CHAPTER VII
RETROSPECT AND PROSPECT

CONTENTS

Introduction

7.1 Development of the Test

7.2 Observations, Conclusions and Suggestions during the Test Development

7.2.1 Sex Differences

7.2.2 Area Differences

7.2.3 Suitability of the Test

7.2.4 The Test Reliability

7.2.5 The Test Validity Results

7.2.6 Suggestions

7.3 The Impact of Reading on Academic Achievement

Findings

7.3.1 Reading and Achievement in Gujarati

7.3.2 Reading and Achievement in Social Studies

7.3.3 Reading and Achievement in Science

7.3.4 Reading and Achievement in Mathematics

7.4 Suggestions

7.4.1 For the Research Workers
Introduction

In the introductory chapter of the present report, the significance of the study has been stressed. To have a clear idea of the impact of reading on the achievement in the different school subjects, the investigator has developed a Silent Reading Comprehension Test. After discussing the theoretical perspective of reading, review of the related literature, it was designed to develop a reading comprehension test.

The investigator coined 32 specific items for measurement of reading comprehension in Gujarati for pupils of Std. VII to evaluate on a five point scale with regard to the degree of its usefulness, by 75 judges, who also offered useful suggestions for the items on word study skills and knowledge and understanding based items.

The reliability of the reading test has been determined by test-retest and split-half methods. The construct and content validity was also determined to decide whether the test fulfils the objectives for which the test was prepared.
The test has standardized on a sample of 2428 pupils. The detailed process of construction and standardization has been reported in details in Chapter V.

The main objective of the present study was to find the impact of reading on the achievement of pupils. The sample of 962 pupils was finally considered for the purpose.

The observations and conclusions made during the test development and the course of the studies have been reported hereafter.

The present chapter deals with various steps taken by the investigator to complete the research study, glaring observations made while the experiment was in progress and the conclusions made on the basis of the data obtained along with the suggestions for further work on the line.

The present study, as its title indicates, is concerned with the studies of the impact of the reading on the achievement of pupils in different school subjects. Therefore, it was the first and foremost task for the investigator to develop a dependable Silent Reading Comprehension Test so as to study the impact of reading on the achievement. Hence, the whole research study has been divided into two main parts:
i. Development of the Silent Reading Comprehension Test, and

ii. Studies of the Impact of Reading on the Achievement in school subjects

7.1 Development of the Test

It was observed that for developing a test to measure Silent Reading Comprehension, it was necessary to define very closely the term "reading comprehension," which was proposed to be measured. This has been done by reviewing a few tests constructed by some experts in the field in India as well as in foreign countries. Moreover, the theory and findings of some researches also helped the investigator to come to a definite conclusion about reading comprehension. From such conclusions, it was decided that the present instrument must attempt to measure the following behaviours components:

i. ability to select the appropriate meaning for a word or a phrase,

ii. knowledge of word meaning,

iii. ability to follow the organization of a passage and identify incidents and references in it,

iv. ability to select the main thought of the passage,
v. ability to draw inferences from the passage,
vi. ability to determine writer's purpose,
vii. ability to draw generalization, and to give proper caption, and
viii. ability to read map, table and charts.

These behavioural components are tested by eight different sub-tests in the battery. The selection of test items, which is considered to be the crux of the process of standardization was made by carefully applying the statistical methods. This was done with a view to obtaining the internal consistency of the test. To add to its utility value, the test has been standardized by strictly following the principles of the test construction and standardization. The process of construction and standardization has been fully described in the thesis. The validity has been established by the general principles of test validation, particularly reading ability test.

The test has been standardized on a sufficiently large representative sample. The grade norms, percentile norms and T-scores have been established to help the user to interpret the test score. This indicates clearly that the test can be used with ease for further researches in the field of reading comprehension. The present study on the impact of reading has been undertaken with the use of this test.
7.2 **Observations, Conclusions and Suggestions during the Test-Development**

7.2.1 **Sex-Differences**

There is no significant difference between the mean performance of boys and girls from urban and rural areas with regard to reading comprehension.

7.2.2 **Area-Differences**

There are no differences with regard to reading comprehension between the pupils from urban and rural areas.

7.2.3 **Suitability of the Test**

The difficulty of the test is very near to 50 per cent as it should be. Therefore, the test is neither difficult nor easy. The difficulty of the individual test item ranges between 20 and 80 per cent. The justification of the sampling reveal that the test was quite suitable to the group chosen. Trait of the reading comprehension is normally distributed in the population tested.

