

Reading Comprehension - Knowledge of Languages and Parental Educational Status : A study

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Abstract

There are multiple elements that influence how well individuals comprehend written material. This research investigates the reading comprehension abilities of higher education students, considering their linguistic proficiency and their parents' level of education. Additionally, it examines how the combination of these two factors impacts reading comprehension. The study focused on postgraduate students enrolled at Gujarat Vidyapith, a deemed university. A total of 346 students were selected using the cluster sampling method. To assess their reading comprehension, a cloze test was administered. The collected data was analyzed using descriptive statistics and two-way ANOVA. Findings indicated no substantial variation in reading comprehension scores between students who spoke only their mother tongue and those proficient in additional languages. Similarly, no significant disparity was found between students whose parents were literate and those whose parents lacked formal education. Furthermore, the interaction between language proficiency and parental education level did not show a notable effect on reading comprehension.

Keywords: *Higher Education, Knowledge of Languages, Parental Education Status, Reading comprehension, Interaction effect*

Introduction

The concepts of reading and reading comprehension are distinct. While reading refers to recognizing written symbols, reading comprehension involves understanding their underlying meaning. Reading is the process of identifying words, whereas comprehension requires interpreting and deriving significance from the text. Simply put, reading converts written language into spoken words, but comprehension ensures that those words make sense in context. In other words, reading comprehension encompasses the ability to read, interpret, process, and internalize content. It requires critical thinking before, during, and after reading by merging the writer's message with the reader's existing knowledge (Meissner & Yun, 2008; Sweet & Snow, 2003; Snider, 1989).

Reading comprehension is a complex cognitive function that allows readers to extract maximum meaning from a text while minimizing errors in understanding. Scholars regard it as a sophisticated thought process that involves multiple mental skills. It requires active engagement, logical reasoning, and meaningful interaction between the reader and the written material. Reading comprehension is a deliberate cognitive activity in which meaning is developed through the relationship between the reader and the text. It involves deciphering words while simultaneously making sense of them. Essentially, reading is a process of engaging with a text to create meaning. Armbruster (2000, p.41) argues that comprehension is the ultimate goal of reading; without understanding, merely reading words does not constitute true reading. Since reading comprehension entails decoding, interpreting, and making sense of text, it directly determines how well a reader grasps the material. Without comprehension, reading remains incomplete.

Studies emphasize the significance of reading comprehension, demonstrating its positive influence on academic performance. It has been shown to enhance achievement in subjects such as mathematics and

science (Akbaşlı; Şahin & Yaykiran, 2016). Extensive research confirms a strong correlation between reading comprehension and overall academic success (Cook, 2006; Ponkshe, 2013; Menaka & Justin Jebaraj, 2017). Moreover, a positive relationship exists between comprehension skills and a favorable attitude toward reading (Windra Dwie Agustiani, 2017). Additionally, writing and translation skills are impacted by comprehension abilities, as studies indicate a direct link between reading comprehension and proficiency in writing and translation (Rahemi; Jufri & Ardi, 2013). Reading fluency also has a close connection with comprehension (Ching Pey; Hui Min & Lay Wah, 2014). Palmer's (2010) research further supports a correlation between reading comprehension, writing proficiency, and writing fluency. Beyond academics, reading comprehension plays a crucial role in shaping a student's intellectual identity. Mokeddem & Houcine (2016) suggest that it enhances summary writing skills. Given the importance of reading comprehension, understanding the factors that influence it is essential. Researchers are increasingly interested in examining how students' language proficiency and parental education levels impact their comprehension abilities, prompting further exploration in this field.

Objectives of the Study

1. To examine the reading comprehension level of higher education students.
2. To explore the reading comprehension of higher education students in the context of their knowledge of languages (KOL) and their parental educational status (PES).
3. To examine interactional effect of higher education students' PES and KOL with their reading comprehension.

Operational Definitions

Reading comprehension. The total score obtained on cloze test by the student was considered as reading comprehension of the student.

Delimitation of the Study

The present study included First and Second B.Tech students of the academic year 2023-24, studying in Five Engineering colleges in Hyderabad.

Population and Sampling

The Population of the present research consisted of the First and Second B.Tech students of the academic year 2023-24, studying in Five Engineering colleges in Hyderabad. For sampling the following procedure was followed:

1. Five Engineering colleges were selected randomly from the list of all engineering colleges of Hyderabad using EXCEL function.
2. Students with Roll numbers 1,6,11,16,21,26 and 31 were selected for the study by pre-selecting these numbers without knowing the details of corresponding students.
3. The number of students varied from one college to other depending upon the number of sections and engineering branches the college have.
4. The 457 students willingly remain present while data collection who were included in the sample.
5. Out of 457 students, 93 students had illiterate parents and 364 students had literate parents. In the sample, the number of students knowing mother tongue only was 264 while that of knowing other languages also was 193.

