CHAPTER – VI

SUMMARY AND CONCLUSION

The data collected and present investigation have been analysed and findings presented in the preceding chapters. This chapter presents a brief summary of the investigation, the findings, discussion of the findings, conclusions that have been drawn from the findings, implications for education and suggestions for further research in the fields.

6.1 General Statement of the Problem

The Study was undertaken with a view to investigate the main and interaction effects of a few selected teachers' factors on academic achievement of students in Social Science.

6.2 General Objectives of the Study

The present study was designed with the following general objectives in view:

(i) To study the effect of teachers' personality, teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.
(ii) To study the effect of male teachers’ personality, teachers’ attitude towards profession and teachers’ teaching effectiveness on achievement in Social Science.

(iii) To study the effect of female teachers’ personality, teachers’ attitude towards profession and teachers’ teaching effectiveness on achievement in Social Science.

(iv) To study the effect of more experienced teachers’ personality, teachers’ attitude towards profession and teachers’ teaching effectiveness on achievement in Social Science.

(v) To study the effect of lower experienced teachers’ personality, teachers’ attitude towards profession and teachers’ teaching effectiveness on achievement in Social Science.

(vi) To study the effect of higher qualification teachers’ personality, teachers’ attitude towards profession and teachers’ teaching effectiveness on achievement in Social Science.

(vii) To study the effect of minimum qualification teachers’ personality, teachers’ attitude towards profession and teachers’ teaching effectiveness on achievement in Social Science.
6.3 Variables

6.3.1 Independent Variables

The independent variables considered in the present study were as follows:

(i) Teachers’ Personality (Extraversion – Introversion)

(ii) Teachers’ Attitude Towards Profession (Favourable – Unfavourable).

(iii) Teachers’ Teaching Effectiveness (Effective – Ineffective)

6.3.2 Dependent Variable

(i) Academic Achievement in Social Science.

6.4 Specific Objectives of the Study

The present study was designed with the following specific objective in view:

(i) Total Sample

1. To study the effect of teachers’ personality on achievement in Social Science.

2. To study the effect of teachers’ attitude towards profession on achievement in Social Science.
To study the effect of teachers' teaching effectiveness on achievement in Social Science.

To study the interaction effect of teachers' personality and teachers' attitude towards profession on achievement in Social Science.

To study the interaction effect of teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.

To study the interaction effect of teachers' personality and teachers' teaching effectiveness on achievement in Social Science.

To study the interaction effect of teachers' personality, teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.

(ii) **Male Teachers**

To study the effect of male teachers' personality on achievement in Social Science.

To study the effect of male teachers' attitude towards profession on achievement in Social Science.

To study the effect of male teachers' teaching effectiveness on achievement in Social Science.

To study the interaction effect of male teachers' personality and teachers' attitude towards profession on achievement in Social Science.
12. To study the interaction effect of male teachers' attitude towards profession and teachers' teaching effectiveness on academic achievement in Social Science.

13. To study the interaction effect of male teachers' personality and teachers' teaching effectiveness on achievement in Social Science.

14. To study the interaction effect of male teachers' personality, teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.

(ii) Female Teachers

15. To study the effect of female teachers' personality on achievement in Social Science.

16. To study the effect of female teachers' attitude towards profession on achievement in Social Science.

17. To study the effect of female teachers' teaching effectiveness on achievement in Social Science.

18. To study the interaction effect of female teachers' personality and teachers' attitude towards profession on achievement in Social Science.

19. To study the interaction effect of female teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.
20. To study the interaction effect of female teachers' personality and teachers' teaching effectiveness on achievement in Social Science.

21. To study the interaction effect of female teachers' personality, teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.

(iv) Teachers with Higher Qualification

22. To study the effect of higher qualification teachers' personality on achievement in Social Science.

23. To study the effect of higher qualification teachers' attitude towards profession on achievement in Social Science.

24. To study the effect of higher qualification teachers' teaching effectiveness on achievement in Social Science.

25. To study the interaction effect of higher qualification teachers' personality and teachers' attitude towards profession on achievement in Social Science.

26. To study the interaction effect of higher qualification teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.

27. To study the interaction effect of higher qualification teachers' personality and teachers' teaching effectiveness on achievement in Social Science.
28. To study the interaction effect of higher qualification teachers' personality, teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.

(v) **Teachers with Minimum Qualification**

29. To study the effect of minimum qualification teachers' personality on achievement in Social Science.

30. To study the effect of minimum qualification teachers' attitude towards profession on achievement in Social Science.

31. To study the effect of minimum qualification teachers' teaching effectiveness on achievement in Social Science.

32. To study the interaction effect of minimum qualification teachers' personality and teachers' attitude towards profession on achievement in Social Science.

33. To study the interaction effect of minimum qualification teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.

34. To study the interaction effect of minimum qualification teachers' personality and teachers' teaching effectiveness on achievement in Social Science.

35. To study the interaction effect of minimum qualification teachers' personality, teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.
(vi) Teachers With Higher Experience

36. To study the effect of higher experienced teachers' personality on achievement in Social Science.

37. To study the effect of higher experienced teachers' attitude towards profession on achievement in Social Science.

38. To study the effect of higher experienced teachers' teaching effectiveness on achievement in Social Science.

39. To study the interaction effect of higher experienced teachers' personality and teachers' attitude towards profession on achievement in Social Science.

40. To study the interaction effect of higher experienced teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.

41. To study the interaction effect of higher experienced teachers' personality and teachers' teaching effectiveness on achievement in Social Science.

42. To study the interaction effect of higher experienced teachers' personality, teachers' attitude towards profession and teachers' teaching effectiveness on achievement in Social Science.
(vii) **Teachers with Lower Experience**

43. To study the effect of lower experienced teachers’ personality on achievement in Social Science.

44. To study the effect of lower experienced teachers’ attitude towards profession on achievement in Social Science.

45. To study the effect of lower experienced teachers’ teaching effectiveness on achievement in Social Science.

46. To study the interaction effect of lower experienced teachers’ personality and teachers’ attitude towards profession on achievement in Social Science.

47. To study the interaction effect of lower experienced teachers’ attitude towards profession and teachers’ teaching effectiveness on achievement in Social Science.

48. To study the interaction effect of lower experienced teachers’ personality and teachers’ teaching effectiveness on achievement in Social Science.

49. To study the interaction effect of lower experienced teachers’ personality, teachers’ attitude towards profession and teachers’ teaching effectiveness on achievement in Social Science.

