CHAPTER - V
COMPENDIUM

5.1.0: Introduction

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5.1.0: INTRODUCTION

Having discussed the importance and dimensions of psychological factors at length, providing the background for the need of psychological factors and explaining the procedure of investigation, sample selected, data collection and interpretation of the results in the preceeding chapters, the present chapter is devoted to presenting a short summary of the investigation. This summary is given in terms of the findings, discussions and educational implications in the present context and suggestions and recommendations for further studies.

The present study was carried out with the aim of finding out the relationship among Achievement motivation, Scientific attitude, Mental ability and Achievement in science of X standard students in Coimbatore district.

For easy understanding, the summary is presented under the following headings.

1. Findings
2. Discussions
3. Educational Implications
4. Recommendations for further study

5.2.0: FINDINGS

1. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Hill area schools.

2. There is a positive significant relationship between Scientific attitude and Mental ability of X standard students studying in Hill area schools.
3. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Hill area schools.

4. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Corporation schools.

5. There is no significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Municipal schools.

6. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Aided schools.

7. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Government schools.

8. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Rural area schools.

9. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Urban area schools.

10. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Boys schools.
11. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Girls schools.

12. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Mixed schools.

13. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard students studying in Coimbatore district.

14. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard boys studying Coimbatore district.

15. There is a positive significant relationship between Achievement motivation and Scientific attitude of X standard girls studying in Coimbatore district.

16. There is no significant relationship between Achievement motivation and Mental ability of X standard students studying in Municipal schools.

17. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Corporation schools.

18. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Aided schools.
19. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Government schools.

20. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Rural area schools.

21. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Urban area schools.

22. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Boys schools.

23. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Girls schools.

24. There is a positive significant relationship between Achievement motivation and Mental ability of X standard students studying in Mixed schools.

25. There is a positive significant relationship between Achievement motivation and Mental ability of X standard Boys studying in Coimbatore district.

26. There is a positive significant relationship between Achievement motivation and Mental ability of X standard Girls studying in Coimbatore district.
27. There is a positive significant relationship between Achievement motivation and Mental ability of X standard Students studying in Coimbatore district.

28. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Municipal schools.

29. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Corporation schools.

30. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Aided schools.

31. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Government schools.

32. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Rural area schools.

33. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Urban area schools.

34. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Boys schools.

35. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Girls schools.

36. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Mixed schools.
37. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Boys studying in Coimbatore district.

38. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Girls studying in Coimbatore district.

39. There is a positive significant relationship between Scientific attitude and Mental ability of X standard Students studying in Coimbatore district.

40. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Municipal schools.

41. There is a positive significant relationship between Scientific attitude and Achievement science of X standard Students studying in Corporation schools.

42. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Aided schools.

43. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Government schools.

44. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Rural area schools.

45. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Urban area schools.
46. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Boys schools.

47. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Girls schools.

48. There is a positive significant relationship between Scientific attitude and Achievement in science X standard Students studying in Mixed schools.

49. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Boys studying in Coimbatore district.

50. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Girls studying in Coimbatore district.

51. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Coimbatore district.

52. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard students studying in Municipal schools.

53. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard students studying in Corporation schools.

54. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard students studying in Aided schools.
55. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard students studying in Government schools.

56. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard students studying in Rural area schools.

57. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard students studying in Urban area schools.

58. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard Students studying in Boys schools.

59. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard Students studying in Girls schools.

60. There is a positive significant relationship between Achievement motivation and Achievement in science X standard Students studying in Mixed schools.

61. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard Boys studying in Coimbatore district.

62. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard Girls studying in Coimbatore district.
63. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard Students studying in Coimbatore district.

64. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Municipal schools.

65. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Corporation schools.

66. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Aided schools.

67. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Government schools.

68. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Rural area schools.

69. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Urban area schools.

70. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Boys schools.
71. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Girls schools.

72. There is a positive significant relationship between Mental ability and Achievement in science X standard Students studying in Mixed schools.

73. There is significant relationship between Mental ability and Achievement in science of X standard Boys studying in Coimbatore district.

74. There is no significant relationship between Mental ability and Achievement in science of X standard Girls studying in Coimbatore district.

75. There is a positive significant relationship between Mental ability and Achievement in science of X standard Students studying in Coimbatore district.

76. There is a positive significant relationship between Achievement motivation and Achievement in science of X standard Students studying in Hill area schools.

77. There is a positive significant relationship between Scientific attitude and Achievement in science of X standard Students studying in Hill area schools.

78. There is significant relationship between Mental ability and Achievement in science of X standard Students studying in Hill area schools.