7.2.4 **The Test Reliability**

The reliability of the test studied by test-retest method and the split-half method are .94 and .91 respectively. The reliability coefficients are very high and they are in accordance with the statement made by Robert Lado,
"Good Vocabulary Structures and reading tests have reliability coefficient usually in 0.90 to 0.99 range."¹

So on the whole the test has a high reliability and could be used with precision.

7.2.5 The Test Validity Results

Establishing the validity of a test is the crux of the process of standardization. Therefore, the test was validated with care and caution, using external criteria. The concept validity of the test has been studied by analysing the items, testing each behaviour components of reading comprehension. This proved the test has good construct validity.

7.2.6 Suggestions

India being a developing country is lagging far behind or practically a little work has been done in the field of reading, in comparison with the work in developed countries. So in our country there is enough scope for research work in this field. In words of Burl J. Brim, "In an extensive view of literature, Standlee and Hooprich concluded that significant gains is speed of reading

frequently are achieved and tend to be retained, the influence of reading training or reading comprehension is somewhat uncertain since comprehension becomes confounded with speed, no single approach or method of reading improvement has yet been proved to be the best for all classes and generally speaking reading improvement courses are useful. Standlee and Hooprich also presented strong justification for further research by pointing out the limited number of well designed and controlled studies in the area of reading improvement.12

As India has ventured upon mass education all sorts of children are enrolled having widely different intellectual, emotional, economical and educational atmospheres. Therefore the investigator feels it proper to suggest that:

1. research in the field of reading disabilities be conducted;

2. possibilities of research in the field of readability of text-books be explored in the context of intelligence, reading abilities and emotional maturity of the students,

-----------------------

3. efforts to carry on research work be sincerely made in the field of reading improvement programmes.

4. efforts can also be made in evolving certain formulae to measure readability in different languages in India, and

5. efforts should also be made to correct reading disabilities and improving the reading speed.

7.3 The Impact of Reading on Academic Achievement

The important part of the study was to study the impact of reading on pupils' achievement in different school subjects. So the second phase of research was purely experimental in nature.

The statistical methods like ANOVA, Critical Ratios, correlation techniques have been followed to study the effect of reading in the achievement of school subjects.

A separate sample of 962 pupils was taken for studying the impact. The results from the school records of annual examination were matched with the performance on the silent reading comprehension test. The results were given statistical treatment to test the hypotheses of the study.
Findings

The following are the findings on the basis of correlation matrix and of the studies of impact.

All the school subjects taught through mother tongue are positively related with reading comprehension.

It indicates that most of the pupils, who comprehend the reading material properly are able to score better in the school subjects. So there is moderate positive relationship of reading comprehension with achievement in the school subjects, viz., Gujarati Social Studies, Science and Mathematics.

The reading speed also indicates positive relationship in the achievement of school subjects.

So it can be concluded that reading speed and reading comprehension with moderate positive relationship, are among the most important correlates of academic achievement . . . . . . . . . .
The following are the findings on the basis of the results of the studies of impact:

7.3.1 Reading and Achievement in Gujarati

1. The achievement of pupils from urban area is better than that of pupils from rural area.

2. The achievement of pupils with good reading comprehension is better than that of normal and poor readers.

3. There are no sex differences in the achievement in Gujarati.

4. The S.E.S. level of parents has great impact on the achievement in Gujarati. Pupils belonging to upper S.E.S. of parents achieve better than middle and lower S.E.S. level of parents and pupils with middle S.E.S. level of parents score better than that of lower S.E.S. level of parents in Gujarati.

7.3.2 Reading and Achievement in Social Studies

The achievement of social studies is greatly affected by the levels of readers.
1. The achievement of good readers is better than that of normal and poor readers.

2. The pupils from urban area achieve better than that from rural area.

3. The achievement of Social Studies is not affected by sex differences.

4. There is significant difference among the level of readers as well as among the pupils belonging to different levels of S.E.S. of parents.

The achievement of good readers is better than that of normal and poor readers and the achievement of pupils belonging to upper S.E.S. of parents achieve better than pupils belonging to middle and lower S.E.S. level of parents. Interaction effect is also noted as the achievement of poor readers of middle S.E.S. level of parents is better than that of lower S.E.S. level of parents.

7.3.3 Reading and Achievement in Science

1. The achievement of Science is affected by the levels of readers.

2. Sex differences do not effect the achievement in Science.
3. The mean scoring of pupils from urban area is better than that from rural area.

