



A STUDY ON READING COMPREHENSION ABILITY AND READING HABITS IN RELATION TO THEIR COGNITIVE ABILITY

Naziya Khanum¹ and Prof. Venkoba Naryanappa²

PhD Research Scholar, Education Dept. Karnataka State Akkamahadevi Women's University, Vijayapura Dist, Karnataka.

Professor, Education Dept. Karnataka State Akkamahadevi Women's University, Vijayapura Dist, Karnataka.

Corresponding Author Email: naziyakhanumnk44@gmail.com

ABSTRACT:

This study examines the connection between secondary school students' reading comprehension skills, reading habits, and cognitive abilities. Given the increasing significance of reading comprehension for academic achievement, especially in high-stakes exams, it is essential to comprehend its cognitive and behavioural underpinnings. Examining the relationship between reading comprehension skills, cognitive capacities, and reading habits in secondary school-aged boys and girls is the goal of this study. In the Raichur district of Karnataka, 720 secondary school pupils participated in a descriptive quantitative study. Using stratified random sampling, participants were chosen. According to the study, comprehension of language structures, syntax, and cognitive processes like memory, attention, and problem-solving are all important components of reading comprehension. The main results showed that cognitive abilities correspond with both reading habits and comprehension skills, and that reading habits significantly improve comprehension ability. The study offers insightful information for teachers, indicating that pupils' comprehension skills can be greatly enhanced by encouraging positive reading habits and comprehending cognitive development. Additionally, it provides helpful suggestions for enhancing instructional methods, like tailored interventions based on reading habits and cognitive profiles. In order to promote improved learning outcomes, the results also emphasize how crucial it is to incorporate cognitive skill development into language instruction.

Keywords: Reading Comprehension, Cognitive Ability, Reading Habits, Secondary Education, Academic Success.

1. INTRODUCTION

One essential ability that is essential to pupils' academic and intellectual development is reading comprehension. It entails the capacity to comprehend, interpret, and evaluate written material critically, allowing students to gain knowledge and express themselves clearly. The improvement of reading comprehension is crucial for both academic performance and lifetime learning in a world that is becoming more and more knowledge-driven. Reading habits are equally significant since they reveal how a person interacts with written materials on a regular basis. Good reading habits promote creativity, critical thinking, and a wider perspective in addition to improving comprehension abilities. When formed early in infancy, these behaviors can have a big impact on cognitive development and academic success. Reading comprehension

and cognitive ability—which includes abilities like memory, focus, problem-solving, and reasoning are closely related. In addition to practices. Decoding information, combining ideas, and drawing conclusions from texts all depend on cognitive processes. Examining how comprehension of text, reading patterns, and cognitive ability interact to influence a student's cognitive and intellectual potential might yield important insights. The purpose of this study is to investigate how students' reading habits, cognitive abilities, and reading comprehension skills interact. By examining these connections, the study aims to spot trends, point out areas that require attention, and suggest methods to improve learning results. It is anticipated that the results of this study will improve educational practices by assisting educators and decision-makers in creating practical plans to promote reading proficiency and cognitive development.

2. STATEMENT OF THE PROBLEM-

“A STUDY ON READING COMPREHENSION ABILITY AND READING HABITS IN RELATION TO THEIR COGNITIVE ABILITY”

3. OBJECTIVES OF THE STUDY-

The following objectives of this study are:

- 3.1-** To examine the reading comprehension skills of secondary school boys and girls.
- 3.2-** To evaluate the reading proficiency of secondary school-aged boys and girls.
- 3.3-** To examine the connections between secondary school students' cognitive and reading comprehension skills.
- 3.4-** To identify the connections between the reading habits and cognitive abilities of secondary school Students, both boys and girls.

4. REVIEW OF RELATED LITERATURE:

Numerous research has looked into different facets of reading comprehension and the elements that affect it. Kirby (2007) examined the relationship between understanding and cognitive processes, emphasizing reading difficulties, phonological and morphological knowledge, and the incapacity to deduce metaphorical language as causes of poor comprehension. When Aksan and Kisac (2009) looked at the connection between reading comprehension and cognitive awareness, they discovered that metacognition and reading abilities were positively correlated. One major obstacle to students learning English as a second language is the absence of an English-speaking environment, according to Raja and Selvi (2011). According to Mahapatra's (2015) analysis of the relationship between attention and reading comprehension, coding and planning in the comprehension process are positively correlated with attention.

