

Chapter – 2
Review
of the
Literature

CHAPTER – II

REVIEW OF THE RELATED LITERATURE

The essential aspect of a research project is the review of related research literature before taking up the research project. It helps the researcher in many ways in conducting study with full insight. Review of related literature is must for any research, which helps like a map by which a scholar can identify the track or route to the destination.

Any investigation/ research whatever the scale, will involve reading about what other people have done about their area of interest gathering evidences to support or refuse their arguments and finally drawing their conclusion on the basis of available evidences.

Therefore the purpose of the reviewing of literature is to build up the context and background as well as to provide a basis for formulation of Hypothesis / Research questions since a good research is based upon the relevant evidences that are known in the area of research for comprehensiveness. It is essential that the new work be based and built on what has already been accomplished.

The review of research literature helps the researcher to delimit and define his/her problem avoiding duplicating well-established findings. It gives the investigator an insight into the problem and research methodology.

2.1 READING COMPREHENSION

Comprehension is considered to be a complex activity consisting of broad highly sub skills. There are three main modes of text presentation for comprehension (oral, silent and aural / teacher read). Interesting comparison have been made between the two specific modes and their relative effectiveness

for comprehension. Conflicting opinions have emerged regarding degree of similarity in processing between the two receptive modes of listening and reading. (Curtis 1980) and Wilkinson (1980) when compared the listening and oral reading performance of young children (6 to 9 years) found that the listening comprehension of these children was significantly superior to their oral reading. However, Smiley et.al. (1977) found the skill of listening and reading more similar.

2.2 STUDIES RELATED TO READING COMPREHENSION ARE MENTIONED BELOW :

1. **AHUJA, G.C. AND AHUJA, PRAMILA, 1988.-** conducted a study to analyse reading comprehension tests used by students of classes VIII, IX, and X in some English medium schools of Mysore).

THE OBJECTIVE OF THE STUDY WAS :

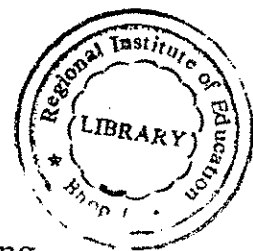
- 1) To make available a scientifically devised, objective tool for assessing the reading comprehension ability.
- 2) With cloze and multiple-choice items pupils studying in classes VIII, IX and X, in some English medium schools of Mysore.

METHODOLOGY :

1. The sample comprised 716 pupils.
2. Reading Comprehension tests were used in the analysis of items, item discrimination and item difficulty were studied.
3. The time limit of each test was 20-30 minutes.

THE MAJOR FINDINGS WERE :

- (1) The test can be easily administered in a usual classroom setting.
- (2) The reliability, validity and homogeneity of both the tests – cloze as well as multiple-choice items – were found to be fairly high.



- (3) Norms in the form of Percentile ranks were provided separately for boys and girls for classes VIII, IX, and X.
 - (4) Comparative norms for reading comprehension of cloze as well as multiple-choice items were provided.
2. **BANATWALA, AYESHA G. 1989.** - Studied to explore the relationship between classroom interaction and uptake in English as a foreign Language (EFL) teaching classes in order to provide better learning opportunities.

THE OBJECTIVES OF THE STUDY WAS :

1. To investigate the process where by learning opportunities are created.
2. To investigate how uptake relates to the interactive nature of leaning opportunities.
3. To find out whether uptake of individual learners differs.
4. To investigate learners perceptions of the relative value of different learning opportunity types.

METHODOLOGY :

1. The data were collected by tape recordings of ten lessons given by the teachers and transcripts were prepared.
2. The learners and teachers were interviewed and transcripts of those interviewed were prepared.
3. First each uptaken word was traced back in the tape transcript of the lesson and the treatment it received in terms of specific categories was noted.
4. The data were analyzed by an ethnographic approach. The teachers, the learners and observes views were triangulated.