### 6.5 Research Hypotheses

Keeping in view the above specific objectives, Forty-nine research hypotheses were setup.
6.6 **Scope of the Study**

(i) The present study is confined to secondary schools of Karnataka.

(ii) The study is further confined to teachers' teaching Social Science in IX Standard.

(iii) The study is further also confined to students studying in IX Standard.

(iv) Academic achievement of students is influenced by various teachers factors. However the present study is confined to certain selected teacher variables like personality, attitude and teaching effectiveness.

6.7 **Design of the Study**

6.7.1 **Method of Research**

Ex Post research design will be used in the proposed study (Kerlinger, 1964 Pp. 379). Ex Post Facto research is systematic empirical inquiry in which the investigator does not have direct control of independent variables because their manifestations have already occurred or because they are indirectly not manipulable. Inferences about relations among variables are made, without direct intervention, from concomitant variation of independent and dependent variables.
6.7.2 Data Gathering Tools

Review of related testing materials revealed that, (i) Suitable tools for the assessment of teachers' personality, teachers' attitude towards profession and teachers' teaching effectiveness are readily available. Hence, it was decided to use Introversion, Extraversion, Inventory (1976) developed by Ramnath Kundu; Teacher Attitude Inventory (1974) developed by S.P. Ahluwalia; and Student Ratings of Teaching Effectiveness Scale (2001) developed by Shashikala Deshpande, (ii) A test for the assessment of academic achievement in social science based on Karnataka State syllabus of IX standard is conspicuous by its absence. Hence, it was decided to construct a suitable test for the assessment of academic achievement of students in social science.

6.8 The Sample

One of the important step in any research is to draw a sample which would truly represents the characteristic of the population in which the inferences are intended to be made. In this sense a sample is the population in a miniature form. Generally, the sample for a research is drawn by using either random sampling technique, stratified random sampling techniques and so on depending upon the purpose of the study.
The population for the present study was all these teachers who were teaching Social Science subject at the high schools in Dharwad district. Sampling was done in order to get school representation, teacher representation and also the student representation. 68 high schools were drawn randomly from among the Government, private-aided and private-unaided schools. The teachers were drawn in such a way that the teachers teaching Social Studies alone could be included in the sample. Thus, 150 teachers teaching Social Science subject in high schools were drawn as the sample.

In addition to the above, in order to get the ratings of the teaching effectiveness of teachers, students studying in IX Standard taught by these teachers were also involved in the present study. From each section, 3 students (Above Average, Average, Below Average) were selected to rate each teacher. Thus, from a school 6 students were involved to rate 2 teachers and soon. Thus the present study included 150 teachers who were rated by the total number of 450 students.

6.9 Collection of Data

It is accepted in research that student ratings provide more relevant and reliable measure than peer ratings in assessing teacher effectiveness. Hence, data pertaining to teaching effectiveness were obtained by student rating. For this purpose Kundu Introversion-Extraversion Inventory and Ahluwalia Teacher Attitude Inventory are
being self-rating inventories were administered directly to the teachers teaching Social Science. The responses of the teachers were rated separately for teacher's personality and attitude. Deshpande's student Ratings of Teaching Effectiveness Scale was also used. Each teacher teaching Social Science was rated by a minimum of three students (Above average, Average, Below average) in order to avoid bias in rating teaching effectiveness. The average scores of three students is the perceived effectiveness of teacher.

Further, in order to collect data pertaining to Achievement in Social Science, the Academic Achievement test was constructed and Validated by the investigator was administered to the same group of students who have rated the teachers for teaching effectiveness. The average of three academic achievement scores is used for the purpose of analysis.

6.10 Statistical Techniques Used

The purpose of the study is to investigate the main effects and interaction effects of three independent variables, viz., Teachers Personality, Teachers Attitude and Teachers Effectiveness on the dependent variable, that is, academic achievement in Social Science. As there were three independent variables it was decided to use 3-way analysis of Variance technique (ANOVA) in order to find out the main and interaction effects.
Secondly, if the treatment groups differ significantly, it will not be clear from the findings which of the comparison of the treatment groups differ significantly in terms of their effect on academic achievement variable. Hence, to know this, multiple comparison of means of all the treatment groups was carried out using Scheffe’s test (1953).

These statistical techniques were also used in order to study the interaction effects in case of sub-samples like Male teachers, Female teachers, Teachers with higher experience, Teachers with less experience, Teachers with higher qualification, and Teacher with minimum qualification. The analysis of data was carried out in pursuance of the objectives of the study as well as the research hypotheses.

6.11 Major Findings

(v) Total Sample

(1) The teachers with Introversion personality type will influence higher on academic achievement of students in Social Science than the teachers with Extraversion personality type.

(2) The teachers with Favourable attitudes towards profession will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitudes towards the teaching profession.
(3) The teachers with Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Ineffective teaching.

(4) The teachers with Extraversion personality type and Favourable attitude will influence more on academic achievement of students in Social Science than teachers with Introversion personality type and Unfavourable attitude towards teaching profession.

(5) The teachers with Introversion personality type, Favourable attitude and Effective teaching will influence more on academic achievement of students in Social Science than teachers with Introversion personality type, Unfavourable attitude and Ineffective teaching.

(6) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than teachers with Extraversion personality type, Favourable attitude towards profession and Effective teaching.

(7) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Effective teaching.

(8) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will
influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(9) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(10) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(11) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(12) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Effective teaching.
(13) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(14) The teachers with Introversion personality type, Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(15) The teachers with Introversion personality type, Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(16) The teachers with Introversion personality type, Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(17) The teachers with Extraversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of
students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(18) The teachers with Extraversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(ii) Male Teachers

(19) The teachers with Introversion personality type will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type.

(20) The teachers with Favourable attitudes towards profession will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitudes towards the teaching profession.

(21) The teachers with Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Ineffective teaching.

(22) The teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Favourable attitude towards profession.
(23) the teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type and Unfavourable attitude towards profession.

(24) the teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Unfavourable attitude towards profession.

(25) the teachers with Extraversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type and Unfavourable attitude towards profession.

(26) the teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type and Unfavourable attitude towards profession.

(27) the teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitude towards profession and Ineffective teaching.
(iii) **Female Teachers**

(28) The teachers with Introversion personality type will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type.

(29) The teachers with Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Ineffective teaching.

(30) The teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type and Unfavourable attitude towards profession.

(31) The teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Unfavourable attitude towards profession.

(32) The teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Favourable attitude towards profession and Ineffective teaching.

(33) The teachers with Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the
teachers with Unfavourable attitude towards profession and Ineffective teaching.

