Chapter - 6
CHAPTER VI

CONCLUSIONS AND SUGGESTIONS

6.1 Introduction
6.2 The Sample and the Design
6.3 Conclusions of the Study
6.4 Implications of the Study
6.5 Suggestions for further studies
6.1 Introduction

This chapter contains a summary of the various steps that has shaped this research. In addition to this, certain observations and conclusions are discussed in a summary form. The chapter ends with the specific suggestion of research problems that can be taken up as future research activity.

The investigator wanted to have a comparative study of expenses of the educational institutions of secondary education of rural and urban areas of Mehsana District and their impact upon the pupils' achievements.

The investigator asked the following research questions to the problem.

(1) Was there any difference in the per capita expenses of the schools of rural and urban areas? If so, was it significant?

(2) Was there any difference in the achievements of the schools having high and low per capita expenses? If so, was it significant?
(3) Was there any difference in the achievement of the schools having large and small size? If so was it significant? The investigator formulated different hypotheses and tested by using different statistical techniques.

6.2 The Sample and the Design

The investigator selected Mehsana District for the research activity. He selected eleven rural schools and eleven urban schools from the different talukas of the district.

He then collected the relevant data of the recurring and nonrecurring expenses and the achievements of the schools at S.S.C.E. and H.S.S.C.E.

For testing different hypotheses, he made different groups (Parallel group designs) for study.

6.3 Conclusions of the Study

There were sixteen studies, hence sixteen conclusions were derived from the study. They were as under:

(1) Achievement of Rural and Urban Schools (S.S.C.E.)

It was presumed under the null hypotheses that the achievements in S.S.C.E of rural and urban would not differ significantly.
It was found that t value of 28.67 was highly significant at .01 level when the means of achievement at S.S.C.E. (Std. X) of rural and urban schools were taken.

Achievement in rural schools was better and more pronounced than that of urban schools.

The null hypotheses was rejected. The conclusion derived was that the achievement at S.S.C.E. of rural schools was significantly better than that of the urban schools.

(2) Achievement of Rural and Urban Schools (H.S.S.C.E.)

It was presumed under the hypothesis that the achievements at H.S.S.C.E. of rural and urban schools would not differ significantly.

It was found that the t value of 18.78 was highly significant at .01 level when the means of achievement at H.S.S.C.E. (Std. XII) of rural and urban schools were taken. This suggested that achievement in rural schools was significantly higher than that of urban schools.

The null hypothesis was rejected. It was concluded that the achievement at H.S.S.C.E. (Std.XII)
of rural schools was significantly better than that of the urban schools.

(3) Per Capita Expenses of Rural and Urban Schools

It was presumed under the null hypothesis that the per capita expense of the rural as well as urban schools would be equal.

Upon examination it was found that the t value of 0.73 was not significant when the means of the expenses of rural and urban schools were taken into account.

This meant that the per capita expenses of both rural and urban schools were equal.

The null hypothesis was accepted. It was concluded that the per capita expenses of rural and urban schools were approximately equal.

(4) Achievement of High Vs Low Per Capita Expenses-S.S.C.E.

It was presumed under the null hypothesis that the achievement of schools having high per capita expenses and low per capita expenses would be equal.

The t value was found to be 0.46 which was not significant. Hence the null hypothesis was accepted.
It was concluded that the schools which were spending more per pupil did not achieve better than those schools which were spending less per pupil.

(5) Achievement of High Vs. Low Per Capita Expenses - H.S.S.C.E.

It was presumed under the null hypothesis that the achievement of schools (at H.S.S.C.E. level) having high and low per capita expenses would not differ significantly.

Upon examination it was found that the t value was 21.87 which was highly significant when the achievements of both the categories of schools were taken into account. This resulted into the negation of the null hypothesis.

It was concluded that the achievement tilted significantly to high per capita expense.

It was concluded that the achievement at H.S.S.C.E. level of the schools incurring high per capita expense was significantly better than the achievement of the schools incurring low per capita expense. This means - the more you spend, the more you reap.
(6) **Salary - Rural and Urban Schools**

It was presumed under the null hypothesis that the expenditure towards salary head would be equal in rural and urban schools.

Upon examination it was found that the t value was 55.60 which was highly significant when the means of the salary heads of the two categories of the schools were taken into account. It was concluded that the Rural schools spent more on teachers salary than its counter-part.

(7) **Rent - Rural and Urban Schools**

It was presumed under the null hypothesis that the expenditure towards the rent head would be equal in rural and urban schools.

Upon examination it was found that the t value was just 0.047 which was nonsignificant. Hence it was concluded that the expenses towards rent in both rural and urban schools were equal.

(8) **Expenses Across years in Rural Schools**

The investigator was interested in the functional relationship of the expenses across years in rural schools.
It was presumed under the null hypothesis that there was no significant linear trend of expenses across the years in rural schools.

