Deepa P. “Certain psychological variables as predictors of reading comprehension in English of secondary school pupils of Kerala”, Department of Education, University of Calicut, 2005
REVIEW OF RELATED LITERATURE

- Theoretical Overview of Reading Comprehension.
- Reading Comprehension: Studies and Theories.
- Conclusion.
Review of literature related to the area of investigation is a significant and essential part of any research work as this serves multiple purposes like knowing what others have learned from similar research problems, elimination of the duplication of the research, guidance regarding the definition and significance of research problems, formation of appropriate hypotheses and provision of helpful suggestions for significant investigations.

The present investigation is an attempt to study certain psychological variables as predictors of Reading Comprehension in English of Secondary School Pupils of Kerala. The investigator has therefore made a review of the studies in the area of Reading Comprehension in relation with the select psychological variables. The reviewed studies are presented in this chapter along with a theoretical overview of the language ability.

2.1. THEORETICAL OVERVIEW OF READING COMPREHENSION

A written script can properly be read with varying degrees of understanding. The scale of comprehension ranges from no meaning to complete understanding. The degree of desired comprehension will depend in part upon the purpose of the reader.

Reading a material serves many purposes. We can classify this broadly into three categories.
i) **Reading for Survival:** The reading we do day by day- instructions on bottles of medicine, instructions on how to handle machinery etc.

ii) **Reading for Pleasure:** The reading we do at leisure times, or during travel for the sake of entertainment.

iii) **Reading for Study Purposes:** Reading for knowledge acquisition, to pass an exam, to get a degree and to be more qualified.

Reading involves not only reception but a degree of perception. It involves recognition of sounds and written symbols. Reading is a process of looking at a written or printed symbol and translating it into an appropriate sound. This spoken symbol is further associated with an object for which it stands. Thus reading consists of three elements - the symbol (written or printed), the sound and the sense.

In reading we employ visual symbols to represent auditory symbols. The basic task in reading is therefore to establish in the mind of the reader automatic connections between sights and the sounds they represent. Since the sounds themselves are symbols of meanings, the process of reading involves a hierarchy of skills ranging from auditory and visual discrimination to such higher order mental activities like organizing ideas, making generalizations
and drawing inferences.

Thus, the term "reading" embraces a wide variety of tasks, activities, skills and mental processes.

Reading occurs at different levels. A child may read easy materials fluently and without help. This is the independent reading level. He may read difficult materials, calling for concentration and special effort. This is the 'level of challenge'. He may read materials which require outside help. This, is the 'instructional level'.

Characteristics of Reading

i) Reading is Purposeful: We read either for information or pleasure

ii) Reading is Selective: Glance rapidly, through a text to find out its general content, main ideas or gist (skimming); searching for a specific item of information by glossing over irrelevant information (scanning) or we read intensively with the aim of decoding the whole of the writer's message.

iii) Reading Speed Varies: According to content and purpose.

iv) Reading is Silent: Reading for meaning, is the activity we normally engage in when we read books, newspapers, road signs, posters etc. It involves looking at sentences in a text and
understanding the message they convey, in other words, 'making sense of' a written text.

v) **Reading is Text-Based**: It seldom involves the mere decoding of individual sentences isolated from context.

vi) **Reading Involves Complex Cognitive Skills**: Readers react to what they read, assessing the accuracy of the facts presented, the value of the opinions stated, or the quality and appropriateness of the style.

vii) **Reading is Based on Comprehension**:

That is, understanding meaning is integral to reading rather than the result of it. The more we comprehend, the more we can, and tend to, read.

Certain faults in reading techniques have been noticed among second or foreign language learners.

a) **Sub vocalization**: refers to forming the sounds of the words you are reading and even murmuring them aloud.

b) **Finger-pointing**: Another faulty habit that slows down the reading process is finger pointing which children use to fix their concentration on the word they are deciphering.
c) **Regressions**: Occurrence of regressive eye movement i.e., the eyes move backwards to check previous words instead of moving steadily forward.

Besides the purpose of the reader, other factors have a bearing upon comprehension. The physical condition of the reader, his interest in the material and the difficulty of the selection- all affect understanding.

