CHAPTER V

ANALYSIS OF DATA AND CONCLUSIONS
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The tests were finally administered in eight colleges. The investigator administered the tests to whatever division(s) he could get from each college. The faculty-wise number of students who took these tests was as follows:

<table>
<thead>
<tr>
<th>T.No.</th>
<th>Name of the Passage</th>
<th>Arts</th>
<th>Science</th>
<th>Commerce</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-</td>
<td>The Story of Forty Brothers</td>
<td>240</td>
<td>277</td>
<td>194</td>
<td>711</td>
</tr>
<tr>
<td>2-</td>
<td>The Golden Touch</td>
<td>164</td>
<td>267</td>
<td>177</td>
<td>608</td>
</tr>
<tr>
<td>3-</td>
<td>Earthquakes</td>
<td>154</td>
<td>232</td>
<td>175</td>
<td>561</td>
</tr>
<tr>
<td>4-</td>
<td>The Story of Aéroplane</td>
<td>165</td>
<td>199</td>
<td>160</td>
<td>524</td>
</tr>
<tr>
<td>5-</td>
<td>The Grain</td>
<td>152</td>
<td>211</td>
<td>166</td>
<td>529</td>
</tr>
<tr>
<td>6-</td>
<td>The Importance of Petroleum</td>
<td>163</td>
<td>198</td>
<td>179</td>
<td>545</td>
</tr>
</tbody>
</table>

The number of students taking these tests seems to be quite satisfactory. However, when these numbers are compared with the number of students who took all the six tests, (Table No. 2) one finds the picture a little disappointing. Irregular student attendance was a feature of all these tests.
The following table sets forth the number of students who took all the six tests:

<table>
<thead>
<tr>
<th>Faculty</th>
<th>No. of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>35</td>
</tr>
<tr>
<td>Science</td>
<td>59</td>
</tr>
<tr>
<td>Commerce</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
</tr>
</tbody>
</table>

A comparative study of Table Nos. 1 and 2 shows that only about 25 percent students attended their classes regularly while others did it by fits and starts. In view of this situation the investigator had to explain the procedure of tests every time he went to these classes. This created the problem of motivation which in turn affected the reliability of the test. Those who joined the course on the third or the fourth test with the least intention of attending the remaining tests could not be properly motivated. These students of 15+ or 16+ age group seemed to be very badly affected by the uncontrolled environment.

The larger classes were more prone to indiscipline, than the smaller ones. They were also unwieldy. In one college having all the three faculties, Arts and Commerce
were combined for teaching English. The investigator was told that usually the strength of the English class varied between 90 and 125. The teacher concerned admitted that it was difficult for him to control the class and teach them effectively.

Students who come to Junior colleges have minimal or sometimes even less-than-minimal competence in English. This prompts the teacher to find an excuse to resort to translation method or dictation of notes and reading questions and answers. As a consequence of this teaching and learning suffer greatly.

Occasional indiscipline was another disappointing feature. In one college where students usually come from the upper-middle-class society, the investigator had to face a strange situation. It was during the first test when some students started acting rather smartly. The investigator had to request them either to keep quiet or to leave the class if they were not interested. They left the class immediately instigating others to follow suit. Half of the class left after them, leaving the remaining half peaceful. The investigator expected some untoward happenings but fortunately nothing happened. The subject teacher who was helpless informed the investigator that this was by no means unusual. It would be rash to generalize from one
such solitary instance. However, it is a fact that indiscipline among college students is on the increase. This is apparent everywhere.

The situation and atmosphere in Junior colleges are far from conducive to effective teaching and learning. To an investigator, who is an outsider, it is even more discouraging and frustrating.

Analysis of Data

Arts Group

The Arts group started with a mean comprehension score of 42.7 and 133 WPM. On the second test they achieved 44.0 comprehension score and 142 WPM speed. However, on the third test both comprehension and speed suffered. The comprehension score was 33.5 while speed was 119 WPM. This was the first test for the group on the scientific information and such a drop was natural and expected. The fourth test was again based on scientific material, but the students did comparatively better in this test. They registered a comprehension score of 41.9 but the speed did not improve. It went down to 101 WPM. On the fifth test there was again some improvement in the comprehension score (44.2) as well as speed (108 WPM). On the sixth test both comprehension and speed decreased.
The comprehension score slipped down to 40.5 while speed came down to 99 WPM.

The mean reading efficiencies of the set of six tests were 34.20, 34.80, 24.70, 31.95, 32.20 and 31.25.

Judging from the overall performance of students on the six tests it is not difficult to conclude that the reading efficiency of this group is poor.