MAJOR FINDINGS :

- (1) The categories which were supposed to be conducive to uptake were generally found to be so.
 - (2) Adequate treatment generally facilitated uptake while inadequate treatment correlated with poor uptake.
 - (3) Besides quantum, variation and quality of treatment, the source of treatment played a significant role in facilitating up take.
 - (4) Words that were inherently easy to spell and had easy equivalents in English and / or in the mother tongue of the learners were more easily uptaken and vice versa.
 - (5) Quite often, those who sought clarification or asked for meanings did not uptaken them.
3. **MATHEW, ANJI LIVELLI, M. 1989 :** Attempts to identify students level of reading comprehension among first year degree students.

OBJECTIVES OF THE STUDY WAS :

1. To identify students level of reading comprehension in terms of intellectual, lexical structural and stylistic components of reading skill.

METHODOLOGY :

1. Experimental method of research was adopted on two groups of first year degree students of 40 each.
2. With one as the control group and the other as the experimental group.
3. Questionnaires were constructed to test the ability of reading skill.
4. Mean, S.D. correlation and 't' test were applied to treat the data.

MAJOR FINDINGS WERE :

1. The experimental group faced significantly better than the control group in reading comprehension sub skills as well as in over all performance in reading comprehension in their post test performance after the experimentation.
 2. The over all performance of the control group in the pretest and the post test revealed that there was no significant difference between the scores in these tests.
4. **CHATTERJEE R.C. M, 1991** - Studied the problem of cognitive processing and speech-related processing differences between skilled and less skilled readers of average I.Q.

OBJECTIVES OF THE STUDY WAS :

- (1) To compare skilled and less skilled readers of Grades I and II on measures of selective attention and simultaneous and successive processing.
- (2) To examine the involvement of speech related processes in reading by comparing skilled and less skilled readers on measures of naming time and speech rate, and
- (3) To examine the pattern of relationship among measures of selective attention, simultaneous and successive coding and speech-related processes for children in Grades I and II.

METHODOLOGY :

1. The sample consisted of 74 Grade I and Grade III children. In each grade there were 19 less skilled readers.
2. These readers were chosen on the basis of their reading grade in the reading comprehension test developed by Mohanty and Sahoo.

3. All the subjects were selected from different Oriya medium schools of Cuttack and Bhubaneswar cities of Orissa.
4. The tools used were, Matrix Analogy test of Das and Neglieri, Reading comprehension test by Mohanthy and Sahoo.
5. Selective Attention, Figure Memory test of Das and Naglieri, Tokens of Das and Naglieri, successive Ordering, serial Recall test of Das, Naming time test. Speech rate and sequence repetition. The collected data were treated using mean S.D. ANAVO and Interco relations.

MAJOR FINDING :

1. Simultaneous processing distinguished the skilled from the less-skilled readers. The emphasizes the involvement of simultaneous processing in reading comprehension for beginners.
2. Though grade influenced performance in almost all the measures, the selective attention and successive processing measures did not differentiate the skilled from the less skilled readers, there by suggesting that simultaneous processing was more important than successive processing at the early stages of reading.
3. The performance on speech related tasks was not influenced by the reading comprehension level of the subjects. No significant differences were observed between skilled and less skilled readers in respect of speech related task.
4. The correlational analysis did not yield any significant pattern of relationship among the cognitive variables employed in the study.
5. **GROVER, SANTOSH, 1991.** – Studied various dimension of student reading ability in English in Govt. and Central Schools of Delhi.

OBJECTIVES OF THE STUDY WAS :

1. To compare students of Govt. & Central Schools regarding their reading ability and
2. To compare boys and girls on their reading ability.

METHODOLOGY :

1. The sample consisted of 800 students drawn from Government and Central Schools of Delhi.
2. The tools used were, a test of vocabulary a test for measuring reading comprehension, Reading inference test.
3. Reading for General significance test. The collected data were treated using inferential statistics.

