-Aided)

### **4.2 Sample**

The sample was drawn from students of higher secondary schools in Kasaragod district, Kerala, using random cluster sampling method. The sample was consisted of 1013 students from various higher secondary schools in the district.

The details of the sub-samples selected for the study are presented in the table 4.1

**Table 4.1**  
**Details of the sub-samples**

| Category                   | Sub-samples | Count |
|----------------------------|-------------|-------|
| <b>Gender</b>              | Male        | 444   |
|                            | Female      | 569   |
| <b>Locale</b>              | Rural       | 622   |
|                            | Urban       | 391   |
| <b>Type of Institution</b> | Govt.       | 606   |
|                            | Govt.-Aided | 205   |
|                            | Un-Aided    | 202   |

### 4.3 Tools

The reading comprehension skills tests were developed and validated by the researcher for the study which are as follows.

#### 4.3.1 Test For Higher Secondary School Students' Comprehension Skills in English

(Vivek T V, 2025)

#### 4.3.2 Test For Higher Secondary School Students' Comprehension Skills in Mother tongue (Vivek T V, 2025)

#### 4.3.1 Test For Higher Secondary School Students' Comprehension Skills in English

The test was consisted of 15 objective type multiple choice questions with a maximum score of 25. The first 10 items carry '2' scores each and the remaining 5 items carry '1' score each. '0' score is awarded for incorrect and no responses. The test were administered to 1013 students from various higher secondary schools in Kasaragod district, Kerala.

##### 4.3.1.1 Calculation of Difficulty Index (DI)

The difficulty index (DI) of the test items were calculated and the result is presented in the table 4.2

**Table 4.2**

**The difficulty Index of 'Test for Higher Secondary School Students' Comprehension Skills in English'.**

| Item | Difficulty Index (DI) |
|------|-----------------------|
| 1    | 0.9023                |
| 2    | 0.8105                |
| 3    | 0.9210                |
| 4    | 0.2715                |
| 5    | 0.7226                |
| 6    | 0.3583                |
| 7    | 0.4580                |
| 8    | 0.4265                |
| 9    | 0.5035                |
| 10   | 0.6308                |
| 11   | 0.6417                |
| 12   | 0.8361                |
| 13   | 0.7708                |
| 14   | 0.4827                |
| 15   | 0.3258                |

#### 4.3.1.2 Calculation of Discrimination Power (DP)

The discrimination power (DP) of the test items were calculated and the result is presented in the table 4.3

**Table 4.3**

**The discrimination power of ‘Test for Higher Secondary School Students’ Comprehension Skills in English’**

| Item | Discrimination Power (DP) |
|------|---------------------------|
| 1    | 0.61                      |
| 2    | 0.61                      |
| 3    | 0.42                      |
| 4    | 0.43                      |
| 5    | 1.1                       |
| 6    | 1.3                       |
| 7    | 1.14                      |
| 8    | 0.26                      |
| 9    | 1.34                      |
| 10   | 1.42                      |
| 11   | 0.41                      |
| 12   | 0.31                      |
| 13   | 0.5                       |
| 14   | 0.43                      |
| 15   | 0.1*                      |

**Note: \*indicates the item with low DP (< 0.20)**

The item no. 15 is discarded due to its low discrimination power. The remaining 14 items were used to calculate the final scores.

#### 4.3.2 Test For Higher Secondary School Students’ Comprehension Skills in Mother tongue

The test was consisted of 15 objective type multiple choice questions with a maximum score of 25. The first 10 items carry ‘2’ scores each and the remaining 5 items carry ‘1’ score each. ‘0’ score is awarded for incorrect and no responses. The test were administered to 1013 students from various higher secondary schools in Kasaragod district, Kerala.

