

Effect of Intelligence on Reading Comprehension in English Among Students at Secondary School Level

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Abstract

Reading has a unique position in the school curriculum. It is both a subject of instruction and a tool for the mastery of other subjects. Reading is an important skill that needs to be developed in children not only for survival in the world of schools and later in universities but in adult life as well. Reading is an active skill-based process of constructing meaning and gaining knowledge from oral, visual and written text. A good reading habit is necessary for healthy intellectual growth and plays a very crucial role in enabling a person to achieve practical efficiency. Reading with comprehension is a difficult skill which is often overlooked and needs to be developed consciously and systematically. This study aims to investigate the relationship between Intelligence and Reading Comprehension in English among secondary school students. A child's mental capacity has a significant impact on his Reading Comprehension. To integrate and consider what they have read, as well as to connect it to their personal experiences, passions or opinions, readers must possess an intelligent mind. Reading skills are critical for the development of children and numerous researchers have shown the link between competency in reading and overall attainment. Futurologists used to predict the date of the printed world but ironically the Internet has made reading more and more a part of people's daily lives.

Keywords: Intelligence ,Reading Comprehension,Secondary School Students, English Language Teaching , English Language Learning

Introduction

Education means learning and learning is a natural and continuous process. In the present global society, learning English is very important. English as a foreign language serves as an important tool for education, communication and livelihood. The role of English in India is very important as in many other developing countries. New Technology and the adoption of the Internet have resulted in a major transition in terms of business, education, science and technological process, all of which demand high proficiency in English. However, one must also be aware of the fact that English cannot be acquired without teaching the four basic skills i.e. Listening, Speaking, Reading and Writing. If we trace the history of languages, we come to know that which so ever language it be, its spoken form is used initially.

Nowadays, English has become the common tongue of global village- English being an international language serves as a passport of success. Knowing English is no longer seen as the privileged possession of a special cultural and educated elite but the necessary instrument for everyone in a democratic society who want to move beyond their national boundaries. In India and also in the world at large, English has a

special role as the 'Lingua Franca' a means of communication for all types and classes of people across national frontiers. Making basic human rights of freedom of knowledge, opinion and movement a reality demands at least a basic knowledge of this particular world language. The mastery of any language involves four major skills-Listening, Speaking, Reading and Writing. Twenty first century is the century of information. Information explosion has increased the importance of reading ability, because most of the information whether it is on net or page requires man's ability to read and understand it. Reading is widely acknowledged and used as one of the important means to acquire knowledge. Reading occupies a pivotal role in the life of a man. Reading opens the doors of the treasures of knowledge. It is an important means of introducing the child to the world that surrounds him. It is the very foundation on which the edifice of the child is to be built. Reading is one of the most important components of our language and it is an essential tool for lifelong learning for all learners. In order to face the twenty first century, education has to prepare these learners to adapt to social and technological changes that are taking place at an unprecedented rate. Education under these circumstances depends largely on language competency. In this context, reading especially is a resource for continued education, for the acquisition of new knowledge and skills, for gaining information through media. especially newspapers, books, radio, television and the computers. Reading is the method by which we communicate to ourselves and to others. It involves both decoding and recording.

Reading is essential to the existence of our complex system of social arrangements. But it is more than that, if all the inventions of a hundred years were destroyed and only books were left, humans could still be humans, in the sense intended by the idealists, the poets and the great creators. Hence it is worthwhile to call reading as a humanizing process. The ability to read with comprehension is one of the most ingredients in language learning. It is a never-ending wide screen film on which life's pageant passes in review. It is still the only known time mission that can recreate the events of the past and open up the vistas of the future.

Reading is a key to the wealth of knowledge. Without reading an individual is deprived of the fundamental right to gain further education. Because reading is the inevitable instrument for learning, it is said that 'Leading nations are reading nations'. Only a reading and well-informed nation can keep in touch with the everyday happenings of the world. When a pupil reaches the secondary level of education, teachers every day face the sad fact that many of their pupils cannot do the reading expected of them. This is because reading with comprehension is a difficult skill which is often overlooked and needs to be developed consciously and systematically.

