CHAPTER – V
FINDINGS, INTERPRETATIONS, RECOMMENDATIONS
AND SUGGESTIONS

5.1. FINDINGS

PART – I

1. The high school students in Chennai are dominant of right hemisphericity (63.07%).
2. The level of creative thinking in toto (50.08%) and in terms of its dimensions – fluency (51.33%), flexibility (49.92%) and originality (52.27%) of high school students is average.
3. The level of intelligence of high school students is average (54.62%).
4. The level of academic achievement of high school students is average (46.79%).

PART – II

Section – A

1. The high school students in Chennai with left hemisphericity dominance are found to be average in their creative thinking in toto (53.39%) and in terms of its dimensions – fluency (50.42%), flexibility (47.03%) and originality (55.08%). Similarly, the high school students with right hemisphericity dominance have average level of creative thinking in toto (48.14%) and in terms of its dimensions – fluency (51.86%), flexibility (51.61%) and originality (50.62%).
2. Significant difference is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality. The high school students with dominance of right hemisphericity have higher creative thinking than the students with dominance of left hemisphericity.
3. The high school students with left hemisphericity dominance have high level of intelligence (73.73%) and the students with right hemisphericity dominance have average level of intelligence (71.22%).
4. Significant difference is found between the high school students with left and right hemisphericity dominance in their intelligence. The high school students with
dominance of left hemisphericity have higher level of intelligence than the students with dominance of right hemisphericity.

5. The high school students with left hemisphericity dominance (46.61%) and the students with right hemisphericity dominance (46.90%) have average level of academic achievement.

6. Significant difference is found between the high school students with left and right hemisphericity dominance in their academic achievement. The high school students with dominance of left hemisphericity have higher academic achievement than the students with dominance of right hemisphericity.

7. The right hemisphericity dominance is the significant predictor of the creative thinking of the high school students in Chennai.

8. The left hemisphericity dominance is the significant predictor of the intelligence of the high school students in Chennai.

9. The left hemisphericity dominance is the significant predictor of the academic achievement of the high school students in Chennai.

Section – B

1. The high school students with low (64.22%), moderate (66.02%) and high (59.07%) father’s education are dominant of right hemisphericity.

2. The high school students having low father’s education with left hemisphericity dominance are found to be average in their creative thinking in toto (51.28%) and in terms of its dimensions – fluency (50%), flexibility (48.72%) and originality (53.85%). Similarly, the high school students having low father’s education with right hemisphericity dominance have average level of creative thinking in toto (47.14%) and in terms of its dimensions – fluency (50%), flexibility (50%) and originality (49.29%).

3. The high school students having moderate father’s education with left hemisphericity dominance are found to be average in their creative thinking in toto (54.29%) and in terms of its dimensions – fluency (50%), flexibility (47.14%) and originality (57.14%). Similarly, the high school students having moderate father’s education with right hemisphericity dominance have average level of creative thinking in toto (49.26%) and in terms of its dimensions – fluency (52.94%), flexibility (51.47%) and originality (52.94%).
4. The high school students having high father’s education with left hemisphericity dominance are found to be average in their creative thinking in toto (54.55%) and in terms of its dimensions – fluency (51.14%) and originality (54.55%); whereas they are found to be high in flexibility (46.59%). Similarly, the high school students having high father’s education with right hemisphericity dominance have average level of creative thinking in toto (48.03%) and in terms of its dimensions – fluency (52.76%), flexibility (53.54%) and originality (49.61%).

5. Significant difference is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality having different levels of father’s education. In all these categories, the high school students with dominance of right hemisphericity have higher creative thinking than the students with dominance of left hemisphericity.

6. The high school students having low father’s education with left hemisphericity dominance have high level of intelligence (65.38%) and the students with right hemisphericity dominance have average level of intelligence (71.43%).

7. The high school students having moderate father’s education with left hemisphericity dominance have high level of intelligence (82.86%) and the students with right hemisphericity dominance have average level of intelligence (73.53%).

8. The high school students having high father’s education with left hemisphericity dominance have high level of intelligence (73.86%) and the students with right hemisphericity dominance have average level of intelligence (68.50%).

9. Significant difference is found between the high school students with left and right hemisphericity dominance in their intelligence having different levels of father’s education. The high school students with dominance of left hemisphericity have higher level of intelligence than the students with dominance of right hemisphericity.

10. The high school students having low father’s education with left hemisphericity dominance (50%) and the students with right hemisphericity dominance (45.00%) have average level of academic achievement. The high school students whose father’s education is moderate with left hemisphericity dominance (44.29%) and the students with right hemisphericity dominance (44.85%) have average level of academic achievement. The high school students having high father’s education
with left hemisphericity dominance (47.73%) have high level of academic achievement; whereas the students with right hemisphericity dominance (51.18%) have average level of academic achievement.