79. The X standard students studying in government, aided, municipal and corporation schools differ in their Achievement motivation.
80. The X standard students studying in government, aided, municipal and corporation schools differ in their Scientific attitude.

81. The X standard students studying in government, aided, municipal and corporation schools differ in their Mental ability.

82. The X standard students studying in government, aided, municipal and corporation schools differ in their Achievement in Science.

83. The X standard students studying in rural, urban and hill area schools differ in their Achievement motivation.

84. The X standard students studying in rural, urban and hill area schools differ in their Scientific attitude.

85. The X standard students studying in rural, urban and hill area schools differ in their Mental ability.

86. The X standard students studying in rural, urban and hill area schools differ in their Achievement in Science.

87. Aided school students are better than Government school students in their Achievement motivation.

88. Aided school students are better than Government school students in their Scientific attitude.

89. Aided school students are better than Government school students in their Mental ability.

90. Aided school students are better than Government school students in their Achievement in science.
91. Municipal school students are better than Government school students in their Achievement motivation.

92. Municipal school students are better than Government school students in their Scientific attitude.

93. Both Government and Municipal school students stand at same level in Mental ability.

94. Both Government and Municipal school students stand at same level in Achievement in science.

95. Government and Corporation school students do not show difference in Achievement motivation.

96. Government and Corporation school students do not show difference in Scientific attitude.

97. Government school students are better than Corporation school students in their Mental ability.

98. Government school students are better than Corporation school students in their Achievement in science.

99. Aided and Municipal school students do not show difference in Achievement motivation.

100. Aided and Municipal school students stand at same position in respect of Scientific attitude.

101. Aided school students are better than Municipal school students in their Mental ability.
102. Aided school students are better than Municipal school students in their Achievement in science.

103. Aided school students are better than Corporation school students in their Achievement motivation.

104. Aided school students are better than Corporation school students in their Scientific attitude.

105. Aided school students are better than Corporation school students in their Mental ability.

106. Aided school students are better than Corporation school students in their Achievement in science.

107. Municipal school students are better than Corporation school students in their Mental ability.

108. Municipal school students are better than Corporation school students in their Achievement in science.

109. Municipal school students are better than Corporation school students in their Achievement motivation.

110. Municipal and Corporation school students do not differ in their Scientific attitude.

111. Rural and Urban area school students do not differ in Achievement motivation.

112. Urban area school students are better than Rural area school students in their Scientific attitude.
113. Rural area school students are better than Urban area school students in their Achievement in science.

114. Rural and Urban area school students do not differ in their Mental ability.

115. Rural area school students are better than Hill area school students in their Achievement motivation.

116. Rural area school students are better than Hill area school students in their Mental ability.

117. Rural area school students are better than Hill area school students in their Achievement in science.

118. Rural and Hill area school students do not differ in their Mental ability.

119. Urban area school students are better than Hill area school students in their Achievement motivation.

120. Urban area school students are better than Hill area school students in their Mental ability.

121. Urban area school students are better than Hill area school students in their Achievement in science.

122. Urban area school students are better than Hill area school students in their Scientific attitude.

123. Girls are better than boys of X standard in their Achievement motivation in Coimbatore District.

124. Girls are better than boys of X standard in their Mental ability in Coimbatore District.
125. Girls are better than boys of X standard in their Achievement in science in Coimbatore District.

126. Girls are better than boys of X standard in their Scientific attitude in Coimbatore District.

127. Boys studying in boys schools and mixed schools do not differ in their Achievement motivation.

128. Boys studying in boys schools and mixed schools do not differ in their Scientific attitude.

129. Boys studying in boys schools and mixed schools do not differ in their Mental ability.

130. Boys studying in mixed schools are better than boys studying in boys schools in their Achievement in science.

131. Girls studying in mixed schools are better than girls studying in girls schools in their Achievement in science.

132. Girls studying in mixed schools are better than girls studying in girls schools in their Scientific attitude.

133. Girls studying in mixed schools are better than girls studying in girls schools in their Mental ability.

134. Girls studying in girls schools and mixed schools do not differ in their Achievement motivation.
5.3.0: DISCUSSIONS

1. The findings of the present study go in-line with result of Jain.S (1983) who has arrived that the intelligence was found to be a part of Achievement motivation.

2. The findings of the present study show that Girls are better than Boys in Scientific attitude whereas the findings of Jain.S (1983), Dani.D.N (1984) and Digumarthi Baskara Rao (1990) are contrary to it. According to them there is no difference in the Scientific attitude on the basis of sex.

