CHAPTER VI

OBSERVATIONS, CONCLUSIONS AND SUGGESTIONS

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6.1 Introduction:

As has been described earlier in Chapter VI, the present research problem was multidimensional having four independent variables incorporated in two major studies designated as phase one and phase two.

The problem for the research was

"A Study of some psycho-social correlates of academic achievement of secondary school girls in Kheda district."

6.2 Summary of the Research Work:

The two major questions before the investigator were:

(i) What were the effects of different independent variables of Area, Caste, SES and Family size on the academic achievement of the girls of secondary schools of Kheda district?
The investigator incorporated four variables as independent in 2x2x2x2 factorial design in the first phase. The variables were Area, Caste, SES and Family size, each operated at two levels. After proper classification of the girls into various categories of the variables, she kept 13 pupils in each of the cells of the factorial design.

The final sample of this phase was 208 girl pupils of standards VIII, IX and X of the secondary schools of Kheda district.

The dependent variable was achievement in different subjects at annual examinations.

The second question addressed to the study was:

(ii) What were the effects of different variables of area, caste, reading ability and study habits on the academic achievement of the girls of secondary schools of Kheda district.

She incorporated these four variables in 2x2x2x2 factorial design in the second phase. She kept 10 girls in each of the cells of the design. The sample was of 160 girls.
The following tools were employed for measurement:

1. SES inventory developed by C.C. Pathak for the assessment of levels of SES.

2. Reading Ability Test standardized by R.S. Trivedi and B.V. Patel.

3. Study Habits Inventory developed by B.V. Patel.

The following objectives were kept in mind:

1. To assess the reading ability of the girls studying in secondary schools of the Kheda district.

2. To assess the study habits of the girls of different castes studying in secondary schools of the Kheda district.

3. To assess the SES of the parents of the girls studying in secondary schools of the Kheda district.

4. To assess the size of the family of the girls studying in secondary schools of the Kheda district.

5. To compare the academic achievement of the girls of rural and urban areas of the Kheda district.

6. To compare the academic achievement of the non-B.C. and B.C. girls of the Kheda district.
(7) To compare the academic achievement of the girls having high and low reading ability.

(8) To compare the academic achievement of the girls having good and poor study habits.

(9) To compare the academic achievement of the girls coming from large family size and girls coming from small family size.

(10) To compare the academic achievement of the girls having high and low SES.

(11) To know the interactive effects between or among the various variables upon the academic achievement of the girls of secondary schools of Kheda district.

(12) To assess the contribution of each of the variables and each of the significant interactions to dependent variable of academic achievement.

(13) To suggest a comprehensive scheme of uplifting the academic achievement based upon the evidences obtained from the research study.

Sample and Research Design:

Factorial Designs of 2x2x2x2 dimensions were invoked for both the phases. In the first design, the sample
consisted of 208 girls, keeping 13 girls in each cell while in the second design it consisted of 160 girls having 10 girls in each factorial cell.

6.3 General Observation:

The research problem evoked interest from the nook and corner of the school premises. The heads and the teachers of the schools were all surprised to know the problem of the research. They were keen to know the outcome of the research.

Many members of the teaching staff were astonished to find the novel variables of the study such as study habits, family size and the reading ability. They were quite unaware of the test like reading ability test.

The girls of secondary schools were very much interested while they were administered the reading ability test. They were not sure regarding the manner in which study habit inventory was to be filled up. At this stage, the teachers and the investigator guided them as and when they asked.

The pupils were found to be accurate when they gave information regarding the variables of SES and family size.
In nutshell, the pupils were highly motivated while taking the test and while giving the information in a given data sheet.

The heads and the teachers including pupils were very eager to know the scores of reading ability and the study habits.

6.4 Statistical Observations and Conclusions:

On the basis of the data obtained in the previous chapter V, the statistical observations and conclusions are given study-wise. They are briefed below:

Study 1: Area Vs. Achievement

Observation:

The F value of area is 125.29 which is significant at .01 level. Urban mean is 60.9 while the rural mean is 51.90.

Conclusions:

(1) The null hypothesis was not accepted.
(2) Urban mean is greater than the rural mean.
(3) The achievement of urban girls was more than that of rural girls.
Study 2: Caste Vs. Achievement

Observation:

The F value of caste is 501.74 which is significant at 0.01 level. NBC mean is 64.18 while the BC mean is 47.81.

Conclusions:

(1) The null hypothesis is rejected.

(2) The secondary school girls of NBC were better than those of the BC in their achievement scores.

Study 3: SES Vs. Achievement

Observation:

The F value of SES is 40.03. The F-ratio is highly significant at 0.01 level. High SES (C) mean is 58.31 and low SES (C) mean is 53.68.

Conclusions:

(1) The null hypothesis could not be accepted.

(2) The girls of high SES found better than those of the girls of low SES in their achievement.

Study 4: Family Size Vs. Achievement

Observation:

The F value of Family size is 17.60, which is
significant at 0.01 level. Large family size mean is 57.53 while small family size mean is 54.46.