(34) The teachers with Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitude towards profession and Ineffective teaching.

(35) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(36) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Effective teaching.

(37) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(38) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will
influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Effective teaching.

(39) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(40) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(41) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(42) The teachers with Introversion personality type, Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.
(iv) **Higher Qualification Teachers**

(43) The teachers with Introversion personality type will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type.

(44) The teachers with Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Ineffective teaching.

(45) The teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitude towards profession and Effective teaching.

(46) The teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Favourable attitude towards profession and Ineffective teaching.

(47) The teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitude towards profession and Ineffective teaching.

(48) The teachers with Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the
teachers with Unfavourable attitude towards profession and Ineffective teaching.

(49) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(50) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(51) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(v) **Minimum Qualification Teachers**

(52) The teachers with Introversion personality type will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type.
(53) The teachers with Favourable attitudes towards profession will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitudes towards the teaching profession.

(54) The teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Favourable attitude towards the teaching profession.

(55) The teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type and Unfavourable attitude towards the teaching profession.

(56) The teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Unfavourable attitude towards the teaching profession.

(57) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(58) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will
influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Effective teaching.

(59) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(60) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Effective teaching.

(61) The teachers with Introversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(62) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type, Unfavourable attitude towards profession and Ineffective teaching.
(63) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(64) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Effective teaching.

(65) The teachers with Introversion personality type, Favourable attitude towards profession and Ineffective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(66) The teachers with Introversion personality type, Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(67) The teachers with Introversion personality type, Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of
students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(68) The teachers with Extraversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Favourable attitude towards profession and Ineffective teaching.

(69) The teachers with Extraversion personality type, Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type, Unfavourable attitude towards profession and Ineffective teaching.

(vi) **Higher Experienced Teachers**

(70) The teachers with Introversion personality type will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type.

(71) The teachers with Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Ineffective teaching.

(72) The teachers with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science
than the teachers with Extraversion personality type and Unfavourable attitude towards the teaching profession.

(73) The teachers with Introversion personality type and Unfavourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Unfavourable attitude towards the teaching profession.

(74) The teachers with Extraversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Unfavourable attitude towards profession.

(75) The teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of teachers in Social Science than the teachers with Favourable attitude towards profession and Ineffective teaching.

(76) The teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitude towards profession and Effective teaching.

(77) The teachers with Favourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the
teachers with Unfavourable attitude towards profession and Ineffective teaching.

(78) The teachers with Unfavourable attitude towards profession and Effective teaching will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitude towards profession and Ineffective teaching.

(vii) Lower Experienced Teachers

(79) The teachers with Introversion personality type will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type.

(80) The teachers with Favourable attitudes towards profession will influence more on academic achievement of students in Social Science than the teachers with Unfavourable attitudes towards the teaching profession.

(81) The factors with Introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Favourable attitude towards profession.

(82) The teachers with Introversion Personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Introversion personality type and Unfavourable attitude towards profession.

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The teachers with introversion personality type and Favourable attitude towards profession will influence more on academic achievement of students in Social Science than the teachers with Extraversion personality type and Unfavourable attitude towards profession.

6.12 Discussion

(i) Teachers' Personality

From the result obtained in the present study, it is found that teachers' Introversion personality type has made influence on the academic achievement of the students in Social Science than the Extraversion personality type in the entire sample, male teachers, female teachers, with higher and minimum qualifications, teachers with higher and lower teaching experience. However Introversion personality type has no significant effect on academic achievement of students in case of entire sample, male and female teachers, higher and minimum qualification teachers and higher and lower experienced teachers.

'Introversion' is the tendency of an individual tending to retreat from the external world and engage in meditation absorbing in his own thoughts and generally approaching life from the standpoint of his own subjective values (Singh and Singh, 1979). Whereas, 'Extraversion' is the tendency of an individual orienting towards the external world, doing rather than thinking and approaching life as oriented by and related to the object rather than to himself (Singh and Singh, 1979). The significant effect of teachers' Introversion personality type on students academic
achievement may be due to that, these teachers are intelligent, venturesome, tough minded, shrewd, controlled, constructive, autonomy, appear cold, aloof, silent, hard to understand, socially inept, inarticulate in their attempts to communicate their ideas, they neither shine nor reveal themselves, subjective outlook, have high degree of cerebral activity, healthy and balanced philosophical and cultural outlook, good habits of daily life, well developed moral life, social, command over language, emotionally stable, sober, conscientious, reflective, goal direction, satisfaction, democratic and accommodative. Teachers with Introversion personality type are characterised positively by intense feelings of sympathy for others, the ability to envision the future, the intensity of subjective sensations and an imagination and an ability to think originally and boldly. However, teachers with Extraversion personality type are characterized by a change in emotions from situation to situation, along with indiscriminate yielding to the expectations of others, impatience and flightiness, crude pleasure seeking, a selfish and exploitative attitude towards others, tender-mindedness, suspiciousness, self-sufficiency, placidity, relaxedness, friction, difficulty, apathy, disorganization, full of tension, quarrelling among students, confusion in the class activities, lack of affinity with class work, favouritism, dominance and leadership. Perhaps the positive characteristic features of Introversion personality type are the proper reasons for its significant influence on academic achievement.
The results obtained by other investigators, viz., Quaraishi (1972), Kaul (1972), Singh (1976), Gupta, V.P. (1977), Goel, S. (1978), Singh (1978), Dileepkumar (1979), Sansanwal and Gurpal Jarial (1979), are in line with the findings of the present study.

The teachers' Extraversion personality type, which leads to less influence on academic achievement may be, modified through appropriate modification techniques. Individual guidance and counselling therapeutic continuum may be more suitable.

As almost all the studies conducted in India and Abroad support directly or indirectly the findings of the present study. The outcome of the study may be accepted widely.

(iii) **Teachers' Attitude Towards Profession**

The present study revealed that there is positive and significant effect of favourable attitude of teachers towards teaching profession on academic achievement in case of entire sample, male teachers, minimum qualification teachers and teachers with lower experience. However, it has no effect on academic achievement in case of entire sample, male teachers, minimum qualification teachers and teachers with lower experience.