3. The research works of Dani.D.N (1984) shows that the Rural students were found to have a low level of Scientific attitude as compared to Urban students. The results of the present study is inline with the previous studies indicating that Urban area school students are better than Rural area school students in their Scientific attitude.

4. The findings of the present study shows that Rural and Urban area school students do not differ in their Mental ability. The findings of Devarajan.P (2000) also show that there is no significant difference in the Mental ability of +2 students hailing from Urban and Rural locality.

5. The findings of the present study show that Girls are better than Boys in Mental ability whereas the findings of Devarajan.P (2000) also show that the +2 Boys and Girls do not differ in Mental ability.

6. The study of Elango.M (1994) shows that the Academic achievement is influenced by intelligence. Renukadevi (2002) and Abdul Raheem (2003) concluded that there is no significant relationship between Achievement and Intelligence.
The findings of the present study reveal that there is significant relationship between Mental ability and Achievement in science. In this regard, the result differs from the findings of Renukadevi (2002) and Abdul Raheem (2003).

7. The findings of the present study go in-line with the result of Athmam Julie Ann (2003), who has arrived that high school students had better Achievement motivation.

8. The findings of the present study show that Achievement motivation of Boys and Girls correlated with Mental ability. The findings of Tirupathi.R.C (1986) also shows that Achievement motivation of Boys and Girls are correlated with intelligence.

9. The studies of Tirupathi.R.C (1986) and Devanesan Paul (1990) show that there was significant relationship between Achievement motivation and Achievement.

     The results of the present study are in-line with the previous studies indicating that there was significant relationship between Achievement motivation and Achievement in science.

10. The findings of the present study go in-line with the results of Jeyavani.S (2000) who has arrived that there is no significant difference between Rural and Urban area school students in respect of Achievement motivation.

5.4.0: EDUCATIONAL IMPLICATIONS

     Many research studies have professed that the Achievement motivation, Scientific attitude and Mental ability play an important role in determining the level of Academic achievement. Most of them have investigated only the impact
of either one or two variables selected for this study. Moreover to the knowledge of the investigator, no such study has been carried out by anybody selecting these three variables. So the researcher has decided to investigate on “The relationship among Achievement motivation, Scientific attitude, Mental ability and Achievement in science of X standard students in Coimbatore District”.

The implications of the study are as follows:

1. The head of the school as well as the teachers must know the students’ personal, social and psychological data.

2. A cumulative record for each student must be maintained. It is useful as it will help the teachers to identify their students’ strengths, attitudes, mental abilities and interests for academic, personal and vocational guidance. This cumulative record provides a continuous evaluation of the physical, mental and social development of every student.

3. The programmes of guidance and counselling must be provided to the students. It conserves and develops human resources. It broadens one’s mind and widens one’s scientific line of thinking. It helps the students to become useful citizens and frustrated students to achieve their goals.

4. In order to raise the Mental ability of the students, the teacher should inculcate the habit of going to library to read books on reasoning, aptitude, current affairs, etc.

5. The school should have a school library with adequate books on different subjects. The school authority should provide a separate period for library reading for the students. Reading habit may help the students to improve their Mental ability and Scientific attitude, etc.
6. In order to increase the Scientific attitude, the school authority should provide better library facilities, participation of students in science fairs, exhibitions, quiz programmes, etc.

7. Institutions may collect information about occupations and make them available to students and counsel each individual with regard to his abilities and interests, and with regard to needs and requirements of various occupations in terms of abilities and skills.

5.5.0: RECOMMENDATIONS FOR FURTHER STUDY

Inline with the present study, similar studies of this nature can be conducted on the following areas.

1. This study is limited to Coimbatore district. It may be extended to other districts in Tamil Nadu.

2. This study can be extended to other states in India.

3. This study may also be conducted in Matriculation and Anglo-Indian English schools.

4. A comparative study of Mental ability of X and XII standard students can be taken.

5. A comparative study of Scientific attitude of X and XII standard students can be taken.

6. A comparative study of Achievement motivation of X and XII standard students can be taken.

7. A study on the relationship among Scientific attitude, Achievement motivation, mental ability and Academic achievement of students studying in Teacher Training Colleges can be undertaken.
8. A study on the relationship among Scientific attitude, Achievement motivation, Mental ability and Academic achievement of students studying in Arts Colleges can be undertaken.

9. A study on the relationship among Scientific attitude, Achievement motivation, Mental ability and Academic achievement of students studying in Medical Colleges can be undertaken.

10. A study on the relationship among Scientific attitude, Achievement motivation, Mental ability and Academic achievement of students studying in Open University can be undertaken.