Conclusions:

(1) The null hypothesis was not accepted.

(2) The achievement of girls from large family size was more than that of girls from small family size.

Study 5: Area x Caste Vs. Achievement

Observation:

The F value of the interaction of area and caste is 3.64. It is not significant.

Conclusion:

The interaction effect of Area and Caste on the academic achievement of girls is not significant.

Study 6: Area x SES Vs. Achievement

Observation:

The F value of area and SES is 14.65. It is significant at 0.01 level.

Conclusion:

The interaction effect of area and SES is significant.
Study 7: Area x Family size Vs. Achievement

Observation:

The F value of the interaction of area and family size is 8.15. It is significant at 0.01 level.

Conclusions:

(1) The interaction effect of area and family size is significant.

(2) The null hypothesis was not accepted.

Study 8: Caste x SES Vs. Achievement

Observation:

The F value of the interaction of caste and SES is 0.21. It is not significant.

Conclusion:

There is no interaction effect between the caste and SES of the girls on their achievement.

Study 9: Caste x Family Size Vs. Achievement

Observation:

The F value of the interaction of caste and family size is 13.46. This value was found to be highly significant at 0.01 level.
Conclusions:

(1) The null hypothesis was not acceptable.

(2) The interaction effect of caste and family size is highly significant.

Study 10: SES x Family Size Vs. Achievement

Observation:

The F value of interaction of SES and family size is 4.37. It was significant at conventional level of 0.05 level.

Conclusions:

(1) SES x Family size has significant interactive effect.

(2) The null hypothesis was accepted.

Study 11: Area x Caste x SES Vs. Achievement

Observation:

The F value of the interaction of area, caste and family size is 2.97. It is not significant.

Conclusions:

(1) The null hypothesis was accepted.

(2) The interaction of the area, caste and SES was not significant.
Study 12: Area X Caste X Family Size Vs. Achievement

Observation:

The F value of the interaction of area, caste and family size is 18.27. It was significant at 0.01 level.

Conclusions:

(1) The null hypothesis was not accepted.

(2) The interaction effect of area, caste and family size is significant.
SES and family size is 1.91. It was not significant at 0.05 level.

Conclusions:

(1) The null hypothesis was accepted.
(2) Regarding area, caste, SES and family size there was no significant interaction.

Study 16: Area Vs. Achievement

Observation:

The F value of area is 30.28. It is significant at 0.01 level.

Conclusions:

(1) The null hypothesis was not acceptable.
(2) The urban girls were superior to rural girls in academic achievement.

Study 17: Caste Vs. Achievement

Observation:

The F value of caste is 58.81. It was highly significant at 0.01 level.

Conclusions:

(1) The null hypothesis was not acceptable.
(2) The NBC girls were better than the BC girls in their achievement scores.

**Study 18: Reading Ability Vs. Achievement**

Observation:

The F value of Reading Ability is 10.75. This was found to be significant at 0.01 level.

Conclusions:

(1) The girls having high and low reading ability obtained significantly unequal mean achievement scores.

(2) The girls having high reading ability were better achievers than the girls having low reading ability.

(3) The null hypothesis was not acceptable.

**Study 19: Study Habits Vs. Achievement**

Observation:

The F value of study habits is observed to be 43.46. This F value of 43.46 was found to be significant at 0.01 level.

Conclusions:

(1) The null hypothesis was not acceptable.
(2) The girls having good study habits were better achievers than the girls having poor study habits.

**Study 20 : Area x Caste Vs. Achievement**

**Observation :**

This interaction was found to be non-significant because its F ratio was only 1.81.

**Conclusions :**

(1) The area and caste did not have interaction in achievement scores of the girls.

(2) The null hypothesis was accepted.

**Study 21 : Area x Reading Ability Vs. Achievement**

**Observation :**

The value of F for area and reading ability interaction was found to be only 0.22.

**Conclusions :**

(1) The area and reading ability were not instrumental in significant interaction in the achievement scores of the girls.

(2) The null hypothesis was accepted.
Study 22: Area x Study Habits Vs. Achievement

Observation:

The F ratio for area and study habits interaction was found to be 0.00 which is a classical one of no interaction.

Conclusions:
(1) The area and study habits did not partake in interaction for achievement scores of the girls.
(2) The null hypothesis was acceptable.

Study 23: Caste x Reading Ability Vs. Achievement

Observation:

The F value of caste and reading ability is 0.49. This value of 0.49 was non significant.

Conclusions:
(1) The null hypothesis was accepted.
(2) The caste and reading ability did not participate in significant interaction for achievement scores of the girls.

Study 24: Caste x Study Habits Vs. Achievement

Observation:

The F value of caste and study habits is 0.77. The value of F was not significant.

Conclusions:
(1) The caste and study habits did not partake in significant interaction for achievement scores of the girls.
(2) The null hypothesis was accepted.
Study 25: Reading Ability x Study Habits Vs. Achievement

Observation:
The F value of reading ability and study habits was 0.28. It is not significant.