MAJOR FINDINGS WERE:

1. Reading ability was not found to be a unitary trait.
 2. There was no significant gender differences in reading in the case of Govt. School boys and Govt. School girls.
 3. There were significant differences in the mean achievements of central school pupils and Govt. school pupils in all the six varieties of the reading ability test.
6. **PATTNAIK, L. 1991.** - Attempt to study the orthographic variation and oral reading strategy among Grade V children.

OBJECTIVE OF THE STUDY WAS:

1. To assess how the readers of Oriya and English make use of orthographic and context cues during reading and
2. To assess their work attach skills across these two orthographics.

METHODOLOGY :

1. The sample comprised 60 Grade V children, out of which 30 were boys and 30 were girls.
2. They were administered oral reading tasks for Oriya and English to assess their oral reading strategies.
3. Raven's coloured Progressive Matrices (RCPM) was administered to measure intelligence.
4. English oral reading task consisted of 36 sentences selected randomly from the English Language text book of Grade IV.
5. The statistical methods used to analyze the data were mean, S.D. 't' test, homogeneity of variance and correlation.

MAJOR FINDINGS :

1. There was no difference between boys and girls regarding the use of orthographic cues both in Oriya and English oral reading tasks.
2. The proportion of Oriya oral reading miscues of boys and girls revealed that both the boys and girls presented similar trend in the use of graphic cues between groups comparison revealed that boys scored higher across all the four indices. Thus boys were found to be greater users of orthographic cues.
3. The proportion of English oral reading miscues of boys and girls revealed that boys were better users of orthographic cues, as their mean proportion of initial letter similarity responses was higher than that of girls. Thus, boys were able to utilize orthographic information more both in Oriya and English oral reading tasks.
4. Mean proportion for various context cues indices for English oral reading task of girls was higher than boys. So girls were more dependent on context cues than boys.

5. There was a significant positive relationship between intelligence (RCPM) and correct Oriya oral reading score. There was a negative relationship between intelligence and incorrect English reading.
7. **PATTANIK R. 1991.** –Attempts to study the problem of involvement of knowledge representation and planning in two major areas of academics such as reading and writing.

OBJECTIVE OF THE STUDY WAS :

1. To identify expert and novice planning strategies in reading and writing tasks.

METHODOLOGY :

1. On the basis of a pilot study five expert and five novice readers and composers were selected from grade VI.
2. Along with that five expert readers and composers were selected from Grade XI.
3. Both groups of subjects belonged to the same area, that is, a rural area in Puri District Orissa.
4. Instruments used were Reading comprehension test, Crack-the-code, summarization (Reading) and written composition.

MAJOR FINDINGS :

1. Experts readers used strategies that were different from those used by novices.
2. Reading was a problem – solving process.

8. **SHASHI, MOHAN, 1991.** Attempts to find out the relationship of some socio-psychological factors (attitude and inactivation) and Linguistic aptitude of English Language learning of the senior secondary classes with reference to types of schooling.

OBJECTIVE OF THE STUDY WAS:

1. To study the relationship between attitudes towards English learning and achievement in English.
2. To study the relationship between linguistic aptitude and achievement in English.
3. To study differences in linguistic Aptitude and attitudes of public school and govt. school students and
4. To study differences in achievement in English of these school children.

METHODOLOGY :

1. The sample comprised 233 students from three public schools, and 313 students from six Govt. Schools.
2. The tools used included, English learning Attitude motivation Questionnaire (ELAMQ) English Ach. Test. And language Aptitude test. The researcher has used the ex-post facto design.
3. The collected data were treated using mean, S.D., correlation, regression and factor analysis.

MAJOR FINDINGS WERE:

1. A few aspects of attitude and motivation showed a significant correlation to some aspects of English learning.
2. Parental encouragement was found positively related to Govt. School students score in reading comprehension.