**Commerce Group**

This group started with better comprehension and speed than the Arts group. The initial comprehension score was 46.2 while speed was 140 WPM. Their comprehension of the second test was 44.1 and speed 132 WPM. On the third test again their comprehension and speed decreased. Comprehension went as low as 34.2 while speed dropped to 127 WPM. Like the Arts group they improved their comprehension on the fourth test (41.8) but on the fifth and sixth tests the comprehension scores remained more or less constant, that is, 41.6 and 41.5 respectively. The speed decreased to 118 WPM on the fourth test, but slightly increased on the fifth test (121 WPM) and decreased to 111 WPM on the last test.

The mean reading efficiency scores of the first two tests of this group were encouraging 38.41 and 42.00 respectively. But after having increased their reading
efficiency they could not improve it further. On the contrary it decreased. The reading efficiencies the other four tests were 28.75, 33.65, 32.70, 29.90 respectively. This group seemed to be slightly better in their performance than the Arts group.

Science Group

This group proved to be the most avid readers of all. The group started with a reading speed of 130 WPM and a comprehension score of 49.3 - the highest ever in the six tests. Then the comprehension decreased on the next two tests to 49.0 and 41.3 respectively. The speed increased to 134 WPM on the second test but decreased to 118 WPM on the third. On the next two tests once again they improved their comprehension scores (43.6, 46.3) but it decreased on the sixth test to 44.8. The speed followed a downward course on the last three tests i.e. 120 WPM, 118 WPM and 112 WPM respectively.

It is rather strange that the science group, which had to opt for higher level English course - a course which aims at literature, should register such a performance. It is not difficult to judge from the performance of the students on this course that they were hardly prepared for a higher level course. They also could not show better performance in the tests which were based on scientific materials.
Though this group was relatively superior to the other groups, their performance in the tests was far from satisfactory.

The performance of the three groups does not seem to be very encouraging. The performance of Arts and Commerce groups can very well be compared with K. R. Narayanaswamy's Hindi Arts College Group.\(^1\) The students of Hindi Arts College could not increase their comprehension beyond 45 although they had registered better speed than the Arts and Commerce group of this investigation. The science group does not stand anywhere near Narayanaswamy's St. Francis College of Arts or Science groups.

Comparative Study of Group 'A' and Group 'B'

The performance of the three groups in the six tests may appear to be disappointing but certainly it is not discouraging if we compare the performance of students who took all the six tests. The students appearing for all the six tests (Group B) achieved not only better performance in all the six tests but also showed steady progress. Their performance proved that training in silent reading helped the students to improve their reading efficiencies.

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\(^1\) Narayanaswamy K. R, Reading Comprehension at the College level, op. cit., pp. 44 to 46.
This was one of the objectives that the investigator wanted to look into. The group of students who appeared for all the six tests is termed here as Group 'B' and the group of students who appeared for one to five tests is termed as Group 'A'. In all there were 140 students who took all the six tests (see Table No. 2).

The Arts Group (A) and Group (B)

The students of Arts Group (B) which took all the six tests registered comprehension scores of 46.9, 49.2, 35.1, 44.0, 48.2 and 47.4, thus showing an increase of 4.2, 5.2, 1.6, 2.1, 4.0 and 6.9 when compared with Arts Group 'A' (those who took one to five tests - see Table No. 6). The students concentrated on comprehension and, therefore, probably did not show any progress in speed. Their speeds over the six tests were 122 WPM, 110 WPM, 104 WPM, 101 WPM, 104 WPM and 101 WPM (see Table No. 7). The gain in reading efficiencies of the six tests were 2.20, 0.50, 0.40, 1.05, 2.50 and 4.45 (see Table No. 3).

The Commerce Group (A) and Group (B)

The students of Commerce Group (B) who took all the six tests showed significant progress in their mean comprehension scores of the first three tests. They registered
the gains of 6.4, 4.5 and 6.8 mean comprehension scores over group (A). They could not gain in the fourth test but showed gain of 2.3 and 1.5 in comprehension scores on the fifth and sixth tests respectively. Their mean comprehension scores of the six tests were 52.6, 43.6, 41.0, 40.0, 43.9, 43.0. Their comprehension scores on the first two tests were even better than those of the Science group (B). The Science group (B) could only achieve 51.2 and 47.47 comprehension scores on the first and second tests respectively whereas commerce group (B) registered 52.6 and 43.6 comprehension scores on first and second tests respectively.

This group showed better progress in speed of reading as well. They read with speeds of 147 WPM, 142 WPM, 135 WPM, 127 WPM, 132 WPM and 130 WPM respectively on the six tests, thus gaining 7, 10, 8, 9, 11 and 19 WPM over Group (A). Their speed throughout was found to be better than that of Arts and Science groups (B).