11. Significant difference is found between the high school students with left and right hemisphericity dominance in their academic achievement having different levels of father’s education. The high school students with dominance of left hemisphericity have higher academic achievement than the students with dominance of right hemisphericity.

12. The right hemisphericity dominance is the significant predictor of the creative thinking of the high school students having different levels of father’s education.

13. The left hemisphericity dominance is the significant predictor of the intelligence of the high school students having different levels of father’s education.

14. The left hemisphericity dominance is the significant predictor of the academic achievement of the high school students having different levels of father’s education.

15. The high school students with low (63.91%), moderate (60.11%) and high (64.93%) mother’s education are dominant of right hemisphericity.

16. The high school students having low mother’s education with left hemisphericity dominance are found to be average in their creative thinking in toto (59.32%) and in terms of its dimensions – fluency (58.47%), flexibility (54.24%) and originality (60.17%). The high school students having low mother’s education with right hemisphericity dominance have high level of creative thinking in toto (44.98%) and average in its dimensions – fluency (49.29%), flexibility (47.85%) and originality (48.33%).

17. The high school students having moderate mother’s education with left hemisphericity dominance are found to be low in their creative thinking in toto (49.30%) and in terms of its dimensions – fluency (53.52%) and flexibility (56.34%); whereas they have average level of originality (49.30%). But, the high school students having moderate mother’s education with right hemisphericity dominance have average level of creative thinking in toto (50.47%) and in terms of its dimensions – fluency (52.34%), flexibility (51.40%) and originality (51.40%).

18. The high school students having high mother’s education with left hemisphericity dominance are found to be average in their creative thinking in toto (51.06%) and in terms of its dimensions – fluency (44.68%) and originality (51.06%); whereas
they are found to be high in flexibility (51.06%). But, the high school students having high mother’s education with right hemisphericity dominance have average level of creative thinking in toto (54.02%) and in terms of its dimensions – fluency (57.47%), flexibility (60.92%) and originality (55.17%).

19. Significant difference is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality with different levels of mother’s education. The high school students with dominance of right hemisphericity have higher creative thinking than the students with dominance of left hemisphericity.

20. The high school students having low mother’s education with left hemisphericity dominance have high level of intelligence (71.19%) and the students with right hemisphericity dominance have average level of intelligence (69.86%).

21. The high school students having moderate mother’s education with left hemisphericity dominance have high level of intelligence (73.24%) and the students with right hemisphericity dominance have average level of intelligence (72.90%).

22. The high school students having high mother’s education with left hemisphericity dominance have high level of intelligence (80.85%) and the students with right hemisphericity dominance have average level of intelligence (72.41%).

23. Significant difference is found between the high school students with left and right hemisphericity dominance in their intelligence with different levels of mother’s education. The high school students with dominance of left hemisphericity have higher level of intelligence than the students with dominance of right hemisphericity.

24. The high school students having low mother’s education with left hemisphericity dominance (47.46%) and the students with right hemisphericity dominance (46.89%) have average level of academic achievement. The high school students having moderate mother’s education with left hemisphericity dominance (46.48%) and the students with right hemisphericity dominance (44.86%) have average level of academic achievement. The high school students having high mother’s education with left hemisphericity dominance (46.81%) have high level of academic achievement; whereas the students with right hemisphericity dominance (49.43%) have average level of academic achievement.
25. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their academic achievement with different levels of mother’s education. The high school students with dominance of left hemisphericity have higher academic achievement than the students with dominance of right hemisphericity.

26. The right hemisphericity dominance is the **significant predictor** of the creative thinking of the high school students with different levels of mother’s education.

27. The left hemisphericity dominance is the **significant predictor** of the intelligence of the high school students with different levels of mother’s education.

28. The left hemisphericity dominance is the **significant predictor** of the academic achievement of the high school students with different levels of mother’s education.

29. The first born (66.67%), middle born (64.60%) and last born (58.78%) high school students are dominant of **right hemisphericity**.

30. The first born students with left hemisphericity dominance are found to be **low** in their creative thinking in toto (46.59%) and in terms of its dimensions – fluency (50%), flexibility (52.27%) and originality (45.45%). The first born students with right hemisphericity dominance have **high** level of creative thinking in toto (51.14%) and **average** in its dimensions – fluency (55.11%), flexibility (52.27%) and originality (53.41%).

31. The middle born students with left hemisphericity dominance are found to be **average** in their creative thinking in toto (57.50%) and in terms of its dimensions – fluency (57.50%), flexibility (50%) and originality (62.50%). But, the middle born students with right hemisphericity dominance have **average** level of creative thinking in toto (46.58%) and in terms of its dimensions – fluency (50.68%), flexibility (47.95%) and originality (47.95%).