3. Both the aptitudinal variables showed more significant explanatory variance in achievement in English as a foreign Language than attitudinal variables.
 4. Language analyses proved to be the most significant factor positively related to achievement in English.
 5. Public school students mean scores on all the variables of the study were higher than those of Govt. and all school students.
 6. Those who were strong in reading vocabulary were liking to commit less spelling errors and performed better in all aspects of English acquisition.
 7. These who were strong in reading vocabulary and reading comprehension did better in language mechanics and language expression aspects of English acquisition.
9. **DAVE, MEETA, 1992.** - An investigation into reading comprehension of the pupil of Grade VII by using the standardized tests in Gujarati.

OBJECTIVES OF THE STUDY WAS:

1. To study the reading comprehension of pupils of Grade VII in relation to various effects and interaction of sex socio economic status intelligence, reading speed, vocabulary, achievement motivation, study habits and scholastic achievement.
2. By permutation and combination, the investigator has put forth a list of 38 objectives using the above quoted variables.

METHODOLOGY :

1. The total number of pupils selected from the sample was 1,000 (500 boys and 500 girls) of age group 11 to 13 years, from 35 Gujarati medium schools.

2. The tools used to collect data included Reading Ability Test of Patel and Vora, SES scale developed by Patel and Vora, Mini Intelligence test of J.H. Shah,
3. Achievement Motivation Inventory standardized by Prayag Mehta, and study Habits inventory of B.V. Patel.
4. To analyse the collected data, mean, S.D., Percentiles, ANOVA and multiple regression were used.

MAJOR FINDINGS WERE :

1. The level of reading comprehension of the pupils was not very high.
2. Sex, SES, intelligence, vocabulary, reading speed, achievement motivation and study habits produced significant influence on R.C. of pupils.
3. The interaction between Sex X SES, Sex X Intelligence, Sex X vocabulary, Sex X Achievement motivations, and Sex X study habits did not produce significant influence on Reading comprehension while SES X intelligence SES X Vocabulary, SES X achievement motivation and SES X study habits produced significant influence on Reading comprehension of pupils.

2.3 MATHEMATICS ACHIEVEMENTS

Achievement in mathematics has been studied in relation to a number of variables, both cognitive & affective. Studies in the past decade have confirmed that intelligence and socio-economic background are major contributors to mathematics achievement. Language mastery was an important factor in the acquisition of concepts in mathematics.

2.4 STUDIES RELATED TO MATHEMATICS ACHIEVEMENTS ARE MENTIONED BELOW :

PANDHARI, A.S., 1988 Studied three factors, viz, language, memory and process. While may affect students learning of mathematics in std. XII.

OBJECTIVES OF THE STUDY WAS:

- (1) To study the effect of language, memory and process as factors affecting students performance in mathematics in Std. XII
- (2) To study the effect of these factors in the following situations.
 - a. Urban, semi urban, rural institutions.
 - b. School attached and college attached junior colleges.
 - c. Junior colleges having technical courses, and in the ones not having such courses.
- (3) To study the effect of these factors, namely, language, memory and process. Singly as also in combination, and
- (4) To construct an achievement test in mathematics for Std. XII.

METHODOLOGY :

1. The sample of the study comprised 27 junior colleges selected at random from Puri district, and 676 students prepared for the test.
2. The tools used included an Achievement test administered exactly on the H.S.C. Board's pattern.
3. The statistical techniques used were frequencies percentages and analysis of variance.

THE MAJOR FINDINGS :

- (1) The three factors under consideration, viz lack of language, memory and process affected students learning in mathematics either separately or in combination.

- (2) All the three factors under study affected students learning in mathematics adversely.
- (3) The learning outcome of children belonging to urban, non technical institution attached to colleges was superior to urban technical institution attached to high schools.
- (4) The 'F' value for interaction was not significant. Thus there was no significant interaction between the factors and the type of the institutions.

THIND S.K. 1990. Conducted a research attempted to study the impact of the socio-economic status of parents on the mathematical problem – solving ability of school students.

OBJECTIVES OF THE STUDY WAS:

To determine the relationship between parental education and occupation on the mathematical problem-solving ability of Grade VII and grade IX rural and urban students.