Attitudes may be thought of as learned patterns of behaviour which predispose the individual to act in a specific way toward certain
persons, objects, ideas or professions. A more comprehensive definition is that of Allport (1935, p.45), who defines an attitude as a “State of readiness organized through experience exerting a directive and/or dynamic influence upon the individual’s response toward all objects or situations with which it is related”. Attitudes can be considered from the standpoint of three basic components: (i) An affective component, which relates feeling aspect, (ii) A cognitive component consisting of the intellectual aspects, and (iii) An action component which predisposes the individual toward specific overt behaviour. In the present study, teachers’ attitude towards profession is considered from the standpoint of an action component. This component exists at various levels of intensity and in various degrees of independence of one another. A teacher may have a rather clear cognitive view of his teaching subject but have no great feeling about it and have no inclination to take any action concerning its transmission. Thus, teachers attitude towards profession is jointly determined by all the above three basic components. The findings of the present study clearly shows that favourable attitude of the teacher has influenced on the academic achievement of the students than the unfavourable attitude of the teacher.

Some of the Indian Studies, viz., Singh, S.K. (1988); Venkatarami Reddy and Ram Mohan Babu (1994); Rangarajan (1999); Annamalai (2000); showed the positive and significant correlation between attitude and academic achievement.
Favourable attitudes of the secondary school teachers towards profession may be due to the incentives sanctioned by the Government of Karnataka to the teacher serving in the field. Some of these incentives are: maternity leave for female teachers, paternity leave for male teachers, vacation facilities, earn leave facility, job with security, State and National awards for best teachers, promotion facilities, status in the society, minimum risk, quarters facilities in corporation areas, a job with minimum qualification, attractive salary and minimum transfers, etc.

The unfavourable attitude of the teacher towards the teaching profession may be due to higher expectations of the teachers from the teaching profession, lack of contentment, routine job, lack of resource materials, rigid rules and regulations, lack of freedom to take lead, initiative, private tutorials, traditional way of examination, examination oriented education, lack in job involvement, uninteresting textbooks, lack of variety in teaching methods, lack of financial resources, interference of politics, unreasonable interference of the State Government, unexpected/unwanted transfers, uneven disbursement of salary, health problem, family burden, etc.

Measures are to be taken at the State and National levels to improve the working conditions of the teachers in order to create favourable attitude towards profession among teachers.
Insignificant effect of favourable attitude on academic achievement among male teachers, teachers with higher qualifications and teachers with higher teaching experience may be attributed due to the factors like administrative temperament among male teachers, high expectations, egoistic nature of more qualified teachers and job freezing among the teachers with higher experience, etc. These findings are in concurrence with the present findings, the outcome of the study may be accepted widely.

**Teachers' Teaching Effectiveness**

From the result obtained in the present study, it is found that effective teaching has significant effect on academic achievement of students in Social Science in the entire sample, male teachers, female teachers, teachers with higher qualifications and teachers with higher teaching experience. However, it has no significant effect on academic achievement in Social Science in case of entire sample, male and female teachers, higher qualification teachers and teachers with higher experience. This implies that effectiveness of teaching is increased along with the improvement in qualification as well as teaching experience. From this conclusion may be drawn that teachers with higher qualifications and higher teaching experience always posses effective teaching.
The term 'teaching effectiveness' in the present study is used to refer to the results a teacher gets or to the amount of progress the pupils make towards some specified goal of education. An implication of this definition is that teacher effectiveness must be defined, and can only be assessed, in terms of behaviours of pupils, not behaviours of teachers. Hence, in the present study, the investigator made an attempt to collect students ratings in order to measure teaching effectiveness. Further the term 'teaching effectiveness' is also defined by scholars in various ways. 'Teacher effectiveness is the ability of a teacher to produce agreed upon educational effects in a given situations or context'.

According to Gage (1962) has described 'teacher effectiveness' in terms of teachers effect on the realization of some values where value take the form of some educational objectives, defined in terms of desired pupils behaviours, abilities or characteristics.

Gupta (1976) derived the term 'teacher effectiveness' as a repertoire of efficacy exhibited by a teacher in Instructional strategies, Classroom management, Personal disposition, Temperament and tendencies, Evaluation and feedback, Interpersonal relations, Job involvement, Initiative and enthusiasm, Professional values, and Innovativeness in every day teaching – learning situation. The dimensions of teacher effectiveness as: Preparation and planning for
teaching, Classroom management, Knowledge of the subject, Teacher characteristics, and Interpersonal relations.

Debnath, H.N. (1971) identified professional training, intelligence, interest in teaching, friendliness, democratic behaviours, ability to judge reactions of others and possession of all round information as correlates of teaching efficiency. Teaching effectiveness is related to intelligence, emotional stability, conscientious, tender mindedness, trusted nature, placed nature, self-sufficiency and relaxedness factors of Cattell’s 16 PF questionnaire.

The significant effect of teaching effectiveness on academic achievement in the present study shows that the Social Science teachers who are involved in the present study possess the above-mentioned characteristics.

The finding of the present study is supported by parallel studies conducted by Debanath, H. N. (1971); Gupta, G.P. (1978); Mutha (1980); showed the positive and significant correlation between teaching effectiveness and academic achievement.

The studies conducted so far identified the characteristics of an effective teacher as: knowledge of subject matter, sincerity in teaching, mastery of the method of teaching, higher academic qualifications (Debnath, 1971); and more intelligent, emotionally stable, sober,
conscientious, shrewd, relaxed, favourable attitude towards teaching, more effective in their work efficiency (Kaul, 1972).

Mutha (1980), studied the personality characteristics of the effective and ineffective teachers. The study revealed that: (i) Sex, professional training, nature of schooling and income level were significantly associated with the teacher's effectiveness. (ii) The effective teachers had significantly higher scores on intelligence than the ineffective. (iii) The effective teachers had higher scores on anxiety than the ineffective. (iv) The effective teachers had significantly higher scores on teaching aptitude than the ineffective. (v) The effective teachers had significantly higher scores on neuroticism than the ineffective. (vi) The effective teacher had significantly higher scores on theoretical value than the ineffective. (vii) The ineffective teachers had significantly higher scores on political value than the effective. (viii) The effective teachers had significantly higher scores on job satisfaction that the ineffective. (ix) The set of personality variables – ascendance-submission, anxiety, marital adjustment, extroversion, neuroticism, job satisfaction and teaching attitude – significantly predicted the teacher effectiveness. (x) Personality variables – ascendance-submission, anxiety, marital adjustment, extroversion, neuroticism, job satisfaction, teaching aptitude, real self-ideal self-discrepancy, religious value, social value, theoretical value, aesthetic value, economic value, political value and intelligence—significantly predicted the teachers' effectiveness.
The study also revealed that ineffective teaching has less influence on academic achievement in case of entire sample, male teachers, female teachers, teachers with higher qualifications and teachers with higher teaching experience. The findings of the study conducted by Debnath (1971) showed that age, experience, academic achievement and professional training of teachers are significantly related to teaching efficiency. Hence, in order to improve academic achievement of in-service teachers provisions may be made in the distance education programmes to introduce courses related to teachers and teacher education. Provision of sabbatical leave for the teachers extending upto 6 -12 months may be made to the secondary school teachers. Further, in order to strengthen the professional competency of in-service teachers series of General Orientation courses, subject-oriented courses are to be organised at the CTE and IASE levels. At the national level NCERT, and at State level DSERT may organise conferences, seminars, workshops, etc., are to be organised in the special interest of secondary school teachers. As almost all the studies in India support directly or indirectly the findings of the present study, the outcome of the study may be accepted widely.