Significance of reading

The ability to read is recognized generally as the most important skill that a person can have. Reading is a tool of the acquisition mind. It is the vehicle for obtaining ideas that cannot be transmitted verbally. The individual who reads well has at his command a means for widening his mental horizon and for multiplying his opportunity for experience.

Reading is a crucial factor effecting intellectual growth. The knowledge contained in textbook is useless to publish if they cannot read, the ability to read and comprehend the printed English language is a pre-requisite to academic success. Reading also plays a significant role in the citizenship, in the vocational success, and the recreation of adults. Reading results from the immediate needs of the individual whether the reading occurs in the process of mastering an assignment in school or in connection with doing one's job.

Components of reading

The goal of all reading is the comprehension of meaning. Comprehension in reading is generally defined as getting a meaning from print. Reading without comprehension may be barking at the print or looking at some figural form. Reading is concerned not only with what it is but also with how worth it is and how best it is. Dr. Marlow Edger (2007) has proposed the big book procedure for reading instruction as a holistic approach. Accordingly, students do not need to struggle over the identification of unrecognized words; they may holistically attend to understand the content.

Smith and Dechant remarked that reading involves the following abilities.

- Ability to associate meaning with the graphic symbols.
- Ability to understand words in context and to select the meaning that fits the content.
- Ability to read in through units.
- Ability to understand units of increasing size, the phrases, clause, sentence, paragraph and whole section
- Ability to acquire word meaning.

Reading is a fundamental skill

Today, as in the schools of the past, reading is one of the most important tool subjects. The emphasize however is now placed on reading to learn rather than on learning to read-just to be able to read-as in early American schools. Children must read extensively in modern schools. W.S. Gray describes the reading process as follows: Reading is no longer defined as a unique ability which functions uniformly in all situations but rather as series of complex mental tasks which vary widely with a kind of material read and the propose of reading. Therefore, pupils must be equipped with skills to enable them to read with proficiency.

Reading is not a natural process; the habits necessary for efficient reading should be acquired during the initial period of reading instruction. Reading can be aloud or silent. Whatever be the type of reading, it involves the following skills.

- Correct pronunciation
- Word grouping
- Comprehending the contextual meaning of the vocabulary
- Comprehending the feeling behind the written word

Process of Reading

The process of Reading may be viewed as drawing information from the printed matters. Thorndike (1971) concluded his view about reading as “Understanding a paragraph is like solving a problem in Mathematics. It consists of selecting the right elements of the situation and putting them together in right relations and also with the right amount of weight or influence or force for each. “Reading has been reviewed by Vernon (1977), he stressed that “same type of auditory or vocal process is always reported.” he attributed it to the fact that “all words are primarily speech units. The view of the reading process stemming from the employment of research emphasizes the role of comprehension in Reading. Another view of the reading process has been presented by Carroll (1964) as the perception and comprehension of written message in a manner paralleling that of corresponding spoken messages.

Concept of Comprehension

Comprehension means the intelligent grasp of the situation at hand. Reading comprehension means the act of understanding the meaning of printed or spoken language. Comprehension ability is more likely a multi-dimensional affair. Bloom (1956) in his taxonomy of educational objectives, pointed out that the term comprehension includes those objectives, behaviors or responses which represent an understanding of the literal message contained in a communication.

This is one of the major contributions in framing the concept of comprehension. In comprehension pupil should read and understand not just the sense but also the feelings, tone and attitude of the language they face verbally or in a written message.

Comprehension is an act of understanding the meaning of written language and it requires intelligent interpretation and creative reaction. Studies conducted by Meera (2010), Skariah (2003), Gupta (2004) in Reading Comprehension have established that some psychological variables like intelligence, creativity, socio-personal adjustments etc. that affect it. When a child begins to acquire language, he acquires each new word in an effective context. Hence the relevance of testing the effect of Intelligence that influences Reading Comprehension.