METHODOLOGY :

1. Sample consisted of 204 respondents a schedule consisting of items related to socio and economic factors a test comprising 22 items to assess the problem solving ability of the students.
2. The statistical technique used was the chi square test.

THE MAJOR FINDINGS WERE :

- (1) The education of the father had no effect on the problem solving ability of rural as well as urban children.
- (2) The mothers education had no impact on rural children's problem solving ability where as the problem solving ability of urban children was affected by the mother's education.

- (3) The father's and mother occupation indicated no effect on both rural and urban children's problem-solving ability.

RANGAPPA, K.T. 1992 – Conducted to an investigation into the relationship between self-concept, reading ability and achievement in mathematics.

OBJECTIVES OF THE STUDY WERE :

- (1) To study self concept and reading ability in relation to achievement in mathematics of students of standard VII.
- (2) To identify the gender and local differences in the achievement in mathematics of study.
- (3) Students and III to determine the combined effect of independent variables on the dependent variables.

METHODOLOGY :

- a. A sample of 1,000 students of std. VII drawn from 25 schools of Bangalore rural and urban districts using stratified random sampling of these 600 were from urban schools.
- b. Tools used, were self concept inventory developed by the researcher, a standardized reading test by Deve Gowda and Shivananda and Achievement test in Mathematics, statistics used included analysis of variance and 't' test.

MAJOR FINDINGS :

- (1) There was no significant different in the achievement of students having different levels of self concept.
- (2) There was significant difference in the achievement in Mathematics of students having different levels of reading ability.
- (3) There was a significant difference in the performance of the students of std. VII in mathematics studying in rural and urban schools.

- (4) There was no significant difference between boys and girls of std. VII in their achievement in mathematics.
- (5) There was a significant interaction of self concept and reading ability on achievement of students.

SINGH, R.D. AND VERMA, S.C. 1992 – Study the attitude towards mathematics as a function of some individual characteristics like sex, age and intelligence.

OBJECTIVES OF THE STUDY WAS:

- (1) To study the attitude towards mathematics as a function of intelligence.
- (2) To study the attitude towards mathematics as a function of sex, and age, and
- (3) To study the attitude towards mathematics as a function of age.

METHODOLOGY :

- a. A sample of 220 students (140 male and 80 female) studying mathematics in class IX of different higher secondary schools of the education department of Bhopal (M.P.).
- b. The tools used were Rating Scale, the General Intelligence test of S.M. Mohsin and the Attitude scale towards Mathematics by Suydam. The statistical techniques used were mean S.D. and 't' test.

MAJOR FINDINGS :

- (1) The students of high intelligence and average intelligence had a more favourable attitude towards mathematics than the students of low intelligence.
- (2) Attitude towards mathematics was independent of sex.
- (3) Students of the age 13+ showed a more favorable attitude towards mathematics in comparison to students of the 14 + 15 +.

2.5 MOTHER TONGUE

Educationists, Linguists and Psychologists are of the view that mother tongue is best suited as medium of early education as it aids concept formation and promotes creativity. In a multilingual country like India, here the notion of mother tongue is mixed up with region, religion, ethnicity etc., and where children are equally at home with two or more languages/dialects, it is more appropriate to use the term 'the early language experience of the child' in the context of elementary education than merely use the term 'mother tongue'.

2.6 STUDIES RELATED TO MOTHER TONGUE ARE MENTIONED BELOW:

NARASIMHAN, G. AND PILLAI, SWAMINATHA S. 1988. Attempts study of the relationship between medium of instruction and achievement of students.

OBJECTIVE OF THE STUDY WAS :

- (1) To find out the mean achievement of students in the secondary school and final Diploma in commercial and computer practice (DCCP) examination, and
- (2) To identify the degree of relationship between their secondary school and polytechnic achievements.

METHODOLOGY :

- (1) A total of 128 students – 64 each who passed the DCCP Course in two different years from the central institute of commerce, Secanderabad.
- (2) Of the these, 61 (48%) did their course in Telugu medium and the remaining 67 (52%) in English medium.