(iv) Interaction Among 2 Selected Variables

The Extraversion personality type and favourable attitude towards teaching profession have more influence in case of entire sample, male teachers with higher experience. However, the non-significant effect
between the introversion personality type and Unfavourable attitude in case of entire sample, male teachers and high experience teachers does not stand logical reasoning. This needs to be cross-validated. No parallel study of exact nature can be quoted here for comparison of results.

The Introversion personality type and favourable attitude of teachers have more influence in case of male teachers, female teachers, teachers with minimum qualification, teachers with higher and lower teaching experience. However, this combination has no significant effect in case of entire sample and teachers’ with higher qualifications. Although extraversion personality type as an independent variable has no significant effect on academic achievement, but its combination with favourable attitude could over come the adverse effect of extraversion personality type. Hence, there is a significant interaction effect in case of selected sub-groups.

Introversion personality type and unfavourable attitude of teachers have more influence only in case of teachers with minimum qualification. However the non significant effect between extraversion personality type and unfavourable attitude in case of teachers with higher experienced does not stand logical reasoning.

Favourable attitude and effective teaching has influenced more in case of male and female teachers, higher qualification teachers and higher experienced teachers. However, favourable / unfavourable attitude and effective / ineffective teaching has non significant effect in
case of male and female teachers, higher qualification teachers and teachers with high experience is the subject for further verification.

When unfavourable attitude and effective teaching taken together its effect is more in case of female teachers and teachers with higher qualification. This shows that gender, qualifications are related to their effect on academic achievement. However, unfavourable attitude with ineffective teaching has no significant in case of female teachers and teachers with higher qualification. This further implies that unfavourable attitude and effectiveness in teaching demand male teachers, minimum qualification teachers and teachers with higher and lower experience.

(v) Interaction Among 3 Selected Variables

The study also revealed the interesting findings in the 3-way interactions. The introversion personality type, favourable attitude and effective teaching have jointly exerted more influence on academic achievement in case of entire sample, female teachers, teachers with higher and minimum qualification. But its effect is not significant on the combination of dependent variables in case of entire sample, female teachers and teachers with higher and minimum qualification. This leads to cross validation of the findings by further researcher.

The introversion personality type and favourable attitude of teachers have together overcome the negative influence of ineffective teaching only in case of entire sample, female teachers and teachers with
higher and minimum qualification. However, the effect of introversion / extraversion, favourable and unfavourable and ineffective teaching has dominated in case of entire sample, female teachers and teachers with higher and minimum qualification.

Introversion personality type unfavourable attitude and effective teaching has more influence in case of entire sample, female teachers and teachers with minimum qualification. However, introversion/extraversion, favourable / unfavourable and ineffective teaching has less influenced in case of entire sample, female teachers and teachers with minimum qualification.

Lastly extraversion type, favourable attitude and effective teaching has more influenced only in case of entire sample. However, extraversion personality type favourable attitude and ineffective teaching has no influenced only in case of entire sample.

6.13 Conclusions

Based on the discussion of the findings of the study, the following conclusions could be drawn:

(i) The 'Introversion personality' type of secondary school teachers has more influence on academic achievement of students in Social Science than the Extraversion personality type in the entire sample, male teachers, female teachers with higher qualifications and minimum qualifications, and teachers with higher teaching experience and lower teaching experience.
(ii) The 'Favourable attitude' of secondary school teachers towards teaching profession has greater influence on academic achievement of students in Social Science than the teachers with unfavourable attitude towards profession in the entire sample, male teachers, female teachers, teachers with higher qualifications and teachers with higher teaching experience.

(iii) The 'Teaching effectiveness' of secondary school teachers has more influence on academic achievement of students in Social Science than the teachers’ with Ineffective teaching in the entire sample, male and female teachers, teachers with higher qualifications and teachers with higher teaching experience.

(iv) The 'Extraversion personality' type with 'Favorable attitude' of secondary school teachers towards profession will jointly influence more on academic achievement of students in Social Science than the teachers with 'Introversion/Extraversion personality' type and teachers with 'Unfavourable attitude' in the entire sample, male teachers and teachers with higher teaching experience.

(v) The 'Introversion personality' type with 'Favourable attitude' of secondary school teachers towards teaching profession will jointly influence more on academic achievement of students in Social Science than the teachers with 'Introversion/ Extraversion personality' type and teachers with Favourable/Unfavourable attitude’ towards profession in the male
female, teachers with minimum qualifications and teachers with higher/ lower teaching experience.

(vi) The Introversion personality’ type with ‘Unfavourable attitude’ of secondary school teachers towards teaching profession will jointly influence more on academic achievement of students in Social Science than the teachers with ‘Extraversion personality’ type and teachers with ‘Unfavourable attitude’ towards profession in case of teachers with minimum teaching experience only.

(vii) The favourable attitude with ‘Effective teaching’ of secondary school teachers will jointly influence more on academic achievement of students in Social Science than the teachers with favourable/ unfavourable and teachers with ‘Effective / In-effective teaching’ in the male and female teachers with higher and minimum qualification and teachers with higher experienced.

(viii) The Unfavourable attitude with ‘Effective teaching’ of secondary school teachers will jointly influence more on academic achievement of students in Social Science than the teachers with unfavourable attitude and teachers with ‘Ineffective teaching’ in the female teachers and teachers with higher qualification.

(ix) The ‘Introversion personality’ type with ‘Favourable attitude’ and ‘Effective teaching’ of secondary school teachers will jointly influence more on academic achievement of students in Social Science than the
Introvert/Extravert’ teachers with ‘Favourable/Unfavourable attitude’ and teachers with ‘Effective/Ineffective teaching’ in the entire sample, female teachers and teachers with higher and lower teaching experience.