32. The last born students with left hemisphericity dominance are found to be **average** in their creative thinking in toto (59.56%) and in terms of its dimensions – fluency (55.56%) and originality (52.78%); whereas they are found to be **high** in flexibility (60.19%). But, the last born students with right hemisphericity dominance have **average** level of creative thinking in toto (45.45%) and in terms of its dimensions – fluency (48.70%), flexibility (52.60%) and originality (48.70%).

33. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality having different birth order. The
high school students with dominance of right hemisphericity have higher creative thinking than the students with dominance of left hemisphericity.

34. The first born students with left hemisphericity dominance have high level of intelligence (72.73%) and the students with right hemisphericity dominance have average level of intelligence (72.16%).

35. The middle born students with left hemisphericity dominance have high level of intelligence (75%) and the students with right hemisphericity dominance have average level of intelligence (75.34%).

36. The last born students with left hemisphericity dominance have high level of intelligence (74.07%) and the students with right hemisphericity dominance have average level of intelligence (68.18%).

37. Significant difference is found between the high school students with left and right hemisphericity dominance in their intelligence having different birth order. The high school students with dominance of left hemisphericity have higher level of intelligence than the students with dominance of right hemisphericity.

38. The first born students with left hemisphericity dominance (50%) have high level of academic achievement; whereas the students with right hemisphericity dominance (44.89%) have average level of academic achievement. The middle born students with left hemisphericity dominance (55%) and the students with right hemisphericity dominance (43.84%) have average level of academic achievement. The last born students with left hemisphericity dominance (49.07%) have high level of academic achievement; whereas the students with right hemisphericity dominance (50.65%) have average level of academic achievement.

39. Significant difference is found between the high school students with left and right hemisphericity dominance in their academic achievement having different birth order. The high school students with dominance of left hemisphericity have higher academic achievement than the students with dominance of right hemisphericity.

40. The right hemisphericity dominance is the significant predictor of the creative thinking of the high school students having different birth order.

41. The left hemisphericity dominance is the significant predictor of the intelligence of the high school students having different birth order.

42. The left hemisphericity dominance is the significant predictor of the academic achievement of the high school students having different birth order.
43. The high school students interested in literary activities (68.75%) and not interested in literary activities (61.86%) are dominant of **right hemisphericity**.

44. The students interested in literary activities with left hemisphericity dominance are found to be *average* in their creative thinking in toto (48.57%) and in terms of its dimension – originality (48.57%); whereas they have *low* fluency (48.57%) and flexibility (48.57%). The students interested in literary activities with right hemisphericity dominance have *average* level of creative thinking in toto (49.35%) and its dimensions – fluency (51.95%), flexibility (54.55%) and originality (50.65%).

45. The students not interested in literary activities with left hemisphericity dominance are found to be *average* in their creative thinking in toto (54.23%) and in terms of its dimensions – fluency (51.24%), flexibility (47.26%) and originality (56.22%). But, the students not interested in literary activities with right hemisphericity dominance have *average* level of creative thinking in toto (47.85%) and in terms of its dimensions – fluency (51.84%), flexibility (50.92%) and originality (50.61%).

46. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality having and not having interest in literary activities. The high school students with dominance of right hemisphericity have *higher* creative thinking than the students with dominance of left hemisphericity.

47. The students interested in literary activities with left hemisphericity dominance have *high* level of intelligence (82.86%) and the students with right hemisphericity dominance have *average* level of intelligence (74.03%).

48. The students not interested in literary activities with left hemisphericity dominance have *high* level of intelligence (72.14%) and the students with right hemisphericity dominance have *average* level of intelligence (70.55%).

49. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their intelligence having and not having interest in literary activities. The high school students with dominance of left hemisphericity have *higher* level of intelligence than the students with dominance of right hemisphericity.

50. The students interested in literary activities with left hemisphericity dominance (48.57%) and right hemisphericity dominance (54.55%) have *average* level of intelligence.
academic achievement. The students not interested in literary activities with left hemisphericity dominance (46.27%) and the students with right hemisphericity dominance (45.09%) have average level of academic achievement.

51. **Significant difference** is found between the high school students not interested in literary activities with left and right hemisphericity dominance in their academic achievement. The high school students not interested in literary activities with dominance of left hemisphericity have higher academic achievement than their counterparts. But, no significant difference is found between the high school students interested in literary activities with left and right hemisphericity dominance in their academic achievement.

52. The right hemisphericity dominance is the significant predictor of the creative thinking of the high school students having and not having interest in literary activities.