Conclusions:
(1) The variable of reading ability and study habits did not interact in achievement scores of the girls.
(2) The null hypothesis was accepted.

Study 26: Area x Caste x Reading Ability Vs. Achievement

Observation:
The F value of the interaction of Area, Caste and Reading Ability is 0.58. This interaction was found to be non-significant.

Conclusions:
(1) The null hypothesis was accepted.
(2) Area, Caste and Reading Ability did not participate in significant interaction in achievement scores of the girls.

Study 27: Area x Caste x Study Habits Vs. Achievement

Observation:
The F value of the interaction of Area, Caste and Study habits is 0.12. This interaction was found to be non-significant.
Conclusions:

(1) The null hypothesis was accepted.

(2) The variable of Area, Caste and Study habits did not produce any significant interaction in achievement scores of the girls.

Study 28: Area x Reading Ability x Study Habits Vs. Achievement

Observation:

The F value of Reading Ability and Study habits is 0.00. This was a classical case of zero interaction effect.

Conclusions:

(1) The three variables of Area, Reading Ability and Study habits did not participate in significant interaction among themselves in achievement scores.

(2) The null hypothesis was accepted.

Study 29: Caste x Reading Ability x Study habits Vs. Achievement

Observation:

The F value of the interaction of caste, reading ability and study habits is 0.77. This F value was not significant.
Conclusions:

(1) Caste, Reading Ability and Study habits did not participate in significant interaction among themselves in achievement scores.

(2) The null hypothesis was accepted.

Study 30: Area x Caste x Reading Ability x Study habits
Vs. Achievement

Observation:

The F value of the interaction of reading ability and study habit is 0.58. This interaction was found non-significant.

Conclusions:

(1) The variables of area, caste, reading ability and study habits in no way interacted with one another in the production of achievement scores of the girls.

(2) The null hypothesis was accepted.

6.5 Conclusions of the Study:

The brief summary of the conclusions are listed below:

(1) The reading ability of the girls of Kheda district studying in secondary school was found to vary
widely in the sample. It was observed that more girls were lying in the low reading ability group.

(2) The study habits of the girls were also found to vary extremely. The girls having average study habits were more than the good and poor study habits groups.

(3) The SES of the parents of the girls of Kheda District found to be low. The most of the families possess the low SES.

(4) In the sphere of family size, the percent of large family was marginally more in the urban area than in the rural area.

(5) The achievement of girls of urban area was more than the achievement of girls of rural area in the secondary schools of Kheda district.

(6) The girls of NBC of secondary schools of Kheda district were better than the girls of BC of secondary schools of Kheda district in their achievement.

(7) The girls of high SES found better than the girls of low SES in their achievement in the secondary schools of Kheda district.

(8) The achievement of girls from large family was more than the achievement of girls from small
Family in the secondary schools of Kheda district.

(9) The girls having high reading ability were better achievers than the girls having low reading ability in the secondary schools of Kheda district.

(10) The girls having good study habits were better achievers than the girls having poor study habits.

(11) Social Correlates: One of 11 interactions, six pertain to first order, four to second order while only one to third order interactions. In this phase of social correlates, only four of the first order interactions were found to be significant. While only three of the second order interactions were found to be significant. The rest were non-significant.

(12) Psychological Correlates: In the second phase, where psychological correlates were involved, out of 11 interactions, none was found to be significant.

6.6 Educational Implications:

The aggregate message to the teachers, guardians and the heads and administrators connected to education is very clearcut from the evidences of this research.
The good study habit induces good reading ability which in turn influences the achievement of the girls. Therefore the poor achievers should be encouraged to form good study habits. This would entail better facilities for reading at home and school.

Though not incorporated in the scheme of research, the good achievers are highly motivated. The urban girls show better scores in study habits, reading ability and the academic achievement because of the motivation factor. This was shown by the pupils when they were interviewed by the investigator at the time of data collection.

So the following points should be born in mind:

(1) Better facilities should be provided to rural girls. The school environment needs to be improved.

(2) Needy and poor BC girls should be given adequate help to come up with the standards of better achieving girls.

(3) The study habits of the girls should be closely monitored by the teachers. The different components of study habits should be brought home to the girls and they should be pursued.
6.7 Suggestions for the Further Research:

The above recommendations cannot be generalized beyond the sample. This research was an exploratory effort. Hence many more researches should be carried out in this direction with different variables.

The following is the list of the problems of further research which is by no means an exhaustive list:

(1) An investigation into the relationship between the personality traits of rural and urban girls and their impact upon the academic achievement.

(2) An inquiry into the levels of study habits and their relationship with different categories of reading ability.

(3) A comparative study of the girl's reading ability in the context of area and parents education and their impact upon the academic achievement etc.

(4) A clinical study of the poor achieving girls in the context of their study habits, reading ability and motivation.

(5) A comparative study of the reading ability of the girls of the highly educated and less educated parents with some relevant variables.
These suggestions for further research work only mean that research on any subject has no end. Further research starts where the previous research stops.