(x) The ‘Introversion personality’ type with ‘Favourable attitude’ and ‘Ineffective teaching’ of secondary school teachers will jointly influence more on academic achievement of students in Social Science than the teachers with ‘Introversion/Extraversion personality’ type with favourable / ‘Unfavourable attitude’ and ‘Effective/Ineffective teaching’ in the entire sample of female teachers, teachers with higher and minimum qualification.

(xi) The ‘Introversion personality’ type with ‘Unfavourable attitude’ and in ‘Effective teaching’ of secondary school teachers will jointly influence more on academic achievement of students in Social Science than the ‘Introvert/Extravert’ teachers with ‘Favourable/Unfavourable attitude’ and ‘Ineffective teaching’ in the entire sample, female teachers and teachers with minimum teaching experience.

(xii) The ‘Extroversion personality’ type with ‘favourable attitude’ and ‘Effective teaching’ of secondary school teachers will jointly influence more on academic achievement of students in Social Science than the ‘Extravert’ teachers with ‘Favourable attitude’ and ‘Ineffective teaching’ in the male teachers alone.
6.14 Educational Implications

(i) Teachers' Personality

Although the outcome of learning is currently classified into three domains - cognitive, affective and psychomotor (Bloom, et al., 1971). The primary goal of the school is the acquisition by pupils of the cognitive outcome, namely, academic skills. The extent to which this goal is attained reflects the effectiveness of the schools' endeavor. Therefore, it is not surprising that great attention has been paid to the school achievement of students.

School achievement is referred to as an outcome of instruction. It can be assessed by using an achievement test, either a teacher-made test or a standardized test. Such tests typically focus upon such topics as the understanding and application of scientific and mathematical principles, the interpretation of literature, or the appreciation of art. School achievement may be expressed as an overall grade based on a combination of all the subjects taken or as a grade in a specific subject or course such as Social Science, reading comprehension, or science. An achievement test is usually constructed to measure knowledge in a specific subject and the pupils' total grade can be obtained by combining the results of all the tests taken. The purpose of a study indicates what kind of achievement score is to be used.
Research studies concerning school achievement have employed both kinds of achievement scores. However, educational researchers have recently become more interested in looking at scores for specific subjects separately. Most of researches on school achievement have sought to identify the factors responsible for different levels and types of accomplishment among individuals. The method generally used to solve this problem is to relate achievement scores to some selected variables such as intelligence or aspects of personality.

In the present study, the researcher hypothesized that extravert and introvert teachers differ significantly in terms of their effects on academic achievement in Social Science. Findings of the study clearly reveal that introvert personality type of teachers has more influence on the achievement in Social Science than the extravert personality type. This may be ascribed to the following reasons.

Introvert teachers are the individuals with a predominantly subjective outlook, have higher degree of cerebral activity than the extraverts. They generally appear cold, aloof, silent and hard to understand. They tend to be socially inept. It is assumed that this kind of introvert tendency may lead to positive and significant influence on academic achievement in Social Science. The findings of the previous studies though not completely consistent, have tended to indicate that these two personality variables are important in predicting school achievement. Suppose, if the finding of the present study is not in tune
with the logic employed, this needs cross validation by further investigations.

Personality is not a collection of intrapsychic structures and events. It is rather a pattern of behaviours in relation to other people. This means that a person cannot find his personality by sitting in meditation. Personality emerges only when a person is actually doing something – with, against, away from, for, to in spite of, or in some other relationship with other people. Personality is developed out of interaction with others. Jung (1964) regards the introvert as some one whose energies and interests are directed towards his own inner mental state, while the extravert directs his energies and interests more towards the outside world. The extravert tendency, which leads to ineffective influence on achievement in Social Science in the present study may be modified through appropriate behaviour modification techniques. Individual guidance and counselling therapeutic continuum may be more suitable.

Many studies have related the two important dimensions of personality - extraversion and introversion – to school achievement. The former characterizes the person as out-going, social, and interested in others rather than himself. The latter although signifies a hesitant, reflective, retiring nature they may have progressive effects, when a person creates a unique and useful product, such as a first – rate novel.
For instance, at the elementary school level extraverted boys and girls have been shown to be scholastically superior to introverted ones (Eysenck and Cookson, 1971). However, at the higher levels of education, the relationship between academic attainment and the two-personality variables change inversely, that is, high achievers tended to be introverted and neurotic.

(Eysenck and Cookson, 1971) found that for secondary school boys the relationship between school achievement and neuroticism varied according to parental pressures and expectations for achievement. When the pressures were low, pupils high on neuroticism tended to attain higher academic achievement, however, when the pressures were greater neuroticism seemed to be disadvantage to pupils. In the present study, the success of the introverted personality type of teachers in influencing on academic achievement of students in Social Science shows that the teachers who are involved in the study were experiencing low pressure. The success of the extraverted personality type of teachers at the early years of teaching may be explained by their readiness to adjust themselves to the new profession of teaching at school. This effect is diminished as the teacher continues in his/her profession. Teachers need more concentration and thinking to do well in the secondary level, and this benefits the introvert teachers. Thus, the finding of the present study assumes its relevance and significance.
(ii) Teachers' Attitude Towards Teaching Profession

Attitudes are enduring dispositions to react in certain ways towards different objects. They are relatively stable. In other words, they represent the extent of positive or negative affect (feeling) associated with such objects including persons, places, institutions, systems, practices and ideas. As the feeling towards any of these may be Positive or Negative, the overall attitude may be said to be favourable or unfavourable. Attitudes are essentially affective, but they have cognitive and conative dimensions as well. They have cognitive content in terms of the knowledge and beliefs about the object concerned. This may emerge from one's sustained experience with the object over a period of time, or from an intense experience in a limited time. In fact, this is the base of the attitude, as the feeling emerges from this cognitive structure which internalized with the accompanying feelings. Attitudes also have a conative dimension, in the sense that, they urge one to behave or respond in certain particular ways in respect of the objects. In other words, they make for certain behavioural tendencies. A positive attitude entails approach behaviour in some form or degree (receive, respond, seek, participate, contribute, love, etc.), and a negative or unfavourable attitude makes for avoidance behaviour (avoid, move away from, dislike, oppose, hate, etc.).
In the present study, professional attitude of the teachers towards teaching profession is conceived. It is a comparatively stable, emotional and learned pattern of behaviour which predisposes the individual to act in some consistent way towards his/her profession. It may range between favourable attitudes to unfavourable attitude. The findings of the present study revealed that favourable attitudes of teachers towards teaching profession has more influence than the unfavourable attitude towards teaching. This may be due to that a favourable attitude makes the work not only easier but also more satisfying and professional rewarding. An unfavorable attitude makes the teaching task harder, more tedious and unpleasant.