53. The left hemisphericity dominance is the significant predictor of the intelligence of the high school students having and not having interest in literary activities.

54. The left hemisphericity dominance is the significant predictor of the academic achievement of the high school students having and not having interest in literary activities.

55. The high school students interested in sports and games (63.60%) and not interested in sports and games (60.94%) are dominant of right hemisphericity.

56. The students interested in sports and games with left hemisphericity dominance are found to be average in their creative thinking in toto (53.76%) and in terms of its dimensions – fluency (50.54%), flexibility (47.85%) and originality (54.84%). The students interested in sports and games with right hemisphericity dominance have average level of creative thinking in toto (48.62%) and its dimensions – fluency (52.62%), flexibility (51.38%) and originality (50.77%).

57. The students not interested in sports and games with left hemisphericity dominance are found to be average in their creative thinking in toto (52%) and in terms of its dimensions – fluency (50%) and originality (56%); whereas they are low in flexibility (50%). But, the students not interested in sports and games with right hemisphericity dominance have average level of creative thinking in toto (46.15%) and in terms of its dimensions – fluency (48.72%), flexibility (52.56%) and originality (50%).
58. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality with regard to interest in sports and games. The high school students with dominance of right hemisphericity have higher creative thinking than the students with dominance of left hemisphericity.

59. The students interested in sports and games with left hemisphericity dominance have high level of intelligence (74.73%) and the students with right hemisphericity dominance have average level of intelligence (70.77%).

60. The students not interested in sports and games with left hemisphericity dominance have high level of intelligence (70%) and the students with right hemisphericity dominance have average level of intelligence (73.08%).

61. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their intelligence having and not having interest in sports and games. The high school students with dominance of left hemisphericity have higher level of intelligence than the students with dominance of right hemisphericity.

62. The students interested in sports and games with left hemisphericity dominance (47.85%) and right hemisphericity dominance (46.15%) have average level of academic achievement. The students not interested in sports and games with left hemisphericity dominance (48%) have high academic achievement; whereas the students with right hemisphericity dominance (50%) have average level of academic achievement.

63. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their academic achievement having and not having interest in sports and games. The high school students with dominance of left hemisphericity have higher academic achievement than their counterparts.

64. The right hemisphericity dominance is the significant predictor of the creative thinking of the high school students having and not having interest in sports and games.

65. The left hemisphericity dominance is the significant predictor of the intelligence of the high school students having and not having interest in sports and games.

66. The left hemisphericity dominance is the significant predictor of the academic achievement of the high school students having and not having interest in sports and games.
67. The high school students interested in singing and dancing (61.71%) and not interested in singing and dancing (66.15%) are dominant of right hemisphericity.

68. The students interested in singing and dancing with left hemisphericity dominance are found to be average in their creative thinking in toto (49.41%) and in terms of its dimensions – fluency (45.88%) and originality (51.76%); whereas they are low in flexibility (46.47%). The students interested in singing and dancing with right hemisphericity dominance have high level of creative thinking in toto (47.08%) and average in its dimensions – fluency (49.64%), flexibility (50.36%) and originality (48.18%).

69. The students not interested in singing and dancing with left hemisphericity dominance are found to be average in their creative thinking in toto (63.64%) and in terms of its dimensions – fluency (62.12%), flexibility (57.58%) and originality (63.64%). But, the students not interested in singing and dancing with right hemisphericity dominance have average level of creative thinking in toto (54.26%) and in terms of its dimensions – fluency (56.59%), flexibility (54.26%) and originality (55.81%).

70. Significant difference is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality having and not having interest in singing and dancing. The high school students with dominance of right hemisphericity have higher creative thinking than the students with dominance of left hemisphericity.

71. The students interested in singing and dancing with left hemisphericity dominance have high level of intelligence (72.35%) and the students with right hemisphericity dominance have average level of intelligence (70.44%).

72. The students not interested in singing and dancing with left hemisphericity dominance have high level of intelligence (77.27%) and the students with right hemisphericity dominance have average level of intelligence (72.87%).

73. Significant difference is found between the high school students with left and right hemisphericity dominance in their intelligence having and not having interest in singing and dancing. The high school students with dominance of left hemisphericity have higher level of intelligence than the students with dominance of right hemisphericity.
The students interested in singing and dancing with left hemisphericity dominance (48.24%) and right hemisphericity dominance (48.18%) have *average* level of academic achievement. The students not interested in singing and dancing with left hemisphericity dominance (46.97%) have *high* academic achievement; whereas the students with right hemisphericity dominance (44.19%) have *average* level of academic achievement.

**Significant difference** is found between the high school students with left and right hemisphericity dominance in their academic achievement having and not having interest in singing and dancing. The high school students with dominance of left hemisphericity have *higher* academic achievement than their counterparts.