The efficient reader will require from the printed page only what he is looking for. He may be distracted and charmed by other sounds and images, but he will not rest until he has discovered the answers to his questions. Efficient reader is one who reads fast and comprehends well (at an appropriate speed and reasonable comprehension). Speed depends on the text read (how easy or difficult).

Having begun to read, good readers operate cognitively at four highly inter-related and overlapping levels of meaning.

**a) Literal**: Understanding the information stated directly in a text.

**b) Interpretive**: Understanding the ideas and information not directly stated in a text; reading ‘between the lines’ and making inferences.
c) **Critical:** Making judgments with regard to a text about the ideas, implications, organization of information, author's style etc.

d) **Creative:** Generating new ideas, insights, applications etc from a text; imaginative reading.

Reading is challenge to the reader because it is such a complex process. Reading is not a general ability, but a composite of many specific abilities.

A single reading skill, although a very important one, well illustrates the complexity of reading. Any teacher who undertakes to cultivate, for instance, children's critical discrimination in reading finds that she is dealing with a whole cluster of abilities. Among these are classifying ideas, distinguishing between fact and opinion, establishing cause and effect, making generalizations, interpreting idiomatic and figurative language, making inferences, recognizing emotional reactions and motives, judging relevancy and drawing general conclusions.

**Skill in the mechanics of reading includes**

a) development of a large sight vocabulary

b) development of skill in identifying unfamiliar words

c) development of good eye-movement habits
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d) development of proper habits of posture, holding books and so on

e) development of speed and fluency in silent reading

f) development of oral reading skills, phrasing, expression, pitch, volume, enunciation

Training in these skills will definitely facilitate reading.

The rate of reading and the degree of comprehension are not highly correlated. Although there is a positive correlation between rate of reading and quality of comprehension, it cannot be automatically assumed that because a person reads fast he necessarily comprehends well.

The 'creative reading act' involves four hierarchical phases. They are descriptive, personal interpretative, critical analysis and creative action.

In the descriptive phase, the reader's focus is on the information contained in the text.

In the personal interpretative phase readers relate the information in the text to their own experiences and feelings.

In the critical analysis phase readers relate the text to broader social issues and may draw conclusions from it.
In the creative action phase readers try to translate the results of the first three phases into concrete action.

Thorndike (1971) hypothesized that adequate comprehension in reading occurs as a result of the reader's use of all his reasoning faculties and skills in problem solving. Comprehension was seen as grasping the sense of each word in its context weighting the words in terms of the reader's purpose. The ideas gained were then validated by comparison with the readers own experience and belief.

Reading

Reading is the ability to pronounce and receive ideas and impressions from a printed page. Reading is the receptive process of communication and is not a simple mechanical skill. It is a thoughtful process.

Readability

The term readability means that the ability of the reader to read and understand the printed words. It is used to refer to the assessment of the difficulty, that readers of a certain level of skill may have in reading a piece of connected written discourse or text. The difficulty of a text is generally measured in terms of how well readers are able to understand it.
Reading Readiness

Reading readiness is closely related with the concept of maturity. In 1931 an experiment in USA suggested that the best time to teach reading to children was when they had attained a mental age of 6 1/2 years.

Bruner (1966) says “The idea of readiness is mischievous half truth”. It is half truth largely because it turns out that for one teacher readiness provides opportunities for its nurture; another does not simply wait for it. Bruner asserted that “any subject can be taught effectively in some intellectually honest form to any child at any stage of development.

Readiness for reading is an ongoing process and the major problem for the teacher is to know how to start and how to proceed with a child in a particular reading task.

Factors Affecting Reading Skills

The following are the factors affecting reading skills.

(i) **Physical or Biological Factors:**

Visual, Auditory, Speech deficiencies and General health problem have considerable influence on reading.
(ii) **Psychological Factors:**

Fear and anxiety, Emotional insecurity, Lack of motivation, Personality of child, Sex of child, Achievement in other subjects, Interference of mother tongue and Level of aspiration have considerable influence on reading.

(iii) **Social Factors:**

School environment, Role of teacher, Home environment, Peer group, Socio-economic level of family, Education and Attitude of parents have considerable influence on reading.

(iv) **Cognitive and Linguistic Factors:**

Mental and language ability of the child also influence reading.

It was developed the idea that reading achievement was a function of general maturity or total growth by Olson and his colleagues at the University of Michigan in 1940.