The F value of linear trend was 36.04 which was significant at .01 level.

The F values of quadratic and the cubic trend were 2.67 and 0.10 which were not significant. The conclusion derived was that the linear trend was found to be significant. This means that the expenses increased as the years rolled by.

(9) Expenses Across Years in Urban Schools

It was presumed under the null hypothesis that there was no significant linear trend of expenses across the years in Urban schools.

The F-value of linear trend was 30.32 which was significant at .01 level. While other trends of quadratic and cubic trends were not significant, their F values being 0.62 and .00. The conclusion derived was that only linear trend was perceptible.

(10) Overall Expenses of Rural and Urban Schools

It was presumed under the null hypothesis that
the overall total expenses of both rural and urban
schools would be equal.

Upon examination it was found that the t value
was just 0.69 which was nonsignificant at conventional
levels. Hence the null hypothesis was accepted.

It was concluded that there was no significant
difference in the overall expenses of the rural and
urban schools.

(11) Trend Test of Achievement in Rural Schools (Std. X)

It was presumed that there was no significant
linear trend perceptible in the achievement at S.S.C.E.
level across the years in rural schools.

F value for linear trend was 10.88 which was
not significant while the F values for quadratic and
cubic trends were 413.27 and 64.57 respectively which
were both significant. This suggested that the results
at S.S.C.E. level were fluctuating across years.

(12) Trend Test of Achievement in Rural Schools (Std. XII)

It was presumed under the null hypothesis that
there was no significant linear trend perceptible in
the achievement at H.S.S.C.E. level across the years
in rural schools.
Upon examination it was observed that the F-value for linear trend was 64.15 which was highly significant while other two trends of quadratic and cubic had 3.86 and 3.82 which were both not significant.

It was concluded that the linear trend was observed suggesting thereby that achievement across years in rural schools was improving as the years rolled by.

(13) Trend Test of Achievement in Urban Schools (Std. X)

It was presumed under the null hypothesis that there was no significant linear trend perceptible in the achievement at S.S.C.E. level across the years in Urban Schools.

While analysing the data it was found that the F-value for linear trend was 29.29 which was significant at .01 level. The values of the quadratic and cubic trends were 3.39 and 9.64 which were both nonsignificant.

It was concluded that the linear trend was observed suggesting thereby that achievement across years in urban schools was improving as the years rolled by.
(14) **Trend Test of Achievement in Urban Schools (Std. XII)**

It was assumed under the trend hypothesis that there was no significant linear trend perceptible in achievement at H.S.S.C.E. level across the years in urban schools.

It was found that the F-values for linear, quadratic and cubic trends were 16.65, 11.72 and 21.47 respectively and the first two i.e. linear and quadratic trends were significant at .05 level while the cubic trends was significant at .01 level.

It could be concluded that the achievement result across the years was highly irregular with ups and downs in the achievement at H.S.S.C.E. level in urban schools.

(15) **Achievement of Small Size Vs Large Size Schools (Std.X)**

It was assumed under the null hypothesis that the achievement at S.S.C.E. level of the small size and large size schools was equal.

Upon examination, the t value of the mean difference of achievements was found to be 21.21 which was highly significant at .01 level.
It was concluded that the schools having small size achieved significantly better than its counterparts at S.S.C.E. levels.

(16) Achievement of Small Size Vs. Large Size Schools (Std. XII)

It was assumed under the null hypothesis that the achievement at H.S.S.C.E. level of the small size and large size schools was equal.

Upon examination of the t value of the mean difference of achievements was found to be 59.80 which was highly significant at .01 level.

It was concluded that small size schools achieved significantly better at H.S.S.C.E. level than the large size schools.

For ready reference of the conclusions of the various studies, table 6.1 gives the relevant information below:
Table 6.1: End results of the various Hypotheses.

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Variables</th>
<th>Hypothesis</th>
<th>t/F Value</th>
<th>Significance</th>
<th>Rejection or Acceptance of HO</th>
<th>Alternative Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rural Vs Urban Achievement Std. X</td>
<td>RA = UA</td>
<td>28.67</td>
<td>.01</td>
<td>Rejected</td>
<td>RA = UA</td>
</tr>
<tr>
<td>2</td>
<td>Rural Vs Urban Achievement Std. XII</td>
<td>RA = UA</td>
<td>18.78</td>
<td>.01</td>
<td>Rejected</td>
<td>RA = UA</td>
</tr>
<tr>
<td>3</td>
<td>Rural Vs Urban Per Capita Expenses</td>
<td>RPCE = UPCE</td>
<td>0.73</td>
<td>NS</td>
<td>Accepted</td>
<td>RPCE = UPCE</td>
</tr>
<tr>
<td>4</td>
<td>Achievement of High Vs Low Per Capita Expenses Std. X</td>
<td>HE_A = LE_A</td>
<td>0.46</td>
<td>NS</td>
<td>Accepted</td>
<td>HE = LE</td>
</tr>
<tr>
<td>5</td>
<td>Achievements of High Vs Low Per Capita Expenses Std. XII</td>
<td>HE = LE</td>
<td>21.87</td>
<td>.01</td>
<td>Rejected</td>
<td>HE = LE</td>
</tr>
</tbody>
</table>
Contd. Table 6.1