##### 4.3.2.1 Calculation of Difficulty Index (DI)

The difficulty index of the test items were calculated and the result is presented in the table 4.4

**Table 4.4**

**The difficulty index of ‘Test for Higher Secondary School Students’ Comprehension Skills in Mother tongue’.**

| Item | Difficulty Index (DI) |
|------|-----------------------|
| 1    | 0.9171                |
| 2    | 0.8648                |
| 3    | 0.8519                |
| 4    | 0.5114                |
| 5    | 0.2626                |
| 6    | 0.7048                |
| 7    | 0.8233                |
| 8    | 0.6871                |
| 9    | 0.6407                |
| 10   | 0.6624                |



|    |        |
|----|--------|
| 11 | 0.2754 |
| 12 | 0.4136 |
| 13 | 0.7443 |
| 14 | 0.1619 |
| 15 | 0.2705 |

#### 4.3.2.2 Calculation of Discrimination Power (DP)

The discrimination power (DI) of the test items were calculated and presented in the table 4.5

**Table 4.5**

**The discrimination power of ‘Test for Higher Secondary School Students’ Comprehension Skills in Mother tongue’**

| Item | Discrimination Power (DP) |
|------|---------------------------|
| 1    | 0.44                      |
| 2    | 0.82                      |
| 3    | 0.76                      |
| 4    | 0.76                      |
| 5    | -0.36*                    |
| 6    | 1.06                      |
| 7    | 1.02                      |
| 8    | 1.16                      |
| 9    | 1.20                      |
| 10   | 0.93                      |
| 11   | 0.08*                     |
| 12   | 0.31                      |
| 13   | 0.65                      |
| 14   | -0.27*                    |
| 15   | 0.36                      |

**Note: \*indicates the items with low DP (< 0.20)**

The items 5, 11 & 14 were discarded due to their low discrimination power. The remaining 12 items were used for calculation of the final scores.

The collected data was subjected for analysis to test the hypothesis. The descriptive and correlation analysis were done using the Statistical Package for the Social Sciences (SPSS) software.

## 5. Results

Preliminary analysis was conducted to the selected variables for the total sample of 1013. In the preliminary analysis descriptive statistical measures such as mean, median, mode, standard deviation, skewness and kurtosis were computed for the total sample of 1013. The results are presented in the table 5.1

**Table 5.1**

**Statistical constants of the variables for the total sample.**

| Sl. No. | Variable                              | Mean  | Median | Mode | Standard Deviation | Skewness | Kurtosis |
|---------|---------------------------------------|-------|--------|------|--------------------|----------|----------|
| 1       | Comprehension Skills in English       | 14.74 | 15     | 15   | 4.154              | -0.071   | -0.608   |
| 2       | Comprehension Skills in Mother tongue | 14.76 | 15     | 17   | 4.015              | -0.558   | -0.306   |

The Pearson Product Moment Correlation Coefficient ( $r$ ) is calculated between the dependent and independent variables for the total sample and sub-samples selected for the study. The results are presented in tables below.

### Relationship between comprehension skills in English and Mother tongue for the total sample.

The Pearson Product Moment Correlation Coefficient ( $r$ ) is calculated between the comprehension skills in English and Mother tongue for the total sample. The result is presented in the table 5.2

**Table 5.2**

**Details of relationship between comprehension skills in English and Mother tongue for the total sample.**

| Sample | N    | r       | Significance | Confidence Interval |             | Shared Variance |
|--------|------|---------|--------------|---------------------|-------------|-----------------|
|        |      |         |              | Lower Limit         | Upper Limit |                 |
| Total  | 1013 | 0.393** | 0.000        | 0.3409              | 0.4451      | 15.4449         |

The results show that, there exists a significant positive relationship ( $r=0.393$ ,  $p<0.01$ ) between students' comprehension skills in English and Mother tongue for the total sample.

### Relationship between comprehension skills in English and comprehension skills in Mother tongue for the sub-samples.

The Pearson Product Moment Correlation Coefficient ( $r$ ) is calculated between the comprehension skills in English and Mother tongue for the sub-samples viz. gender, locale and type of institution. The results are presented below.