The right hemisphericity dominance is the *significant predictor* of the creative thinking of the high school students having and not having interest in singing and dancing.

The left hemisphericity dominance is the *significant predictor* of the intelligence of the high school students having and not having interest in singing and dancing.

The left hemisphericity dominance is the *significant predictor* of the academic achievement of the high school students having and not having interest in singing and dancing.

The high school students interested in histrionic activities (66.37%) and not interested in histrionic activities (61.30%) are dominant of *right hemisphericity*.

The students interested in histrionic activities with left hemisphericity dominance are found to be *average* in their creative thinking in toto (53.33%) and in terms of its dimensions – fluency (49.33%), flexibility (49.33%) and originality (56%). The students interested in histrionic activities with right hemisphericity dominance have *average* level of creative thinking in toto (48.65%) and its dimensions – fluency (53.38%), flexibility (54.73%) and originality (50.68%).

The students not interested in histrionic activities with left hemisphericity dominance are found to be *average* in their creative thinking in toto (53.42%) and in terms of its dimensions – fluency (50.93%), flexibility (45.96%) and originality (54.66%). But, the students not interested in histrionic activities with right hemisphericity dominance have *average* level of creative thinking in toto (47.84%) and in terms of its dimensions – fluency (50.98%), flexibility (49.80%) and originality (50.59%).
82. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality having and not having interest in histrionic activities. The high school students with dominance of right hemisphericity have *higher* creative thinking than the students with dominance of left hemisphericity.

83. The students interested in histrionic activities with left hemisphericity dominance have *high* level of intelligence (76%) and the students with right hemisphericity dominance have *average* level of intelligence (72.30%).

84. The students not interested in histrionic activities with left hemisphericity dominance have *high* level of intelligence (72.67%) and the students with right hemisphericity dominance have *average* level of intelligence (70.59%).

85. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their intelligence having and not having interest in histrionic activities. The high school students with dominance of left hemisphericity have *higher* level of intelligence than the students with dominance of right hemisphericity.

86. The students interested in histrionic activities with left hemisphericity dominance (48.00%) and right hemisphericity dominance (41.89%) have *average* level of academic achievement. The students not interested in histrionic activities with left hemisphericity dominance (45.96%) and the students with right hemisphericity dominance (49.80%) have *average* level of academic achievement.

87. **Significant difference** is found between the high school students with left and right hemisphericity dominance in their academic achievement having and not having interest in histrionic activities. The high school students with dominance of left hemisphericity have *higher* academic achievement than their counterparts.

88. The right hemisphericity dominance is the *significant predictor* of the creative thinking of the high school students having and not having interest in histrionic activities.

89. The left hemisphericity dominance is the *significant predictor* of the intelligence of the high school students having and not having interest in histrionic activities.

90. The left hemisphericity dominance is the *significant predictor* of the academic achievement of the high school students having and not having interest in histrionic activities.
91. The high school students interested in aesthetic works (62.91%) and not interested in aesthetic works (63.33%) are dominant of right hemisphericity.

92. The students interested in aesthetic works with left hemisphericity dominance are found to be average in their creative thinking in toto (52.70%) and in terms of its dimensions – fluency (48.65%) and originality (54.05%); whereas they are low in flexibility (45.95%). The students interested in aesthetic works with right hemisphericity dominance have average level of creative thinking in toto (48.21%) and its dimensions – fluency (52.19%), flexibility (51.39%) and originality (50.20%).

93. The students not interested in aesthetic works with left hemisphericity dominance are found to be average in their creative thinking in toto (54.55%) and in terms of its dimensions – fluency (53.41%), flexibility (51.14%) and originality (56.82%). But, the students not interested in aesthetic works with right hemisphericity dominance have average level of creative thinking in toto (48.03%) and in terms of its dimensions – fluency (51.32%), flexibility (51.97%) and originality (51.32%).

94. Significant difference is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality having and not having interest in aesthetic works. The high school students with dominance of right hemisphericity have higher creative thinking than the students with dominance of left hemisphericity.

95. The students interested in aesthetic works with left hemisphericity dominance have high level of intelligence (73.65%) and the students with right hemisphericity dominance have average level of intelligence (71.71%).

96. The students not interested in aesthetic works with left hemisphericity dominance have high level of intelligence (73.86%) and the students with right hemisphericity dominance have average level of intelligence (70.39%).

97. Significant difference is found between the high school students with left and right hemisphericity dominance in their intelligence having and not having interest in aesthetic works. The high school students with dominance of left hemisphericity have higher level of intelligence than the students with dominance of right hemisphericity.