**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). She stressed that "same type of
auditory or vocal process is always reported". She 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.

The third view of reading process is "Reading as a discipline"
that by a silent reading practice is getting meanings from the page;
the rate of reading and thinking will grow with the pupil's growth
and with his power to assimilate what he read (Huey, 1913). Another
view of the reading process has been presented by Caroll (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 multidimensional affair. Whether one is concerned
with spoken or written language, the evidences suggest that the
individual may have different levels of ability with respect of vocabulary, grammatical features, sentence structure etc.

Warren (1934) defined comprehension as synonymous to understanding. Bloom (1956) in his taxonomy of educational objectives, pointed out that the term comprehension includes those objectives, behaviours 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 nineteen seventies the concept of comprehension was given a new turn towards input-output processing. The main contributors in the decade are Hartman, Stork and Wolman. In Wolman’s (1977) view comprehension is constructive which involves prior knowledge, intentions, contents and task demands.

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.

2.2. READING COMPREHENSION: STUDIES AND THEORIES

Recognizing the importance of Reading Comprehension numerous studies have conducted on this topic. Hence there are
various theories about Reading Comprehension. Kingston (1961) stated that ‘Reading Comprehension can be understood as a product of communication that results from interaction between the reader and writer. Chase and Clark (1972) present comprehension as information processing, whereas the theories proposed by Frederikson (1972) illustrates the analysis of connected logical discourse.

Reading Comprehension involves a variety of skills. John Munby (1985) has identified the following as sub-skills of Reading Comprehension.

- Recognize the script of language.
- Reducing the meaning and use of unfamiliar lexical items.
- Understanding information explicitly stated.
- Understanding conceptual meaning.
- Understanding the communicative value of sentences and utterances.
- Understanding relations within the sentence.
- Understanding relations between the parts of a text through lexical cohesion devices.
- Interpreting text by going outside it.
- Recognizing indicators on discourse.

- Identifying the main points or important information in a place of discourse.

- Distinguishing the main idea from the supporting details.

- Extracting salient points to summarize.

- Selective extraction of relevant points from a text.

- Using basic reference skills-understanding and use of graphic presentation, cross referencing.

- Using Skimming (Glancing rapidly through a text to find out its general content, central idea(s), or gist) for main ideas.

- Using Scanning (Darting over a text to search for a specific item of information desired, passing over irrelevant information) to locate specifically required information.

The studies reviewed on the relation of Reading Comprehension in English with psychological variables are presented below:

Bormuth (1963) validated the close procedure on 50 children in grades 4, 5 and 6 as a measure of comprehension and found it to be a reliable approach across a wide range of comprehension ability.

Cooper (1964) compared the level of reading achievement of White and Negro students in a sample comprising about one third of
the fourth through twelfth grade population of the country school systems in Georgia. It was found that White students were consistently more proficient in vocabulary and comprehension and exhibited greater variability of achievement at each level.

Davis (1964) described the results of a multiple regression study which demonstrated a significant relation of measures of psychological functioning in the sub-strata factor theory and speed of reading.

Davis (1968) found that strong association of vocabulary and Reading Comprehension is taken into account both in sub skill theories of comprehension.

Dhar (1968) studied the problems of Indian students of the secondary level. One of the findings was 'mean vocabulary scores are higher than mean comprehension scores'.

Koppar (1970) found out that Reading Comprehension was positively related to reading attitude and anxiety.

Schwimmer (1971) in a research paper titled 'The Relationship of Readability to Reading Comprehension' cited that intelligence was found to be the best predictor of Reading Comprehension. The purpose of the study was to examine the effect of stylistic difficulty as measured by readability formula on the Reading Comprehension.
A statistical analysis of the data indicated that the increase in stylistic difficulty had no significant effect upon Reading Comprehension. However, a strong correlation was found to exist between intelligence and the scores achieved by the subjects on the Reading Comprehension test.

Procedures for testing language comprehension were discussed by Carroll and Freedle (1972) in their book "Language Comprehension and the Acquisition of Knowledge". They threw light on some discussion like comprehension vs. non-comprehension, degree of comprehension or comprehensibility. Some aspects of messages were also elaborated.