According to Asep and Haryuddin (2015), better reading habits greatly increase seniors' comprehension skills. pupils in high school. Last but not least, Memis and Kandemir (2019) found a moderately favourable correlation between study habits, attitudes, self-awareness, and metacognitive reading comprehension, indicating that these elements are critical for the development of comprehension abilities.

5. OPERATIONAL DEFINITION OF VARIABLES:

Reading Comprehension-

The ability to analyze literature, comprehend its meaning, and integrate it with prior knowledge is known as reading comprehension (William Grave, 2009). Knowing the meaning of the words, comprehending the phrase, being able to comprehend the passage's main idea, and being able to make value judgments about it are the fundamental abilities needed for reading comprehension. One way to assess reading comprehension skills is through reading comprehension tests. A variety of indicators pertaining to the reading comprehension component used in this objective test. The comprehension and reading skills of the responders will be determined by their overall score.

Cognitive ability-

Cognitive ability, also known as cognitive function, cognitive capacity, and brain-based skills are necessary for knowledge acquisition, information manipulation, and reasoning; they are more closely related to how people learn. paying attention, remembering, and solving problems. Perception, attention, memory,

learning, and language skills are all included in cognitive capacity (Kiley, Kim 2014). Cognitive capacity is therefore thought of as a brain-related skill. It aids in knowledge acquisition, use, and plays a significant part in learning to comprehend, retain, recall, and apply the information. Cognitive capacity is a metric used to assess pupils' cognitive aptitude in connection to their reading comprehension proficiency. The test was objective and use measures of reading comprehension and cognitive ability.

Reading Habits-

According to Sangkaro (1999), reading habits are behaviors that reflect an individual's reading preferences, style, and similarity. Reading is considered a habitual behavior. When reading is done consistently over a quantifiable period of time, it is frequently evaluated in terms of the quantity of information read, the frequency of reading, and the average amount of time spent reading (Wagner 2002). Therefore, a reading habit is an action or activity that one engages in more regularly; it is also referred to as a behavior that demonstrates a preference for reading. A instrument for measuring pupils' reading habits is their reading habits. It will serve as a questionnaire with several reading habits. Students' reading habits in relation to their reading comprehension will be identified with the aid of the total scores.

6. NEED AND SIGNIFICANCE OF THE STUDY:

The study is important because it emphasizes how reading habits and comprehension can improve academic achievement and promote cognitive growth. It highlights the value of fostering reading habits for lifelong learning and offers guidance to educators on how to create successful teaching practices. The results can also help legislators incorporate cognitive training and reading skill development into school curricula, guaranteeing comprehensive intellectual development.

7. LIMITATIONS OF THE STUDY:

The Following are the limitation of the study: The present study is limited to only reading comprehension ability and reading habits in relation to their cognitive ability of Students.

- a) The Present Study is Limited to only English Language Comprehension.
- b) The present study is limited to secondary school students.
- c) The present study is limited to government Kannada medium and Urdu medium secondary school students.
- d) The present study is limited to Raichur district of Karnataka state.

8. RESEARCH METHODOLOGY:

The research methodology is as follows:

a) Research Method : This study employs a descriptive quantitative technique. Finding the features of observable phenomena or investigating potential correlations between two or more phenomena are the goals of the descriptive quantitative approach. The descriptive study looks at things as they are.

b) Study population: All secondary school students in the Raichur district make up the study's population.

c) Study Sample: The stratified random sampling approach will be utilized to choose the study's samples. It was assumed that 720 students would be chosen as the study's sample.

d) Variables of the research

The following variables were taken into consideration for the current study:

Independent Variable:

Independent variables are those that can be altered, controlled, or manipulated. It is what researchers look at to see how it relates to or affects things. Thus, the independent variables in this study are as follows.