MAJOR FINDINGS :

- (1) Both in the school final and polytechnic diploma examination the English medium students performed better as compare to their Telugu medium counterparts.
- (2) The correlation coefficient between their scores in school final and diploma examinations were significant.
- (3) The obtained value of correlation coefficient for Telugu medium students of the two different batches was significant.
- (4) For the second bathes it was not significant.

THOMAS LUCY, 1998 : Attempt at studying the effect of bilingualism on the development of personality with special reference to intelligence.

OBJECTIVES OF THE STUDY WAS :

1. To study the effect of bilingualism on personality traits.
2. To study the effect of socio-economic differences on the personality traits of bilinguals and monolinguals, and
3. To study the effect of six on the personality traits of bilinguals and monolinguals.

METHODOLOGY :

The sample consisted of 530 students of both sexes studying in different students of Agra city.

The tools used to collect the data included. Jr. Sr. High school personality Questionnaire, Mixed type groups test of Intelligence of P.N. Mehrotra and Socio-economic status scale (Form-A) of S.P. Kulshrestha.

MAJOR FINDINGS. :

1. The personality traits of bilinguals were significantly different than the personality traits of monolinguals.

2. The personality traits of high bilinguals were not significantly different from the personality traits of balanced bilinguals.
3. The personality traits of high bilinguals were significantly different from the personality traits of monolinguals.
4. The personality traits of balanced bilinguals were significantly different from the personality traits of monolinguals.
5. Personality factors of bilinguals of high socio-economic status were not significantly different from the personality factors of monolinguals of average socio-economic status.
6. The personality traits of bilingual boys and girls of high intelligence were not significantly different from the personality traits of bilingual boys and girls of average intelligence.
7. Personality factors of bilingual boys and girls of average intelligence were significantly different from the personality factors of monolingual boys and girls of average intelligence.

DEVAKI, L. AND RAMASAMY, K, 1990 – Attempt to study cognitive styles and errors in second language learning.

OBJECTIVE OF THE STUDY WAS :

- (1) To see the relationship between cognitive style and errors in second language learning.

METHODOLOGY :

- (1) The sample consisted of eight male adults attending the advanced course in Tamil, after completing the basic & intermediate courses.
- (2) The mother tongues of these students were Assamese, Bengali and Hindi – all of them bearing non cognate relation to Tamil.

- (3) Witkin's Embedded Figure Test (EFT) and a specific language test were used as tools to collect relevant data.

MAJOR FINDINGS :

- (1) The higher the degree of field independence (F.I.) the lower was the tendency to make global errors and vice versa.
- (2) The higher the degree of F.I. the lower was the tendency to over or under generalize.
- (3) Low level of F.I. seemed to be sufficient for identification and use of embedded clauses.
- (4) Higher level of F.I. was directly related to ambiguity recognition & lower level of F.I. to ambiguity non-recognition.
- (5) The higher the level of F.I., the lower was the progress to interference. The lower the level of F.I. the greater was the proneness to errors.

DEY, SARSWATI, (1991)– A critical appraisal of the abilities of the students in some aspects of English as a second language and finding out some linguistic factor.

OBJECTIVE OF THE STUDY WAS :

- (1) Standardize a proficiency test in English.
- (2) To determine significant differences in mean attainment in English Sex-wise and strata-wise and
- (3) To find out a general factor in different dimensions of the proficiency test in English.

METHODOLOGY :

1. A proficiency testing English was used as a tool. The collected data were treated using ANOVA factor analysis & regression. Analyze.

MAJOR FINDINGS :

- (1) The urban students showed better performance in the proficiency test in English as compared to their rural counterparts, and so were urban boys as against rural boys, & urban girls as against rural girls.
- (2) Students with high proficiency in vocabulary, spelling, stylistic transformation, derivational structure, applied grammars & contextual meaning were superior in proficiency in English as compared to their low profile counterparts.
- (3) However, there were no differences between boys & girls, urban boys & urban girls, as well as rural boys & rural girls.