#### Gender

The Pearson Product Moment Correlation Coefficient ( $r$ ) is calculated between the comprehension skills in English and Mother tongue for male and female students. The results are presented in the table 5.3

**Table 5.3**

**Details of relationship between comprehension skills in English and Mother tongue for male and female students.**

| Gender | N   | r       | Significance | Confidence Interval |             | Shared Variance |
|--------|-----|---------|--------------|---------------------|-------------|-----------------|
|        |     |         |              | Lower Limit         | Upper Limit |                 |
| Male   | 444 | 0.198** | 0.000        | 0.1083              | 0.2877      | 3.9204          |
| Female | 569 | 0.406** | 0.000        | 0.3372              | 0.4748      | 16.4836         |

The results show that, the relationship between students' comprehension skills in English and Mother tongue is significantly positive for both male ( $r=0.198$ ,  $p<0.01$ ) and female ( $r=0.406$ ,  $p<0.01$ ) students.

#### Locale

The Pearson Product Moment Correlation Coefficient ( $r$ ) is calculated between the comprehension skills in English and Mother tongue for the rural and urban students. The results are presented in the table 5.4

**Table 5.4**

**Details of relationship between comprehension skills in English and Mother tongue for the rural and urban students.**

| Locale       | N   | r       | Significance | Confidence Interval |             | Shared Variance |
|--------------|-----|---------|--------------|---------------------|-------------|-----------------|
|              |     |         |              | Lower Limit         | Upper Limit |                 |
| <b>Rural</b> | 622 | 0.349** | 0.000        | 0.2798              | 0.4182      | 12.1801         |
| <b>Urban</b> | 391 | 0.544** | 0.000        | 0.4739              | 0.6141      | 29.5936         |

The results show that, there exists a significant positive relationship between students' comprehension skills in English and Mother tongue for both rural ( $r=0.349$ ,  $p<0.01$ ) and urban ( $r=0.544$ ,  $p<0.01$ ) students.

### **Type of Institution**

The Pearson Product Moment Correlation Coefficient ( $r$ ) was calculated between the comprehension skills in English and Mother tongue for Govt., Govt.-Aided and Un-Aided institutions. The results are presented in the table 5.5

**Table 5.5**

**Details of relationship between comprehension skills in English and Mother tongue for Govt., Govt. Aided and Un-Aided institutions.**

| Type of Institution | N   | r       | Significance | Confidence Interval |             | Shared Variance |
|---------------------|-----|---------|--------------|---------------------|-------------|-----------------|
|                     |     |         |              | Lower Limit         | Upper Limit |                 |
| <b>Govt.</b>        | 606 | 0.279** | 0.000        | 0.2054              | 0.3526      | 7.7841          |
| <b>Govt.- Aided</b> | 205 | 0.514** | 0.000        | 0.4125              | 0.6155      | 26.4196         |
| <b>Un-Aided</b>     | 202 | 0.800** | 0.000        | 0.75                | 0.85        | 64              |

The results show that, the relationship between students' comprehension skills in English and Mother tongue for Govt. institutions ( $r=0.279$ ,  $p<0.01$ ), Govt.-Aided institutions ( $r=0.514$ ,  $p<0.01$ ) and Un-Aided institutions ( $r=0.8$ ,  $p<0.01$ ) are significantly positive.

### **6. Discussion and Conclusion**

The present study revealed that, the higher secondary school students' comprehension skills in English is positively correlated with their comprehension skills in Mother tongue. There is significant positive relationships exists between students' comprehension skills in English and Mother tongue also for the sub-samples selected viz. Gender, Locale and Type of Institution.

The findings of the study suggests that, the competency in students' mother tongue or home language can facilitate their competency in a second language. The mother tongue acts as a strong foundation in learning a second, third or a foreign language for the students. This findings go in hands with the recommendation of NEP 2020 on the use of mother tongue or regional language for learning until at least Grade 5, preferably till Grade 8 and beyond (NEP 2020, 4.11).

Following suggestions can be considered for future research on this area:

1. The present study was conducted on the students of selected higher secondary schools in Kasaragod district of Kerala. Similar studies can possibly conduct on the students of higher secondary schools across the state to determine the consistency of the results.
2. The impact of demographic variables other than used in the present study on the relationship between higher secondary school students' comprehension skills in English and Mother tongue can be studied in future.

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