Hayes (1972) carried out a study to examine the relationship between Reading Comprehension and intellectual development as defined by Piaget. Findings of the study clearly indicated that Reading Comprehension and intellectual development were highly correlated and each Reading Comprehension measure was highly correlated with intellectual development. Thus, he concluded that Reading Comprehension is developmental in nature, since high and low intellectually developed group scored high and low in Reading Comprehension accordingly.
Patel (1974) has concluded that larger the span of apprehension, better is the rate of reading.

Smith (1974) in a study on first grade children tested the inter-relationships between five measures of Reading Comprehension, Intelligence and three measures of cognitive style variables. Findings of the study indicated a high correlation between Intelligence and paragraph comprehension.

Ahuja (1975) found that fast silent readers comprehend better in comparison to slow silent readers. The fast readers are decidedly good readers because they comprehend more in lesser time.

Vora (1976) found that attitude play a dominant role in Reading Comprehension. The study also found that rate of reading and rate of comprehension are interdependent.

Caroll (1977) proposed that Reading Comprehension must be viewed in terms of language cognition and reading skills. He proposed that a child’s cognitive ability might provide an upper limit for the comprehension of oral language, which might in turn provide an upper limit for the child’s comprehension of text.

Bhatt (1978) in his study has drawn the conclusion that Girls show more significant positive attitude towards reading and hence they could be better readers.
Ellis and Miles (1978) argued that speed of processing from the visual information is one determinant of speed of reading.

Mosley (1979) in a research paper titled 'The Relationship Between Intelligence and Two Major Categories of Reading Comprehension', cited the influence of intelligence on two categories of Reading Comprehension. i.e., Literal-explicit and inferential implicit. The findings of the study showed a curvilinear relationship between intelligence and literal and inferential comprehension. Brighter students tended to infer more but they loose some details in process, whereas less bright students on the other hand do better with detailed questions, but show less success in making inferences.

Patel (1979) conducted a study on high school science students. The students were tested after reading their text books for the same material modified for readability by shortening long sentences. An intelligence test was also administered on the same group of students. The results of the study highlighted that both, the students with high and low I.Q. who had read the rewritten material scored significantly higher on the comprehension test than did high and low I.Q. students who had read the material as it appeared in their text book.
Ryan (1979) conducted a study to analyse the effects of the readability of textual material, motivation and reader intelligence on the Reading Comprehension. Findings of the study revealed that factors of readability, motivation and intelligence all showed significant effect on the subject’s level of Reading Comprehension. The students who encountered with the easiest reading material, performed better than the students with more difficult reading material. Likewise, students with higher motivation performed at a higher level than subjects with low motivation and the students with above average intelligence performed at higher level than the below average intelligence on the Reading Comprehension tests.

Shah (1979) found no difference in Reading Comprehension between boys and girls. There were significant differences in frequencies of three different groups of pupils on all the three psychological variables—reading rate, intelligence and vocabulary.

Bhishikar (1980) found that intelligence plays a significant role in the acquisition of reading skills. The low intelligence group showed significantly greater improvement in comprehension, and the high intelligence group showed significantly greater improvement in vocabulary. He also found that there was no sex difference in reading skills.
Kotakgira (1981) found that it is possible to develop the reading proficiency of students through the skills approach in which a learner practiced different skills separately before he engaged in the task of reading.

Parikh (1981) in her study found that there is no correlation between reading speed and comprehension. The hypothesis of Vocabulary does not have significant effect on Reading Comprehension is rejected and the hypothesis of content of reading material does not have significant effect on Reading Comprehension is accepted.

Turner (1981) in his study tried to investigate the relationship between intellectual ability and the comprehension of religious language. The findings of the study showed that the comprehension of language at each age level was superior in the case of high intellectual ability students.

Gaur (1982) conducted a psychological study of reading ability in relation to achievement, intelligence and found that intelligence is significantly related to speed of Reading Comprehension and vocabulary of students.

Lionel (1982) found that the psycholinguistic strategy of teaching Reading Comprehension is superior in effectiveness to the usual method.
Shivapuri (1982) found no difference in comprehension scores of the two sexes. In the case of boys only, the correlation of comprehension scores with intelligence was significant. The relationship with personality factor was significant only for girls. Both for boys and girls the maximum contribution to comprehension scores was that of intelligence. The effect of personality factors varied for the two sexes.