4. The scoring of good readers is better than that of normal and poor readers.

5. There is interaction effect on the readers and area. The poor readers of rural area (boys) achieve better than that of the poor readers (boys) from urban area and even in case of poor readers (girls) of rural area they achieve a little better than that of poor readers (girls) of urban area.

6. As far as the achievement in Science is concerned, the S.E.S. level of parents has significant influence on the achievement in Science.

   The good readers achieve better than the normal and poor readers. The achievement of the pupils belonging to upper S.E.S. level of parents is better than that of the middle and lower S.E.S. level of parents. The mean scores of the pupils belonging to middle S.E.S. level of parents are better than that of the lower S.E.S. level of parents. And interaction effect is also significant, it shows that the poor readers of the middle S.E.S. level of parents achieve better than that of the poor readers belonging to upper S.E.S. level of parents.
7.3.4 Reading and Achievement in Mathematics

As far as the achievement of Mathematics is concerned the following are a few conclusions:

1. The mean score of urban pupils is better than that of rural pupils.

2. The achievement of good readers of both the areas and both the sex is better than that of normal readers and poor readers of both the areas and both the sex.

3. The achievement of boys is better than girls in Mathematics.

4. There is also the effect of interaction. The boys with poor reading comprehension from rural area are found better than that from the urban area. The same is the case with the girls. The girls of poor category of readers from the rural area achieve better in Mathematics than that of the poor readers (girls) from urban area. Even in the case of normal readers, girls from rural area achieve better than that of the normal readers (girls) from the urban area.

5. The achievement of good readers of all the S.E.S. levels of parents is better than that of normal readers is better than that of poor readers among all the levels of S.E.S. of parents.
The achievement of the pupils of the upper S.E.S. level of parents is better than that of middle and lower S.E.S. level of parents.

The achievement of the pupils of middle S.E.S. level of parents is better than that of the lower S.E.S level of parents.

7.4 Suggestions

After drawing useful conclusions, certain suggestions have been made keeping in view the administrators, syllabus framers, teachers, parents and research workers.

The suggestions are as follows:

1. The syllabus framers should try to frame syllabuses keeping in view pupils from urban and rural areas.

2. Text-books to be meant for higher achievers and the lower achievers should have different readability levels. This is also supported by Indian Education Commission Report, 1964-66.

3. There should be more encouraging reading improvement programmes for poor readers, so that after having improved their reading comprehension they can achieve higher than their former level.
4. More reading material should be supplied to pupils belonging to middle and lower S.E.S. level of parents.

5. The administrators should classify the pupils of each class on the bases of reading abilities.

6. The administrator should study different extra-reading books written by different authors and prescribe to the students according to their reading abilities.

7. All the teachers are basically the teachers of reading and then teachers of other subjects, therefore they should take up co-operative, reading improvement programmes to improve the reading comprehension of their pupils.

8. Literate parents have an equal responsibility of forming good reading habits in their children and helping them build up reading abilities by providing good reading material at home.

7.4.1 For the Research Workers

India being a developing country, is lagging behind as compared to the advanced countries like U.S.A., U.K., Russia etc., in scientific and technical fields. It is equally true in the field of behavioural science like
education and more so in case of reading. Indian educational research workers have just started doing some work in the field of reading.

To study the impact of reading is absolutely untouched sphere in the area of educational research in India. Some work has been initiated by NCERT, but is not sufficient. Hence there is enough scope for research works to exploit this area taking different subjects in hand.

It is very important to teach and learn reading without which comprehension in other subjects cannot be dreamt. So the researchers may take up the studies in the area. A few problems indicated for further researches in the area are:

1. A study of the impact of the reading comprehension of pupils in relation to their age-levels.

2. A study of the impact of written redundancy on the reading of reading material.

3. A study of the speaking language patterns of the pupils in the context of reading material.

4. A study of reading comprehension ability in relation to the influence of dialects.

5. A study of the impact of programmed instructional materials on reading ability.
In the age of mass education, it is becoming increasingly difficult to individualize instruction. Therefore, it is more necessary for the good of nation to think in terms of improving reading material and developing reading skills to increase the pupils' reading ability and decreasing their dependence on others for reading. Therefore, research needs in all these areas have become manifold and more essential. A regular and systematic instructions in reading skills are highly essential in the lower classes of primary education and consciousness of the importance of reading on the part of taughts, irrespective of the subject they read, is indispensable. The research workers may take studies related to teaching in hand and find out the effects of reading.