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>RE = UE</td>
<td>RE = LE</td>
<td>55.60</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>For Salary</td>
<td>Salary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>RE = UE</td>
<td>RE = UE</td>
<td>.047</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>For Rent</td>
<td>Rent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Trend Test</td>
<td>Linear</td>
<td>36.04</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>Expenses across Years (Rural)</td>
<td>Quadratic</td>
<td>2.67</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cubic</td>
<td>0.10</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td>9.</td>
<td>Trend Test</td>
<td>Linear</td>
<td>30.32</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>Expenses across Years (Urban)</td>
<td>Quadratic</td>
<td>.62</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cubic</td>
<td>.00</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td>10.</td>
<td>RE = UE</td>
<td>RE = UE</td>
<td>0.69</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>Overall Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Trend Test</td>
<td>Linear</td>
<td>10.88</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>Achievement in Std.-X (Rural)</td>
<td>Quadratic</td>
<td>413.27</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cubic</td>
<td>64.57</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>---</td>
<td>-----------------</td>
<td>--------------</td>
<td>-----</td>
<td>------</td>
<td>---------</td>
</tr>
<tr>
<td>12.</td>
<td>Trend Test</td>
<td>Linear</td>
<td>64.15</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>Achievement in</td>
<td>Quadratic</td>
<td>3.86</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>Std.-XII (Rural)</td>
<td>Cubic</td>
<td>3.82</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td>13.</td>
<td>Trend Test</td>
<td>Linear</td>
<td>29.29</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>Achievement in</td>
<td>Quadratic</td>
<td>3.39</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td>Std.-X (Urban)</td>
<td>Cubic</td>
<td>9.64</td>
<td>NS</td>
<td>Accepted</td>
</tr>
<tr>
<td>14.</td>
<td>Trend Test</td>
<td>Linear</td>
<td>14.65</td>
<td>.05</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>Achievement in</td>
<td>Quadratic</td>
<td>11.72</td>
<td>.05</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td>Std.-XII (Urban)</td>
<td>Cubic</td>
<td>21.47</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td>15.</td>
<td>Achievement of small size and large size schools (Std. X)</td>
<td>$SS_A = LS_A$</td>
<td>21.21</td>
<td>.01</td>
<td>Rejected</td>
</tr>
<tr>
<td>16.</td>
<td>Achievement of small size and large size schools (Std. XII)</td>
<td>$SS_A = LS_A$</td>
<td>59.80</td>
<td>.001</td>
<td>Rejected</td>
</tr>
</tbody>
</table>
6.4 Implications of the Study

The issue regarding the expenditure on education as investment is still unsettled. But Prof. Kindleberger and other economists believe that the importance of education to economic development is now fairly widespread. That is the reason why the title of Kothari Commission (1966) on education is captioned as "Education and National Development".

It could not follow from this that the larger the investment in education, the greater would be the benefit to an economy. So far as cost analysis of education is concerned, the present research showed that per capita expenses of both rural and urban schools were nearly equal.

But on the achievement front of the school, the rural schools achieved better at S.S.C.E. and H.S.S.C.E. levels than the urban schools.

The better achievement in rural schools could be attributed to the small size of the school as compared to its urban schools where large number of pupils attended.

The implication is that the size of the school should be kept optimal, so that it can be managed effectively.

The present research also advocates that higher per capita expense would not yield better achievement at S.S.C.E.
level. While it did yield better achievement at H.S.S.C.E. level. This result is contradictory. Hence any implication would be misleading. A further research must be carried out.

In both rural and urban schools expenses across the years showed increasing tendency. This was a healthy sign if the expenses were not affected by the incidence of inflationary effects. But the overall expense of rural and urban schools manifested no significant difference.

6.5 Suggestions for further studies

The following problems require further study, though the list is by no means exhaustive:

(1) An investigation into the expenses of the primary schools run by public administration and private management.

(2) A comparative study of the patterns of private expenditure incurred by rich and poor families of Gujarat State.

(3) An investigation into the salary expenses of high and low achieving primary schools in the context qualification, teacher's, teacher-pupil ratio and other demographic variables.
(4) An investigation into the Government expenses for SC & ST students of primary and secondary education.