98. The students interested in aesthetic works with left hemisphericity dominance (47.97%) and right hemisphericity dominance (44.22%) have average level of
academic achievement. The students not interested in aesthetic works with left hemisphericity dominance (44.32%) and the students with right hemisphericity dominance (51.82%) have average level of academic achievement.

99. Significant difference is found between the high school students with left and right hemisphericity dominance in their academic achievement having and not having interest in aesthetic works. The high school students with dominance of left hemisphericity have higher academic achievement than their counterparts.

100. The right hemisphericity dominance is the significant predictor of the creative thinking of the high school students having and not having interest in aesthetic works.

101. The left hemisphericity dominance is the significant predictor of the intelligence of the high school students having and not having interest in aesthetic works.

102. The left hemisphericity dominance is the significant predictor of the academic achievement of the high school students having and not having interest in aesthetic works.

103. The high school students interested in social service activities (63.68%) and not interested in social service activities (61.66%) are dominant of right hemisphericity.

104. The students interested in social service activities with left hemisphericity dominance are found to be average in their creative thinking in toto (51.85%) and in terms of its dimensions – fluency (50%), flexibility (48.15%) and originality (53.09%). The students interested in social service activities with right hemisphericity dominance have average level of creative thinking in toto (50.35%) and its dimensions – fluency (53.87%), flexibility (52.82%) and originality (52.46%).

105. The students not interested in social service activities with left hemisphericity dominance are found to be average in their creative thinking in toto (56.76%) and in terms of its dimensions – fluency (51.35%) and originality (59.46%); whereas they have low flexibility (51.35%). But, the students not interested in social service activities with right hemisphericity dominance have high level of creative thinking in toto (44.54%) and average in terms of its dimensions – fluency (47.06%), flexibility (48.74%) and originality (46.22%).

106. Significant difference is found between the high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its
dimensions – fluency, flexibility and originality with regard to interest in social service activities. The high school students with dominance of right hemisphericity have higher creative thinking than the students with dominance of left hemisphericity.

107. The students interested in social service activities with left hemisphericity dominance have high level of intelligence (75.31%) and the students with right hemisphericity dominance have average level of intelligence (70.42%).

108. The students not interested in social service activities with left hemisphericity dominance have high level of intelligence (70.27%) and the students with right hemisphericity dominance have average level of intelligence (73.11%).

109. Significant difference is found between the high school students with left and right hemisphericity dominance in their intelligence having and not having interest in social service activities. The high school students with dominance of left hemisphericity have higher level of intelligence than the students with dominance of right hemisphericity.

110. The students interested in social service activities with left hemisphericity dominance (45.68%) and right hemisphericity dominance (46.13%) have average level of academic achievement. The students not interested in social service activities with left hemisphericity dominance (48.65%) and the students with right hemisphericity dominance (48.74%) have average level of academic achievement.

111. Significant difference is found between the high school students with left and right hemisphericity dominance in their academic achievement having and not having interest in social service activities. The high school students with dominance of left hemisphericity have higher academic achievement than their counterparts.

112. The right hemisphericity dominance is the significant predictor of the creative thinking of the high school students having and not having interest in social service activities.

113. The left hemisphericity dominance is the significant predictor of the intelligence of the high school students having and not having interest in social service activities.

114. The left hemisphericity dominance is the significant predictor of the academic achievement of the high school students having and not having interest in social service activities.
PART – III

Section – A

1. The male high school students are dominant of right hemisphericity (65.20%).
2. The male high school students with left hemisphericity dominance are found to be *average* in their creative thinking in toto (55.86%) and in terms of its dimensions – fluency (53.15%), flexibility (51.35%) and originality (58.56%). Similarly, the male students with right hemisphericity dominance have *average* level of creative thinking in toto (55.29%) and in terms of its dimensions – fluency (58.65%), flexibility (56.73%) and originality (57.21%).

3. *Significant difference* is found between the male high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality. The male students with dominance of right hemisphericity have *higher* creative thinking than the male high school students with dominance of left hemisphericity.

4. The male high school students with left hemisphericity dominance have *high* level of intelligence (81.98%) and the male high school students with right hemisphericity dominance have *average* level of intelligence (68.75%).

5. *Significant difference* is found between the male high school students with left and right hemisphericity dominance in their intelligence. The male high school students with dominance of left hemisphericity have *higher* level of intelligence than the male students with dominance of right hemisphericity.

6. The male high school students with left hemisphericity dominance (47.75%) and the male students with right hemisphericity dominance (49.52%) have *average* level of academic achievement.

7. *Significant difference* is found between the male high school students with left and right hemisphericity dominance in their academic achievement. The male high school students with dominance of left hemisphericity have *higher* academic achievement than the students with dominance of right hemisphericity.