Vora (1982) conducted a study of effective psychological correlates of Reading Comprehension and found that pupils who were highly motivated and pupils with positive attitude towards reading are less anxious.

Mezynski and Karen (1983) conducted a study on issues concerning the acquisition of knowledge of vocabulary training on Reading Comprehension. Eight studies that explored the effects of vocabulary instruction on subsequent Reading Comprehension found an increase in work knowledge but only a few studies reported any Reading Comprehension improvement. Methodological and instructional differences across studies are examined in an attempt to account for the different results.

Bensoussan and Laufer (1984) in an analysis of student answering patterns found that context helped lexical guessing in
only 13 percent of the responses for only 24 percent of the words. Word guessability was shown to be less a function of using the context than of applying preconceived notions. Most frequent errors were with polysemes, morphological trouble makers, idioms and synophones. Although more proficient students knew more words than less proficient students, they were not able to use context more effectively.

Dass (1984) in his study, revealed that high Reading Comprehension scores are in favour of students having high leadership traits.

Joshi (1984) concluded that there existed a significant relationship between intelligence and growth of various English language abilities. The growth of English language ability was found to be influenced by such factors as caste, intelligence, locality, administrative control of an institution, socio-economic status and personality factors.

Moore and Skinner (1985) investigate the effects of illustrations on 11 year olds' comprehension of abstract and concrete passages. Results for the concrete passage revealed no significant effects due to the illustration, although ability effects were found for literal, inferential and total comprehension. Similar ability effects were
found for the abstract passage. In addition, for the abstract passage significant effects attributable to the illustration were revealed for inferential and total comprehension.

Nagy, et al. (1985) conducted a study on incidental Vs. instructional approaches to increasing reading vocabulary. The study advocates the use of incidental vocabulary learning to assist students in vocabulary expansion and Reading Comprehension. It also addresses the issues of the number of words students would have to know to make substantial gains and what type of word knowledge is necessary to facilitate Reading Comprehension.

Dholakia (1986) revealed that the guided reading procedure proved to be effective in improving Reading Comprehension.

Koppar (1987) carried out An Enquiry into Factors Affecting Reading Comprehension (in English). The major findings were the following. Reading Comprehension is related positively to reading attitude and to dependence.

Kumari (1987) found that significantly higher reading ability score for boys, students with English as the medium of instruction and for students from urban areas.

Rao and Subrahmanyam (1987) designed a study establishing norms for speed and comprehension in Reading Telugu in standards
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3 to 8. The findings of the study revealed no significant difference between the performance of boys and girls.

Silva, et al. (1987) The results of the study confirm the importance of early language delay as a predictor of lower intelligence and reading ability and increased behaviour problems.

Eldredge and Quinn (1988) reported that evidence from existing literate suggests that the decoding and Reading Comprehension skills of poor readers can be improved by assisting them to read material that is too difficult for them to read fluently.

Schlapp and Underwood (1988) found that good readers use a predominantly phonological strategy in lexical decision while poor readers do not, and that for the best readers/ spellers as tested here the orthographically and phonologically irregular words have some sort of special status which allows them to gain fast and accurate responses.

Ahuja and Ahuja (1989) reported that closed circuit television programme was liked by the students and was found to be very effective both from the language and comprehension point of view by more than 95 percent of the students.

Detlef (1989) found that Reading Comprehension of early readers appears to be holistic, closely related to general Intelligence
and verbal problem solving.

Rajagopalan (1989) measured the pupils level of Reading Comprehension, importance of vocabulary and their grammatical knowledge in their attainment of Reading Comprehension and suggested remedial measures for the improvement of Reading Comprehension.

Barnes, et al. (1990) found that a three-way interaction produced significant main effects in which good comprehension and specified purpose of reading enhanced word learning.

Elredge and Quinn (1990) found out that phonic knowledge has a causal impact on both Reading Comprehension and vocabulary gains and that Reading Comprehension has a causal effect on vocabulary gains.

Golden and Nancy (1990) examined the effectiveness of computer networking system in providing guided practice in teaching Reading Comprehension to middle-school remedial reading students. It was found that guided practice is not useful for learning newer and complex cognitive skills.