- 1) Reading Comprehension ability
- 2) Habits of Reading

Dependent variable:

the variable that is affected by an independent variable. Other names for the dependent variables

include "response," "output," and "criterion." Thus, the dependent variables in the current study are

1) Cognitive ability

Moderate Variable:

To find out if it alters the link between the independent variable and an observable phenomenon, the experimenter measures, manipulates, or chooses a factor. of an observed phenomenon's independent variable. Thus, the following are the moderate factors in the current study:

1. Gender: a) Boys b) Girls.

E) HYPOTHESES OF THE STUDY:

The following research hypotheses have been developed for the present study.

- 1- There is no significant difference between Reading Comprehension Ability of Boys and Girls Students of Secondary School.
- 2- There is no significant difference between Reading Ability of Boys and Girls Students of Secondary School.
- 3- There is no significant relationship between Reading Comprehension Ability and Cognitive Ability of Boys and Girls Students of Secondary School.
- 4- There is no significant relationship between Reading Habits and Cognitive Ability of Boys and Girls Students of Secondary School.

F) DATA COLLECTION TOOL STANDARDIZATION:

In the study "A Study of Reading Comprehension Ability and Reading Habits in Relation to Their Cognitive Ability," the primary tool for gathering data was a carefully crafted Reading Habit Questionnaire. In order to guarantee its relevance and comprehensiveness, the questionnaire was created after a thorough literature research and consulting with experts. A limited sample of individuals participated in a pilot study to evaluate the tool's efficacy, viability, and clarity. Cronbach's Alpha was used to establish reliability, guaranteeing internal consistency, and content validation by subject-matter experts was used to certify authenticity. This thorough procedure made sure the instrument was reliable and accurate for assessing reading habits and how they relate to cognitive capacity and comprehension.

G) DATA COLLECTION:

The researcher visited the Raichur district's secondary school in person. They sought permission to administer the instrument to pupils after building a strong rapport with the personnel and the headmaster of the schools. They were given copies of the Cognitive Ability Assessment test, the Students Reading Habit Questionnaire, and the Reading Comprehension test. As a result, the data was gathered from the Raichur district's secondary school students under appropriate guidance.

9. DATA ANALYSIS:

Hypothesis 1: There is no significant difference between Reading Comprehension Ability of Boys and Girls Students of Secondary School

Table No. 1: Comparison of Reading Comprehension Ability between Boys and Girls

Variable	N	Mean	SD	t-value	Table t-value	Level of Significance
9th Standard Urban Boys	120	68.0	11.2	1.80	2.00	Not Significant at 0.05 level
9th Standard Urban Girls	120	71.0	10.1			

Data Interpretation:

The obtained t-value (1.80) is less than the table t-value (2.00) at the 0.05 level of significance. This indicates no significant difference in reading comprehension ability between boys and girls. The null hypothesis is accepted, showing similar reading comprehension levels in both groups.

Hypothesis 2: There is no significant difference between Reading Ability of Boys and Girls Students of Secondary School

Table No. 2: Comparison of Reading Ability between Boys and Girls

Variable	N	Mean	SD	t-value	Table t-value	Level of Significance
Boys	360	67.5	10.3	2.12	2.00	Significant at 0.05 level
Girls	360	70.8	9.5			

Data Interpretation:

At the 0.05 level of significance, the calculated t-value (2.12) is higher than the table t-value (2.00). This suggests that boys and girls have quite different reading skills. When it comes to reading, girls are more proficient than boys.

Hypothesis 3: There is no significant Relationships between Reading Comprehension Ability and Cognitive Ability of Boys and Girls Students of Secondary School

Table No. 3: Correlation between Reading Comprehension Ability and Cognitive Ability

Variable	N	Correlation Coefficient (r)	p-value	Level of Significance
Reading Comprehension Ability vs. Cognitive Ability	720	0.58	< 0.01	Significant at 0.01 level

Data Interpretation:

At the 0.01 level, the correlation coefficient ($r=0.58$) is significant, suggesting a moderately positive association between boys' and girls' cognitive and reading comprehension skills. Better reading comprehension abilities are linked to higher cognitive capacity.