8. The right hemisphericity is the *significant predictor* of the creative thinking of the male high school students.

9. The left hemisphericity is the *significant predictor* of the intelligence of the male high school students.
10. The left hemisphericity is the **significant predictor** of the academic achievement of the male high school students.

**Section – B**

1. The female high school students are dominant of right hemisphericity (60.94%).

2. The female high school students with left hemisphericity dominance are found to be **average** in their creative thinking in toto (51.20%) and in terms of its dimensions – fluency (48%) and originality (52%); whereas they have **low** flexibility (48.80%). Similarly, the female high school students with right hemisphericity dominance have **high** level of creative thinking in toto (50.26%) and in terms of its dimensions – fluency (45.64%) and originality (47.18%); whereas they are **average** in flexibility (46.15%).

3. **Significant difference** is found between the female high school students with left and right hemisphericity dominance in their creative thinking in toto and in terms of its dimensions – fluency, flexibility and originality. The female high school students with dominance of right hemisphericity have **higher** creative thinking than the female high school students with dominance of left hemisphericity.

4. The female high school students with left hemisphericity dominance have **high** level of intelligence (66.40%) and the female high school students with right hemisphericity dominance have **average** level of intelligence (73.85%).

5. **Significant difference** is found between the female high school students with left and right hemisphericity dominance in their intelligence. The female high school students with dominance of left hemisphericity have **higher** level of intelligence than the female high school students with dominance of right hemisphericity.

6. The female high school students with left hemisphericity dominance (45.60%) and the female high school students with right hemisphericity dominance (44.10%) have **average** level of academic achievement.

7. **Significant difference** is found between the female high school students with left and right hemisphericity dominance in their academic achievement. The female high school students with dominance of left hemisphericity have **higher** academic achievement than the students with dominance of right hemisphericity.

8. The right hemisphericity is the **significant predictor** of the creative thinking of the female high school students.
9. The left hemisphericity is the significant predictor of the intelligence of the female students.

10. The left hemisphericity is the significant predictor of the academic achievement of the female students.

5.2. INTERPRETATIONS

The present study has brought out the finding that the high school students in Chennai are dominant of right hemisphericity. It has also been shown that irrespective of the background variables, father’s education, mother’s education, birth order, interest in library activities, interest in sports and games, interest in singing and dancing, interest in histrionic activities, interest in aesthetic works and interest in social service activities, the high school students seem to have dominance in right hemisphericity. From this, it may be understood that the high school population especially, standard IX students are more of global in nature in approaching tasks related to their studies. Therefore, they seem to be imaginative, following divergent thinking and seeing the forest instead of the trees. Such a faculty would certainly enable them to be original and innovative in their activities. It seems to be a welcome sign for building up a new India with the help of this younger generation.

Moreover, as the finding reveals that 36.93% of students are dominant of left hemisphericity, it may be interpreted that the sizeable number of students are logical, and analytical in their approach which enables them to master scientific concepts and mathematical problems in a more competent and critical manner. Therefore, the investigator is of the opinion that the present system of education is good enough to foster skills and knowledge to younger generation necessary for utilizing the left and right lobes of brain for greater achievement.

When hemisphericity is studied in terms of creative thinking, intelligence and academic achievement, it has yielded interesting findings. When it is studied in terms of creative thinking, the role of left and right hemisphericity is quite identical, because individual with left hemisphericity and individuals with right hemispheric dominance are reported to be average in their creative thinking as well as in its dimensions - fluency, flexibility and originality. However, the data was subjected to differential analysis, it has yielded a finding that the individuals with right hemispheric dominance are superior in
creative thinking and in its dimensions - fluency, flexibility and originality to their counterparts having the dominance of left hemisphericity. It clearly indicates the role of right hemisphericity in forming and shaping the creative thinking of the subjects who were subjected to this investigation. Similarly, the brain dominance was also studied in terms of their intelligence. It reveals the fact that individuals having left hemispheric dominance are superior to those with right hemispheric dominance in the cognitive aspect - intelligence. The present finding is in consonance with previous findings which have claimed that the logical and analytical skills needed for dealing with situations in an intelligent manner are embedded in left lobe of brain. Moreover, the present study has also investigated the role of hemisphericity deciding the academic achievement of the students. It has brought out the fact that left hemispheric dominance enables the individuals to score for better in academic achievement than their counterparts having right hemispheric dominance.

Following the findings of the previous studies, the present study has also shown that left hemispheric dominance is more important and influential for academic achievement than right hemispheric dominance. As the present mode of curriculum requires the individuals to gain a complete understanding of the concepts by logical reasoning, it is but natural the present set of high school students are well trained to analyze and look into the relationships for a better understanding of the concepts revealing the impact of the present education to strengthen the dominance of left hemisphericity.