Subhash (1990) found that there is significant difference between boys and girls in their mean achievement scores in listening comprehension and Reading Comprehension.
The results of the investigation made by Weisberg and Renee (1990) suggested the need for modeling strategies, consistent feedback, the usefulness of constructing graphic organizers and writing summaries to help disabled readers monitor understanding and improve Reading Comprehension.

The results of Aaron (1991)’s study suggest that reading difficulty is attributed to one of the following three factors: (a) poor decoding, (b) poor comprehension or (c) a combination of poor decoding and poor comprehension. The validity of these diagnostic decisions was assessed by testing independently children’s word-decoding skill and reading speed.

Cornwall (1992) examined the relationship of phonological awareness, naming speed and verbal memory to the scores obtained from five tests assessing word attack, word identification, Reading Comprehension, and spelling skills in 54 children with severe reading disabilities (48 boys and 6 girls). Multiple regression analyses indicated that the best predictor of achievement across the five academic tests was the verbal comprehension factor from the Wechsler Intelligence Scale. The result also suggests that several independent processes interact to determine the extent and severity of reading problems.
Cunningham, et al. (1993) conducted a study on the contribution of understanding academic vocabulary to answering comprehension questions. Investigates whether the vocabulary of written comprehension questions is an independent factor in determining students Reading Comprehension performance. Found that academic vocabulary enabled in answering comprehension questions. Computed simple, multiple and semi partial correlations between vocabulary measures and comprehension scores and found support for the interpretation that differences in terminology accounts for differences in performance.

Kappil (1993) in her study revealed that there is significant difference between boys and girls in Intelligence and in Achievement in Reading Comprehension in English.

Burt (1996) reported that good spellers achieve accurate learning of words orthographies, and better vocabulary knowledge, in their reading than do poor spellers.

The results of the investigation made by Waters (1996) suggested that sentence span tasks are unreliable unless measurements are made of both their sentence processing and recall components, and that the predictive value of these tasks for Reading Comprehension abilities lies in the overlap of operations rather than
in limitations in verbal working memory that apply to both.

Smith and Carl (1997) conducted a study on vocabulary instruction and Reading Comprehension (ERIC Digest). Based on the idea that word knowledge has particular importance in literature societies, this digest finds that most people feel that there is a commonsense relationship between vocabulary and Reading Comprehension; i.e., messages are composed of ideas, and ideas are expressed in words. The digest considers several viewpoints on teaching vocabulary, offers some strategies for vocabulary teaching, and suggests some sources for further reading about vocabulary instruction and Reading Comprehension.

The results of the investigation made by Aarnoutse and Leeuwe (1998) suggested that the precision of the prediction for Reading Comprehension and vocabulary was found to be better than for reading pleasure and reading frequency.

Rabia (1998) concludes that problematic social contexts negatively affect L2 learning of minority students. In order to facilitate Hebrew L2 learning, L2 curricula should include Hebrew language texts with content culturally familiar and relevant to the life of Arab learners.
Brookbank, et al. (1999) conducted a study on improving student achievement through organization of student learning. This action research project investigated various reading strategies to increase Reading Comprehension and vocabulary skills. A review of current literature and analysis of the identified problem in the targeted schools led to the use of graphic organizers to improve comprehension and vocabulary skills post intervention data revealed improvement in Reading Comprehension and Vocabulary Skills.

Hatcher and Hulme (1999) found that for Reading Comprehension, verbal ability (but not non verbal ability) made an additional unique contribution to predicting responsiveness to teaching.

Qian and David (1999) conducted a study on assessing the roles of depth and breadth of vocabulary knowledge in Reading Comprehension and explored the relationships between depth and breadth of vocabulary knowledge and Reading Comprehension in English as a second language. Results support the hypotheses that scores on vocabulary size, depth of vocabulary knowledge, and Reading Comprehension are highly and positively correlated; and scores on depth of vocabulary knowledge can make a unique contribution to the prediction of Reading Comprehension levels.
Aarnoutse and Leeuwe (2000) found that students with initially poor abilities in word recognition and Reading Comprehension showed greater improvement over time on Reading Comprehension, vocabulary and spelling than students with initially better abilities in word recognition and Reading Comprehension.