The Commerce group (B) did not gain in the mean of the reading efficiency in the first and second tests but thereafter on the next four tests showed a gain. The loss or gain in the reading efficiencies on the six tests were \(-0.31, -4.75, +2.00, +4.65, +2.90, +4.50\).
The Science Group (A) and Group (B)

The science group (B) did not show any steady and significant progress. Their progress was zig zag. They registered comprehension scores of 51.2, 49.0, 42.3, 41.6, 49.3 and 47.5 respectively.

They also did not show better performance in speed of reading. Throughout they achieved lower speed than that of group (A). The speeds of the six tests were 123 WPM, 115 WPM, 117 WPM, 113 WPM, 110 WPM and 110 WPM respectively.

The group (B) gained in the reading efficiencies on the first, third, fifth and sixth tests but could not do better than group (A) on second and fourth tests. The reading efficiencies on the six tests were 39.90, 37.70, 36.45, 33.25, 35.25 and 40.95 and the gain or loss in the reading efficiencies over the six tests were 0.25, -1.30, 3.90, -0.25, 0.50 and 5.75 respectively.

Comprehension Scores of Group (A) and Group (B)

Again when the comprehension scores of the two groups on the six tests are compared, group (B) seems to stand out. In almost all the tests the performance on comprehension of group (B) was better (See Table No. 12 and 13). In Test No. 2, 12.4 percent of group (A) scored 60% marks whereas 10 percent of group (B) scored 60 percent marks. It is true that here group (B) percentage was low
but the percentage of the students who scored 70 percent and above increased. This means that some had shifted to a higher range of comprehension. In Test No. 4, 5 and 6 also similar instances were found but there also the percentage of comprehension scored by group (B) improved and the percentage of comprehension shifted to a higher range.

Response to Facts, Inferences and Vocabulary Items

Comprehension of the passages required students to employ their ability to comprehend factual information, to read between the lines and to get the meaning of the words from the context. An analysis of responses to these items can highlight the areas of difficulty in comprehension. This will also have implications for teaching and testing comprehension.

Responses of students to facts, inferences and vocabulary items of the first test (The Story of Forty Brothers) and the fourth test (The Story of Aeroplane) were analysed. This first passage was a narrative and the second was based on scientific information. By analysing the test items of these tests it was also possible to see the performance of the students on the two types of passages.

Students did comparatively better on items on facts
than on items on inferences or vocabulary. (See Table Nos. 15 and 16). The average percentages of the comprehension scores on facts on the first test for Arts, Science and Commerce were 55.1, 63.5 and 57.4 respectively whereas their average percentages of comprehension scores on inferences were 41.6, 48.8 and 43.2 respectively. The three groups repeated similar performance on facts and inferences on the fourth test. Their average percentages of comprehension scores on items on facts were 44.6, 46.9 and 45.2 respectively and those on items on inferences were 37.3, 41.6 and 38.2. The performance of Arts and Commerce groups on items on vocabulary of the first test was not very encouraging. They scored average percentages of 29.3 and 23.4 respectively but on the fourth test they improved their comprehension of vocabulary and registered 40.0 and 41.8 percent respectively. The Science group maintained more or less uniform performance in comprehension of vocabulary on the two tests. Their average percentages of comprehension scores on first and fourth tests were 45.3 and 46.7 respectively.

The performance of the students on facts, inferences and vocabulary of these two tests once again established the fact that students were poor comprehenders. The items on inferences and vocabulary caused greater difficulties to them in comprehension than other items. Their performance on items on facts was not satisfactory either. This is why the general comprehension of all the
three groups was poor.

Conclusions

Judging from the performance of these students on this course against the criterion that was aimed at (See Chapter III, p. 120) it is beyond doubt that all the three groups were below average. They all had comprehension scores below 50 percent. The speed was also poor. These reflected on their reading efficiency. There could be several other factors too which affected their reading performance.

Reading efficiency is very closely related to scholastic attainments. The performance of these students on this reading course and the percentage of aggregate marks obtained by them at the SSC examination vis-a-vis the marks obtained in English at the SSC were examined. On the basis of this it is not difficult to conclude that the performance in reading correlates fairly closely with their performance in examination.