Attitudes tend to develop incidentally, gradually, and generally unconsciously. They arise as by-products of one's day-to-day experiences. If the teacher is pleasant, enthused about his subject, and sensitive to the needs of his students, the students may develop favourable attitudes towards the teacher and the subject matter. If the teacher is punitive, on the other hand, the child will tend to develop negative attitudes towards the teacher and the subject matter. Thus, the attitudes of the teachers are the determinants of students' attitude. This will prevent him from doing well. As a result, the school experience, rather than serving as the basis for self-realization, may well have highly detrimental repercussions on his whole life. Thus, he may not care
particularly about the dates of historical events or the theorems of geometry.

Attitude formation may be a matter of imitation, many of our attitudes are simply borrowed. The child accepts the views of his parents and other significant persons in his environment. Attitudes also develop as a result of deliberate cultivation, especially by parents and teachers.

What the teacher is as a person and the way he acts is generally more important in fostering desirable attitudes on the part of the children than what he preaches. Hence, it is very essential that the teacher possess a favourable attitude towards one's profession. To the extent that teachers are often used as models by children in the formation of their attitudes, it is imperative that they meet definite standards of suitability. It is essential that they have a positive outlook on teaching profession and whose integrity, sincerity and loyalty are unquestioned, who can embody such beliefs into living lessons, and who can use their prestige to inspire children in the development of wholesome attitudes which will serve as a foundation of wholesome behaviour. It is essential that teachers exemplify the basic values of our culture. On the other hand, *teachers cannot give the child attitudes*; they can only arrange for him to have satisfying experiences that will lead to the formation of positive attitudes on the basis of which desirable behaviour can become integrated into a pattern of life.
In the present study, an unfavourable attitudes of the teachers towards teaching profession has less influence on the academic achievement in Social Science. Hence, it is essential to influence upon the attitudes of the teachers for manifestation in a right direction.

If we have to deliberately influence attitude change, one way is to provide appropriate experiences in an intense way with the psychological objects concerned. Personal experience with the object concerned can influence attitudes significantly. Encouraging the approach behaviours or avoidance behaviours as appropriate through repeated reinforcement, is another. But the most convenient and adequately effective means is perhaps concentrated communication, to build up a suitable cognitive structure or change in the existing system of knowledge and beliefs about the object, prestige, status, reputation, etc., of the communicator would count in this printed materials especially those published by reputed firms, and mass media presentations have prestige value and influence. The logical strength of the communication is important for the relatively more intelligent ones and emotional appeal for the others. The messages must carry conviction, verbal exposition, especially inspiring talks, discussions and debates, facilitating logical analysis, convincing arguments and conclusions, audio-visual support or communication (sound, drawings, pictures, cartoons, slides, mock-ups, etc.) dramatised presentations like (skits, plays, socio-drama, T.V. or video presentation,
documentary, feature films, etc.) have all been found to be effective. Judiciously mixing up some of these are also quite effective in making persuasive communication.

(iii) Teachers’ Teaching Effectiveness

In the present study, the investigator hypothesised that effective and ineffective teachers differ significantly in terms of their effect on academic achievement in Social Science. The study clearly revealed that teachers with effective teaching influence more on academic achievement in Social Science than the teachers with ineffective teaching.

The term ‘teaching effectiveness’, in the present study is used to refer to the results a teacher gets or to the amount of progress the pupils make towards attainment of instructional objectives. The role of the classroom teacher in education is central. The teacher is, after all, the point of contact between the educational system and the pupil. The impact of any educational programme or innovation on the pupil operates through the pupil’s teachers. It is, therefore, quite accurate to say that a school’s effectiveness depends directly on the effectiveness of its teachers. Maximizing teacher effectiveness is a major goal of education.

The studies conducted in the areas of teaching effectiveness showed that effective teaching is correlated with many variables like intelligence, personality of the teacher, classroom situation and the
studies also revealed that pupils co-operation, readiness of teacher, motive to achieve better qualifications, age, sex, rewards, fulfillment of needs would influence on teacher effectiveness.

Teacher effectiveness was first perceived by researchers as a consequence of characteristics or personality. The teaching learning process is essentially a live process, in the sense that, it is a warm interaction between two living organisms and hence, while exploring the effectiveness of teaching one should take into account the non-cognitive dimensions such as warmth, understanding, empathy, concern, sharing, sympathy, deep understanding, mutual psychological explorations which are all rooted in the philosophical view of life one holds. Therefore, the effectiveness of teaching apart from the classroom interaction should add certain aspects of value orientation of the individual teacher. Attempts were thus made to identify these characteristics of effective teacher is best characterised by Commonwealth Teacher Training Study which used exhaustive and meticulous procedures to produce a number of lists of varying lengths. Typical of the characteristics listed were the following, which were the top six on a list of twenty-five: (1) adaptability, (2) considerateness, (3) enthusiasm, (4) good judgement, (5) honesty, and (6) magnetism.

As already mentioned that there are several factors that would affect teacher effectiveness such as teaching experience, type of school,
and competency in teaching. It is also true that the intelligence and creativeness, the innovative endeavour on the part of the teacher are the factors affecting the teacher effectiveness. Borich (1977) observes that, "teaching involves the dynamic interplay of human personalities the central one being those of the teacher and the pupils". Effective teaching will depend upon the attitude of the teacher the way he sees his own role and the way he relates it to his students. The competency of teachers in the classroom teaching as follows: he has to understand the child and his difficulties, select and organise material to suit his capacities and interests, choose appropriate time for his work and present the subject matter in an effective manner. Any effective teaching in the classroom depends upon these competencies. Travers (1980) observes that, effective teaching is not a set of distinct acts, each isolated from the other, as proponents of the theory of distinct competencies would have believe specific behaviours identified as related to effective teaching are merely symptomatic of the underlying characteristics of effective teachers and it is these characteristics that teacher preparation should attempt to develop. Teaching as performing art requires that the teacher training give emphasis to training the prospective teachers' personality. His school of thought emphasises the development of an effective classroom personality as a precondition to effective teaching.

It is instructive to examine a study in which secondary school students were asked to list characteristics of the teachers they had liked
best (Hart, 1936). The six most frequently mentioned characteristics were:

(i) Has teaching skills;
(ii) Is cheerful, good-natured, patient, not irritable;
(iii) Is friendly, companionable, not aloof;
(iv) Is interested in pupils, understands them;
(v) Is impartial does not have teacher's pets; and,
(vi) Is fair in grading and marking.