Gunn, et al. (2000) conducted a study on the efficiency of supplemental instruction in decoding skills for Hispanic and Non-Hispanic students in early elementary school. A study evaluated the effects of supplemental reading instruction for 256 students in kindergarten through grade 3 (158 Hispanic). Children who received the supplemental reading instruction performed significantly better on measures of word attack, word identification, oral reading fluency, vocabulary and Reading Comprehension after 15 to 16 months of instruction.

Harris and Qualls (2000) reported that younger adults who used elaborative rehearsal had superior working memory measures, and older adults who used elaborative rehearsal and superior Reading Comprehension measures, suggesting elaborative rehearsal’s memory-enhancing function in verbal working memory and Reading Comprehension tasks.
Jongsma and Kathy (2000) conducted a study on vocabulary and comprehension strategy development. Discusses materials that foster engagement in the learning process for students, teachers and parents. Looks at three sets of materials helpful for vocabulary and comprehension strategy development (1) guiding teachers and students through the think-along process for developing Reading Comprehension (2) building vocabulary and comprehension at school and home; and (3) focusing on reading and reasoning skills developed through puzzles.

Joshi and Aaron (2000) propose that Reading Comprehension could be predicted by the product of decoding and linguistic comprehension.

MacLean and Isabel (2000) conducted a study on effects of interactive vocabulary instruction on Reading Comprehension of students with learning disabilities. This 5-month action research project examined effects of a short-term interactive vocabulary instruction on Reading Comprehension with four intermediate grade students identified as having learning disabilities in reading.

Sharma (2000) states that more developed sight vocabulary promotes Reading Comprehension skills. A high positive correlation between Reading Comprehension and sight vocabulary supports this
hypothesis. If the learner has more developed sight vocabulary, then his performance at various levels of Reading Comprehension is better.

Aarnoutse, et al. (2001) conducted a study on development of decoding Reading Comprehension, vocabulary and spelling during the elementary school years. Investigated the development of decoding (efficiency), Reading Comprehension, vocabulary and spelling during the elementary school years. Determines the differences between poor, average and good performers with regard to the development of these skills. Finds clear seasonal effects for Reading Comprehension, vocabulary and spelling, but the seasonal effect for decoding efficiency was restricted to the early grades.

Collins, et al. (2001) conducted a study on levels on Reading Comprehension and dreading vocabulary among graduate students. The purpose of the present investigation was to examine graduate students Reading Comprehension and reading vocabulary, by comparing scores of graduate students on a standardized reading test to scores obtained by a large normative sample of undergraduates. Findings revealed that the graduate students had higher scores on the Reading Comprehension portion of the NDRT than did a normative sample of 5000 undergraduate students from
38 institutions. Similarly, the graduate students had higher scores on the reading vocabulary portion of the NDRT than did the normative sample.

The results of the investigation made by Popplewell and Doty (2001) suggested that students in the classrooms utilizing the Four-Blocks framework scored higher on measures of Reading Comprehension than the students in the classrooms utilizing one basal reader approach.

Savage (2001) explores that listening comprehension was the best predictor of Reading Comprehension, although reading accuracy was an additional predictor. Decoding skills best predicted reading accuracy. Reading self-percepts correlated with decoding but not comprehension skills.

Collins, et al. (2002) conducted a study on levels of reading ability among African-American graduate students. Poor reading ability has been identified as a predictor of underachievement among undergraduate students, but little known about the reading ability of graduate students, especially those of minority background. This study examined the Reading Comprehension and reading vocabulary of 105 African-American graduate students at a historically black college. Their scores were compared to those of
two samples of Caucasian graduate students and a large normative sample of undergraduates. The African, American students obtained statistically significantly lower scores in Reading Comprehension and vocabulary than did the comparison groups. A canonical correlation analysis revealed a strong relationship between these reading ability variables and achievement in research methodology courses.

Hedrick and Cunningham (2002) reported that reading a lot may influence listening comprehension, thus adding support to the educational practice of providing time for children to read independently and encouraging more and varied reading outside of school.

Lau and Chan (2003) compared 83 good readers and 76 poor readers on their ability to use reading strategies in Chinese Reading Comprehension and on various reading motivation variables. Poor readers scored lower than good readers in using all reading strategies, and especially in using sophisticated cognitive and metacognitive strategies. Poor readers also had lower intrinsic motivation in reading than had good readers. While the ability to use reading strategies had the strongest relation with Reading Comprehension, intrinsic motivation and strategy attribution might
facilitate reading development through their positive relations with strategy use.