Variables of the study

- Dependent variable-Reading Comprehension
- Independent variable-Intelligence

Objectives

- To study the relationship between Intelligence and Reading Comprehension in English among secondary school students.
- To compare whether there is any significant difference in Intelligence and Reading Comprehension in English with respect to
 - a. School locale
 - b. Gender

Hypotheses

- There exists a significant relationship between Intelligence and Reading Comprehension in English among Secondary School students.
- There exists a significant difference in Intelligence and Reading Comprehension in English with respect to:
 - a. School locale
 - b. Gender

Methodology

Survey method is used for the present study.

Sample for the study

The sample comprises 545 standard IX students studying in various secondary schools in Kozhikode district. A stratified random sampling method was used for the study with representation to the gender of pupils and school locale.

Tools used

- Test of Intelligence
- Test of Reading Comprehension in English

Statistical techniques used

- Descriptive statistics like Mean, Median, Mode, Standard deviation, Skewness, Kurtosis.
- Pearson's Product Moment Coefficient of Correlation
- Test of significance of difference between means

Analysis and Interpretation of data

The data collected were worked out based on certain essential descriptive statistics like mean, median, mode, standard deviation, skewness and Kurtosis for the whole sample.

Summary of Mean, Median, Mode, Standard Deviation, Skewness and Kurtosis for the variables Intelligence and Reading Comprehension in English (Total sample)

Variables	Mean	Median	Mode	Standard Deviation	Skewness	Kurtosis
Intelligence	34.43	33.66	35.97	11.70	0.35	0.44
Reading Comprehension	21.69	20	21	9.42	0.302	-0.844

From the table it is seen that the Mean, Median and Mode for Intelligence are approximately equal and the Mean, Median, Mode of the second variable Reading Comprehension is also equal hence both the variables follow normality.

Estimation of Relationship between Intelligence and Reading Comprehension in English among secondary school students

An attempt was made to examine the nature and extent of the relationship between Intelligence and Reading Comprehension in English among secondary school students. The Correlation was found out using Karl Pearson's product moment coefficient of correlation.

The value obtained for relationship between Intelligence and Reading Comprehension in English among secondary school students with respect to total sample are given in Table – 1.

Table -I

Data and result of the Relationship between Intelligence and Reading Comprehension in English among secondary school students with respect to Total sample

Variable	N	r- value	Relationship
Intelligence and Reading Comprehension	545	0.65**	Positive

**correlation is significant at 0.01

From Table-1, the correlation coefficient relationship between Intelligence and Reading Comprehension in English among secondary school students is 0.65**. The correlation coefficient ($r = 0.65^{**}$) is significant under 1% level of significance. From the results, Intelligence and Reading Comprehension in

English among secondary school students is related and positive value of 'r' indicate that any increase or decrease in Intelligence will result corresponding increase or decrease in Reading Comprehension in English.

Investigation of significant difference in Intelligence and Reading Comprehension in English with respect to school locale

Comparison of the Mean scores of Intelligence and Reading Comprehension in English with respect to school locale

Two tailed tests of significant difference is used to test the significance of difference between Intelligence and Reading Comprehension in English with respect to school locality. This aims to determine if there is a significant difference in the mean scores of Intelligence and Reading Comprehension in English with respect to School locality are given in Table-2.

Table-2

Data and result of Test of significance of difference between Mean scores of Intelligence and Reading Comprehension in English with respect to school locale

Variable	Gender	N	Mean	Standard Deviation	t-value
Intelligence	Urban	157	29.15	7.89	6.50
	Rural	388	36.34	12.91	
Reading Comprehension	Urban	157	19.70	9.04	3.14
	Rural	388	22.50	9.56	

The table-2, reveals that the t-value obtained for mean difference in intelligence between urban and rural secondary school students is significant at 0.05 level of significance because the calculated value 't' (6.50) is greater than the table value of 't' (1.96). Thus, it concludes that there is a significant difference in the mean scores of Intelligence between urban and rural secondary school students at 0.05 level of significance. It is found that intelligence between urban and rural secondary school students differ significantly and the t-value obtained for mean difference in Reading Comprehension between urban and rural secondary school students is significant at 0.05 level of significance because the calculated value 't' (3.14) is greater than the table value of 't' (1.96). Thus, it is concluded that there is a significant difference in the mean scores of Reading Comprehension in English between urban and rural secondary school students at 0.05 level of significance. It is found that Reading Comprehension in English between urban and rural secondary school students differ significantly.