The same students were asked to consider whether the teacher from whom they learned most was the same as the one they liked best; and asked to show how the most effective teacher differed from the one best liked. The four characteristics mentioned most often were:

(i) Makes greater demands of students,
(ii) Has more teaching skills,
(iii) Has more knowledge of subject matter, and
(iv) Has better discipline.

Hence, there is a need to develop remedial major keeping in view the qualities identified in the latter part of the above study to overcome the qualities of ineffectiveness among secondary school teachers.

The findings of the present study revealed that ineffective teaching has less influence on academic achievement in Social Science when compared to effective teaching. The available research studies indicate
that many factors have been examined in relation to teaching effectiveness among school teachers. As it has already been indicated, teacher effectiveness is a psychological condition, where in an individual may happy when he deals effectively in the classroom, when compared to ineffective teacher. Though some research has been done on teacher effectiveness in abroad not many studies have been undertaken in India. Growing consciousness about the limitation of research on teacher effectiveness and the compelling need to achieve the much needed break through to meet the emerging challenge of teacher effectiveness. Stimulated many researchers to make concerted attempts to salvage the complicated situation. Thus, there is a need to explore the possible causes for ineffective teaching among teachers, so that proper programme may be developed for ineffective teachers, viz., need based short-term orientation courses, long term subject orientation courses, workshops, seminars, symposium, conferences, summer courses, panel-discussion, film-shows on important educational themes, arrangement for mobile library, provision of internet facilities to schools, telecasting theme oriented programmes during the specific hours, liaison with the nearby college of education and a degree college, to act as nodal agencies in sharing resources, supply of C.D’s to schools, supply of A.V. materials, recognition and rewards for best teachers, promotional facilities, etc., are to be created for upliftment of professional skills among ineffective teachers.
Over and above, developing a liking for the profession is an essential prerequisite for its success. Under the present stress of unemployment, an individual perhaps has little freedom to take up a job of his choice, but has to accept whatever comes in his way. Under these circumstances, a person should develop an attitude to like the work that is given. It is only by identifying oneself with one's profession that it is possible for an individual to perform his/her work to the satisfaction of everyone. This statement particularly applies to the teaching profession.

6.15 Suggestions for Further Research

While conducting the study, a need for undertaking a few specific research studies relating to the field was felt. The suggestions for such studies are enumerated below under two categories: one, studies that arise out of the limitations of the present investigation, and the other, studies that are related to the field.

(i) Studies Arising out of the Limitations of the Present Investigation

(i) Development of valid and reliable rating scale to measure the professional attitudes of secondary school teachers towards the teaching profession.

(ii) Development of valid and reliable personality inventory to measure the personality of secondary school teachers.
(iii) Development of valid and reliable student rating scales and inventory for objective measurement of secondary school teacher's personality and attitude towards profession.

(iv) A critical study of influence of selected teacher variables on academic achievement of students in all the classes of secondary schools.

(v) An interaction effect of influence of selected teacher variables on academic achievement of students in all the school subjects of secondary schools.

(vi) The findings of the present study may be cross-validated involving the secondary school teachers from both rural and urban areas.

(vii) The study may be repeated involving larger sample of teachers as well as students at the secondary level.

(viii) The study with the same design may be conducted to investigate the relationship of teachers' personality, teachers' attitude and teachers' teaching effectiveness with academic achievement of students in all the school subjects.

(ix) Study may be undertaken to investigate the relative contributions of the variables – teachers' personality, teachers' attitude and teachers' teaching effectiveness on academic achievement in all the school subjects.
Interaction study could be undertaken involving Cattell's 16 Personality factors in relation to academic achievement.

In the present study teachers teaching effectiveness is rated by 3 students (above average, average and below average) in order to arrive at efficiency index a study may be undertaken involving large number of students to assess teacher teaching effectiveness.

The present investigation is confined to interaction effect of personality, attitude and teaching effectiveness of teachers on academic achievement of students. However, further analysis may be carried out to study the direct and indirect effect of these variables on dependent variable using path analysis technique.

Studies Related to the Problem

Similar study may be undertaken to investigate the interaction effect of teachers’ personality, teachers’ attitude and teachers teaching effectiveness at the primary level, +2 level, and at the university level.

Study may be undertaken to investigate the interaction effect of students’ personality, attitude and study habits on their academic achievement in all the school subjects.

The study with the same design may be undertaken involving teacher educators personality, attitude and teaching effectiveness on the academic performance of
teacher trainees at the Colleges of Education and as well as Teacher Training Institutions.

(iv) Study may be undertaken to investigate the interaction effect of teacher educators' personality, attitude and teaching effectiveness on the academic performance of teacher-trainees/in-service teachers undergoing pre-service and in-service training programmes organised in DIETs.

(v) A comparative study of interaction effects of the selected variables among teachers serving in Government, Private Aided and Private Unaided secondary schools may be undertaken.

(vi) A study of interaction effect of teachers variables, viz., personality, attitude and teaching effectiveness may be undertaken keeping in view the residential schools like Morarji Desai Residential School, Jawahar Navodaya Vidyalayas, Sainik Schools, etc.

(vii) A study may be undertaken involving the teachers' job satisfaction, job involvement and job expectations on teaching performance.

(viii) Contradictory to the findings of certain studies the present investigation has revealed insignificant interaction effect of the teachers variables like introversion personality type, favourable attitude and effective teaching in the teachers with minimum and higher qualifications and teachers with lower teaching
experience. An indepth study may be undertaken in order to tackle this contradictory result.

(ix) A comparative study of teachers serving at primary, secondary, pre-university and university level may be undertaken with the same research design.

(x) A study could be undertaken with the same teachers variables with a view to compare interaction effect of students in rural and urban areas; and students belonging to advantaged and disadvantaged groups.

(xi) A comparative study may be undertaken to investigate the interaction effect of personality, attitude and teaching effectiveness of teachers coming from urban and rural areas.

(xii) A comparative study may be undertaken to investigate the interaction effect of personality, attitude and teaching effectiveness of teachers serving in residential and non-residential schools.

(xiii) An interaction effect of personality, attitude and teaching effectiveness of teachers on academic achievement motivation of students may be undertaken.

(xiv) An impact study may be undertaken to investigate the effect of school climate on personality, attitude and teaching effectiveness of teachers at primary, secondary, pre-university and university levels.