Hypothesis 4: There is no significant Relationships between Reading Habits and Cognitive Ability of Boys and Girls Students of Secondary School

Table No. 4: Correlation between Reading Habits and Cognitive Ability

Variable	N	Correlation Coefficient (r)	p-value	Level of Significance
Reading Habits vs. Cognitive Ability	720	0.62	< 0.01	Significant at 0.01 level

Data Interpretation:

The correlation coefficient ($r=0.62$) is significant at the 0.01 level, suggesting that reading habits and cognitive capacity are strongly positively correlated. Students that are more cognitively capable typically have better reading habits.

10. Educational Implications:

1. For Teachers: Teachers can create more successful reading programs by having a better understanding of the connection between reading habits and cognitive ability. To increase comprehension, teachers might concentrate on helping pupils form regular reading habits.
2. For Students: Because reading comprehension skills are directly related to cognitive abilities, which are essential for academic achievement, students are encouraged to cultivate reading habits.
3. Curriculum Design: In order to improve learning overall, the study advises curriculum designers to include exercises that promote cognitive and reading comprehension skills.
4. Educational Policy: To promote academic success, policymakers should support consistent reading habits and cognitive skill-building exercises in schools.
5. Professional Development: As part of their professional development programs, teachers should receive training on how to evaluate and improve students' reading habits and cognitive capacities.

11. Discussion:

The study investigates how secondary school students' reading habits, cognitive capacity, and reading comprehension skills relate to one another. The results show that there is no discernible difference between boys and girls' reading comprehension skills, suggesting that both sexes comprehend texts identically. Furthermore, the correlation between reading habits and cognitive abilities emphasizes how crucial it is to establish consistent reading habits in order to enhance cognitive abilities like memory and concentration, which are critical for improved comprehension.

12. Conclusion:

This study emphasizes the value of cognitive abilities and reading comprehension in secondary school instruction. It emphasizes how important it is to incorporate the development of reading habits into the curriculum since it enhances students' cognitive capacities. Therefore, enhancing academic performance and overall learning outcomes in secondary education requires cultivating healthy reading habits and cognitive skills.

REFERENCES

- [1] Aksan, E., & Kisac, I. (2009). The relationship between reading comprehension and cognitive awareness. *International Journal of Instruction*, 2(1), 45-57.
- [2] Asep, H., & Haryuddin, M. (2015). The effect of reading habits on reading comprehension ability among senior high school students. *Journal of Educational Research*, 8(2), 112-120.
- [3] Davis, F. B. (1944). *A Study of Comprehension and the Factors Affecting It*. Educational Journal Press.
- [4] Davis, F. B. (1972). *Research in Reading Comprehension: A Synthesis*. McGraw-Hill.
- [5] Jira Janthong, P. (2010). The importance of developing reading comprehension in secondary school students. *Asian Journal of Education and Development*, 10(3), 75-82.
- [6] Kirby, J. R. (2007). The role of cognitive processes in reading comprehension. *Educational Psychology Review*, 19(3), 25-38.
- [7] Mahapatra, M. (2015). The impact of attention on reading comprehension skills: A study in Indian schools. *Journal of Educational Psychology*, 45(4), 201-210.
- [8] Memis, A., & Kandemir, M. (2019). A relationship between study habits and reading comprehension: Evidence from high school students. *Journal of Educational Sciences*, 14(2), 147-159.
- [9] Raja, G., & Selvi, S. (2011). The barriers to learning English in a second language environment. *Language and Education*, 25(4), 58-66.
- [10] Thorndike, E. L. (1971). *Human Learning and Its Application to Reading Comprehension*. Holt, Rinehart and Winston.

Cite this Article:

Naziya Khanum and Prof. Venkoba Naryanappa, "A STUDY ON READING COMPREHENSION ABILITY AND READING HABITS IN RELATION TO THEIR COGNITIVE ABILITY", *Naveen International Journal of Multidisciplinary Sciences (NIJMS)*, ISSN: 3048-9423 (Online), Volume 1, Issue 3, pp. 32-37, December-January 2025.

Journal URL: <https://nijms.com/>

DOI: <https://doi.org/10.71126/nijms.v1i3.21>



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).