Out of 666 students who filled in and returned the questionnaire: 45.1 percent had obtained marks between 35% to 45%. 42.4 percent had obtained marks between 46% to 60%. The percentage of first classes was 3.9 percent and only 2.4 percent had obtained above 70% marks at the
SSC examination (See Table No.19). 71.5 percent of Arts group had obtained marks between 46% to 60%. Only one student had obtained 70% marks and the rest ranged between 46% to 60% marks. Among the commerce students 48.2 percent had obtained marks between 35% to 45% while only 1.5 percent had secured first class. The rest had obtained marks between 46% to 60%. The science group was comparatively much better. 52.7 percent had obtained marks between 46% to 60% and 16.6 percent had obtained marks between 61% to 70% and 5.5 percent had secured above 70% marks. Only 24.5 percent had obtained marks between 35% to 45%.

The performance in English at the SSC examination was no better (See Table No.20). Out of 666 students 57.4 percent had obtained marks between 35% to 45%, 25.9 percent ranged between 46% to 60%, 3.3 percent secured marks between 61% to 70% and 2.3 percent had obtained above 70%. Here again the science group was found to be superior.

Thus, the scholastic attainments of the students seem to have a direct bearing on their performance.

It must be mentioned here that out of 666 students all but 19 students had studied through the mother tongue (See Table No.21).

The poor reading performance of the students in reading could be explained in three ways:
Firstly, they were poorly equipped with language. Their performance on the vocabulary items provides a testimony to this (See Table Nos. 15 and 16). This resulted in poor comprehension and they found it impossible to read faster.

Secondly, an alternative explanation could probably be that they knew only one type of reading - 'Study reading' - and this being established as a habit they found it difficult to shift gear into a higher speed. This is probably the reason why most of the students remained in the 'D' category (see Table No. 14) throughout the course. In the first two tests 2.8 percent and 2.3 percent respectively were in the 'C' category but in the tests which followed the number of these decreased and 0.7, 0.6, 0.2 and 0.6 percent respectively remained in the 'C' category in the last four tests.

Thirdly, lack of training and practice in silent reading at school and college levels could be another reason of their low performance in reading. In response to a question - 'Did your teachers in high school teach you how to read silently'? 64.8 percent said 'Yes' while 33.6 responded negatively. In response to another question - 'Does your teacher in college teach you how to read silently'? 45.5 percent responded positively (see Table No. 14). Out of the seven teachers who filled in the
questionnaire for teachers, four said 'Yes'. The other three said that they cannot afford to spend time on this. The teachers of colleges who did not fill in the questionnaire often expressed surprise if this type of activity could be possible at college level where there are usually large classes. One teacher frankly admitted that she did not know if teaching reading comprehension was one of the objectives at the Junior college stage. The teachers who are experienced probably referred the syllabus designed for this stage but those who did not have any previous experience of teaching relied very much on text-books and examination papers. The examination paper in English gives 6 marks (out of 100) to testing of reading comprehension. Naturally he would feel disinclined to spend time on developing such a skill. There is no book prescribed for teaching reading comprehension at this stage. Fortunately, at the secondary school level in the text-books for standards VIII and IX a section has been devoted to passages for reading. But there are no instructions and teachers do not know what to do with them. They teach these passages as they teach other lessons in the books i.e. for intensive language work.

The college libraries mostly do not possess books written in simple English or 'graded' books. Out of the seven teachers three responded positively to the question —
'Does your college library posses graded books'? They mentioned that their library possessed 25, 100, and 50 books. The two who noted '100' and '50' books belonged to the same college. The figures mentioned by these teachers are self explanatory and the less said the better about library facilities. In the absence of graded or simplified books it seems difficult if the teachers could give any reading assignments though three of them said 'yes' to the question - 'Do you give any extra reading assignment to your students'? Their method they said was to ask students to read stories and essays from some magazine or journal. It means, if they did what they said, the assignments were unsupervised and could not be evaluated. It is doubtful if such a practice could be of any use.

Students do not read extra books. Though 43.9 percent students responded positively to the question - 'Do you read any English books other than text-books'? - hardly few could write names of the books they had read. 62.2, 43.7 and 60.1 percent of Arts, Science and Commerce students respectively responded negatively to the above question.

The percentage of students who read newspapers daily was 11.6. 61.9 percent read the newspaper occasionally while 19.6 percent of students did not read newspapers at all.
All this goes to show that students have not formed the habit of reading any extra books other than text-books. Most of them do not even read newspapers.

The other factors for backwardness of students in reading are beyond the control of the class-room teacher. Factors like socio-economic conditions, environment, and emotional attitudes must have certainly affected the reading efficiency of these students. 50.4 percent of fathers of guardians (see Table No. 25) and 53.9 percent of mothers (see Table No. 26) of the students were literate or illiterate. The income of 75.7 percent parents was below Rs.400/- per year (Table No. 22) and 74 percent students did not have a separate room to study (see Table No. 24).