Tools of the Study

Cloze Test

A cloze assessment was utilized to evaluate the reading comprehension skills of higher education students. The test included a paragraph where the opening and concluding sentences remained unchanged. Beginning with the second sentence, every fifth word was systematically removed and replaced with a blank space. This pattern continued throughout the passage. However, monosyllabic words, numerals, proper nouns, and personal names were excluded when determining which words to omit. To prevent test-takers from guessing based on blank size, all blanks were kept uniform in length. The paragraph contained a total of 66 words, with 10 words removed. Participants were required to fill in the blanks with appropriate words. Each correct response was awarded one point, while incorrect responses received no points. The reliability scores for the test, measured using Cronbach's Alpha, Spearman-Brown Coefficient, and Guttman Split-Half Coefficient, were 0.83, 0.84, and 0.73, respectively. The Clif's Consistency Index (C) was determined to be 0.52.

Data Collection and Analysis

The cloze test was conducted in a standard classroom setting to collect data. Participants received general instructions regarding the test format and how to provide responses. No time constraints were imposed for completing the test.

Following data collection, the results were analyzed using descriptive statistics and two-way ANOVA to assess patterns and relationships within the data.

Results

To decide the three levels of reading comprehension of higher education students *Mean +/- sd* formula was applied. The results are presented in Table 1.

Table 1
Reading comprehension level of higher education students

Level	Score	N	Percentage
High	> 8.79	102	22.31 %
Moderate	4.05 to 8.79	269	58.86 %
Low	< 4.05	86	18.81 %

Table 1 shows that 22.31 % students had low; 58.86 % students had moderate and 18.81 % students had high level of reading comprehension. The results revealed that most of students had moderate level of reading comprehension.

Table 2 presents the descriptive statistics analysis summary for objective 2.

Table 2
Descriptive statistics for the second objective

KOL	PES	N	Mean	Std. Deviation
Mother tongue only	Illiterate	73	6.58	2.262
	Literate	191	6.18	2.621
	Total	264	6.51	2.328
Other language also	Illiterate	48	6.13	2.653
	Literate	145	5.15	2.193
	Total	193	5.88	2.558
Total	Illiterate	93	6.52	2.318
	Literate	364	5.97	2.557
	Total	457	6.42	2.370

The observation of Table 2 shows that the students having knowledge of mother tongue only scored mean 6.51 on cloze test with 2.328 as standard deviation.

The students having knowledge of other languages also scored 5.88 mean with 2.558 as standard deviation on the cloze test.

The students having knowledge of mother language only and other languages also scored 6.42 and 2.370 on the cloze test as mean and standard deviation, respectively. To examine the interaction effect of higher education students' PES and KOL with their reading comprehension; two-way ANOVA was conducted. The results are presented in Table 3.

Table 3
Summary of ANOVA of reading comprehension, KOL and PES

Source	Sum of squares	df	Mean square	F	Sig.
KOL	16.99	1	16.99	3.052	0.82
PES	14.98	1	14.98	2.690	0.102
KOL*PES	2.616	1	2.616	0.470	0.494
Error	1904.96	453	5.570		
Total	16182.00	457			

Table 3 shows that a two-way ANNOVA was conducted to know the relationship between KOL, PES and reading comprehension. It can be observed from Table 3 that the reading comprehension scores of students having knowing mother tongue only ($M=6.51$, $SD=2.328$) and those knowing other languages also [$(M=5.88$, $SD=2.588)$; $F(1, 457) = 3.052$, $p>0.01$] were not significantly different.

There was no significant difference between the scores for reading comprehension of students having illiterate parents ($M=6.52$, $SD=6.318$) and those having literate parents ($M=5.97$, $SD=2.557$); $F(1, 457) = 2.690$, $p>.01$.

Table 3 also shows that the interaction effect of KOL and PES with reading comprehension was not significant, $F(1, 457) = 0.470$, $p>.01$.

Discussion

The findings indicated that the majority of students demonstrated a moderate level of reading comprehension. Research on reading emphasizes that comprehension is an essential component of the reading process. Without it, reading remains incomplete. As a result, educators should prioritize strengthening students' ability to comprehend texts. Teachers must introduce various comprehension strategies and offer individualized support to students. According to Gilakjani & Sabouri (2016), specific techniques can enhance reading comprehension, while Ardakani & Lashkarian (2015) suggest that using semantic mapping as a visual tool can be an effective approach.

The study revealed no notable difference in comprehension scores between students whose parents were literate and those whose parents lacked formal education. Similarly, no significant variation was found between students proficient only in their native language and those fluent in additional languages. Therefore, educators should avoid assuming that parental literacy automatically leads to better comprehension skills. Likewise, knowing multiple languages does not necessarily result in superior reading comprehension. The findings suggest that neither parental education nor linguistic proficiency independently affects students' comprehension abilities, nor does their combination significantly contribute to variations in comprehension levels.

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