Investigation of significant difference in Intelligence and Reading Comprehension in English with respect to Gender.

Comparison of the Mean scores of Intelligence and Reading Comprehension in English with respect to Gender

Two tailed tests of significant difference are used to test the significance of difference between Intelligence and Reading Comprehension in English with respect to Gender. This aims to determine if there is a significant difference in the mean scores Intelligence and Reading Comprehension in English with respect to Gender are given in Table-3.

Table-3

Data and result of test of significance of difference between Mean scores of Intelligence and Reading Comprehension in English with respect to Gender

Variable	Gender	N	Mean	Standard Deviation	t-value
Intelligence	Boys	293	35.79	12.79	2.85
	Girls	252	32.86	10.84	
Reading Comprehension	Boys	293	19.81	9.21	5.12
	Girls	252	23.88	9.28	

The Table-3 reveals that the t-value obtained for mean difference in Intelligence between boys and girls secondary school students is significant at 0.05 level of significance because the calculated value 't' (2.85) is greater than the table value of 't' (1.96). Thus, it concludes that there is a significant difference in the mean scores of Intelligence between boys and girls secondary school students at 0.05 level of significance. It is found that Intelligence between boys and girls secondary school students differ significantly and the t-value obtained for mean difference in Reading Comprehension between boys and girls' secondary school students is significant at 0.05 level of significance because the obtained value 't' (5.12) is greater than the table value of 't' (1.96). Thus, it concludes that there is a significant difference in the Mean scores of Reading Comprehension in English between boys and girls secondary school students at 0.05 level of significance. It is found that Reading Comprehension in English between boys and girls secondary school students differ significantly.

Further, it is seen that the mean value obtained in the case of rural students is higher than that of the urban students, may be since the rural students are utilizing their opportunities and facilities owing to the explosion of science and technology.

Findings of the study

The study revealed that there is a significant difference in Reading Comprehension and Intelligence among students at the secondary level.

There exists a significant difference in intelligence between boys and girls. In the case of Reading Comprehension, the mean value of Girls is higher than that of Boys which shows that Girls are superior in Reading Comprehension in English than Boys. There exists a significant difference between Urban and Rural students in Reading Comprehension in English.

Conclusion

The findings led the investigator to conclude that Intelligence turned out to be the significant predictor of Reading Comprehension in English. It is found that the child's Reading Comprehension is highly dependent on his mental ability. It is necessary to have a creative mind for the reader to consolidate and reflect upon what has been read and also to relate it to the learner's knowledge, interests or views.

Educational Implications

The findings of the study have the following implications in the present context of English language teaching in India. The study revealed the need for developing strategies to improve the reading competencies among the pupils. It showed a need to give a greater focus on teaching the Reading

Comprehension skills. Some intelligent and creative ways of developing Reading Comprehension that can be followed by teachers are as follows:

- Engage the children to read through a text/passage and then ask for a good term for it (or ask them to select a title from among three or four given titles) and ask them to suggest the sentence that reflects the primary idea of the text/passage.
- Ask pupils to say the meaning and to create a sentence of their own using the new words they acquired each day.
- Using play way methods such as spelling games, word games, finding words that aptly describe a picture etc.
- Give the class a story with sentences jumbled up and ask them to put it in the right order. This exercise can be made easy or difficult depending on the level of the learners.
- By providing different learning experiences to comment, describe, add and arrange what is read and transform them into story, poem, drama, description, news bulletin, interview, commentary etc., in the class.
- To be up-to-date with the latest information make students read newspapers in the morning and conduct a 'Thought for the day' session for presenting the so prepared striking news in the class.
- Allow peers to discuss on what they have read by asking questions to each other.
- Equip the school library with plenty of books and journals or magazines to meet the reading interests of the different age groups.
- Framing hypotheses or predictions about what the text is likely to deal with based on the title alone or the title of the book from which the text is taken.
- After reading a section of the story or a novel, anticipating or predicting what is likely to happen next and making them say or write possible endings for stories.

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