Stevens (2003) reported that the students in Student Team Reading and Writing had significantly higher achievement in reading vocabulary, Reading Comprehension, and language expression.

Yang and Kuo (2003) found that less proficient readers could not finish the task of word recognition within time limits and their accuracy rates were quite low, whereas the proficient readers processed the physical words immediately and translated them into meaning quickly in order to memorize the whole passage.

Lerkkanen (2004) has concluded that the reading-related variables predicting reading performance varied according to the phase of reading development. Word meaning was associated with letter knowledge and listening comprehension, whereas initial word reading skill and listening comprehension were highly associated with the development of Reading Comprehension.

Nation and Snowling (2004) suggest that children's oral language proficiency, as well as their phonological skills, influences the course of reading development.
Sprugerica and Hoien (2004) examined the relationships among various phonological skills and Reading Comprehension. Latvian children were followed from grade 1 to grade 2 and were tested with a battery of phonological, word reading, and Reading Comprehension tasks. A principal component analysis of the phonological tasks revealed three salient factors: a phonemic awareness factor, a rapid naming factor and a short-term memory factor. In order to analyze the relationship between various phonological skills and Reading Comprehension, a structural modeling analysis was performed. Phonemic awareness and rapid naming explained approximately the same amount of unique variance in Reading Comprehension, but phonemic awareness had most predictive power indirectly via word decoding only rapid naming had a significant direct impact on Reading Comprehension.

Swerling (2004) found that test format should be considered in interpreting Reading Comprehension performance and underscore the need to assess specific component abilities in reading.

Yamashita (2004) examines the relationship between both first language (L1) and second language (L2) reading attitudes, and learner's performance in L2 extensive reading. The study has demonstrated the importance of understanding learner's attitudes to
reading both in L₁ and L₂ for encouraging L₂ learner involvement in extensive reading and suggest that cognitive and affective domains of reading relate differently in L₁ and L₂.

Anna (2005) found that the relationship between listening and Reading Comprehension becomes stronger after decoding mastery, and the difference between listening and reading decreases with increasing grade level.

Samuelstuen and Braten (2005) examined the interaction of topic knowledge with strategic processing on students' text comprehension, and indicated that student's prior knowledge about the topic of the text contributed most to their comprehension.

Yovanoff, et al. (2005) investigates the relative importance of vocabulary and oral reading fluency as measurement dimensions of Reading Comprehension as the student passes from elementary to high school. Vocabulary knowledge is a significant and constant predictor of overall.

2.3. CONCLUSION

By the review of works related with the present study, the investigator found the following:

1) Adequate comprehension in reading comes about as a result of
the reader’s use of all his reasoning faculties and skills in problem solving.

2) Reading Comprehension is positively correlated to reading attitude and anxiety.

3) All the three variables, viz., reading rate, intelligence and meaning vocabulary showed positive correlation with Reading Comprehension.

4) Factors such as caste, intelligence, locality, administrative control of an institution, socio-economic status and personality factors were found to be related to the growth of English language ability.

5) Guided reading procedure proved to be effective in improving Reading Comprehension.

6) Early language delay is a predictor of lower intelligence, lower reading ability and increased behaviour problems.

7) Intelligence is the best predictor of Reading Comprehension.

8) There is significant difference between boys and girls in Intelligence and in the Achievement in Reading Comprehension in English.

9) Depth of vocabulary knowledge and Reading Comprehension are highly and positively correlated.
10) High Reading Comprehension scores are in favour of students having leadership traits.

11) A number of studies are done in the area of Reading Comprehension. But it was found that studies on the relation of variables like Intelligence, Creativity, Extraversion, Self-Concept, Achievement Motivation and Attitude towards Academic Work with Reading Comprehension in English are very few.

Thus it can be concluded that even though the available studies are on the relation of either cognitive variables with Reading Comprehension or non-cognitive variables with Reading Comprehension; Comprehensive studies on the relation of both cognitive and affective variables with Reading Comprehension especially in English are rare. Also there is a lack of attempt to find the combined influence or predictive ability of a set of psychological variables using statistical techniques like one-way ANOVA, Correlations and Multiple Regression Analysis.