The present study has also aimed at digging out more information about the impact of left and right hemisphericities on the dependent variables in terms of the background variables - father’s education, mother’s education and birth order. Interestingly, the present study has brought out the finding that irrespective of different levels of father’s education, different levels of mother’s education and different birth order, the subjects have revealed the dominance of right hemisphericity over left hemisphericity in deciding the creative thinking and its dimensions - fluency, flexibility and originality. Thus, the dominance of right hemisphericity is well ascertained for the manipulation of creative thinking in accordance with the findings of the previous studies.

In the same way, the background variables do not seem to be of any importance in influencing the intelligence and academic achievement in terms of left and right
hemisphericity. The individuals with the dominance of left hemisphericity are found to be more dominant in their intelligence and academic achievement than those with the dominance of right hemisphericity, irrespective of the difference in father’s education, mother’s education and birth order. It is also in line with the findings of the previous studies, which state that those with left hemispheric dominance can see the trees first and then the woods as their analytical skills enables them to proceed systematically to solve the problems intelligently and promote their academic achievement by bettering the understanding of the concepts.

The present study has also attempted to investigate into the impact of hemisphericity on the dependent variables - creative thinking, intelligence and academic achievement with respect to the interest of the subjects in literary activities, sports and games, singing and dancing, histrionic activities, aesthetic works and social service activities. In all the categories of interest, right hemispheric dominance is found to be more influential over creative thinking and its dimensions - fluency, flexibility and originality than the dominance of left hemisphericity. That is, the different types of interest do not seem to alter the dominance of left or right hemisphericity in deciding creative thinking and its dimensions. In other words, hemispheric dominance is not based on one’s father’s level of education, mother’s level of education and his or her interest in varied field of activities.

On studying the subjects’ intelligence and academic achievement with respect to their different interest, it is found that the impact of left and right hemisphericity dominance on intelligence and academic achievement is not influenced by their interest. In the case of individuals with different interest, the impact of left hemisphericity on intelligence and academic achievement is superior to that of the dominance of right hemisphericity. That is, the role of hemisphericity either left or right is the same irrespective of the nature of their interest. In accordance with the previous studies, the male and female subjects are not different from the population in the characteristics of hemisphericity. That is the male and female high school students are found to exhibit right hemisphericity as in the case of the general population.
5.3. RECOMMENDATIONS

The dominance of right hemisphericity in IX standard students studying in the schools in Chennai is well brought beyond any doubt. Moreover, the role of right hemisphericity has also been brought out in influencing creative thinking and its dimensions. But what is alarming is the presence of only average level of creative thinking and its dimensions in the high school students. Therefore, the investigator would like to recommend the following promoting creative thinking in students:

a) The mode of teaching should be structured in such a way that the teachers should be able to provide variety in the teaching not only from the strategic point of view, but also from the point of the subject matter and the concepts.

b) Children should be enabled to participate in the teaching-learning process by expressing their experiences and providing illustrations and examples from their background.

c) All subject matter should be dealt with systematically using other than text materials available in the class.

d) For all subjects along with theory, practical activities should be provided to enable students to manipulate their skills and knowledge.

e) Small projects may be suggested for each topic as a group or individual work which may last for a week or up to a fortnight.

f) Students should be given freedom to commit mistakes so as to stand corrected by intuition or by insight learning.

g) Continuous evaluation may be practiced from primary classes to provide a good understanding to students about their own interest and achievements.

h) For evaluating students, the questions may be asked in such a way to exploit their thinking and creativity.

The dominance of left hemisphericity is established in the present investigation influencing the intelligence and academic achievement. However, it is noted that in spite of the students with left hemispheric dominance having more than average level of intelligence are found to be only average in their academic achievement. From this, it may be inferred that something debilitating the academic achievement of the students in spite of the reasonable level of intelligence. Therefore, the investigator would like to give the following recommendations:
a) The institutions may encourage the students to make good use of the library. Therefore, the library may be equipped well with reading materials suitable for high school students.

b) The institutions should have a full-time librarian to work out the modalities for promoting reading habits in students with the help of their subject masters.

c) Each classroom may form reading circles for exchanging books of interests they have read.

d) Quiz programmes may be organized on the basis of the books read by the students periodically.

e) Students may be encouraged to form home library in their homes with the help of teachers.

f) The education authorities may instruct institutions to hold inter-school competitions - oral as well as written - once or twice in a year at different levels on different subjects with prescribed topics.

g) In academic subjects, the subject masters may prepare question banks with the help of the students and enrich them every year with the help of the new batch.

By fulfilling the above stated recommendations, it is hoped the high school students would be able to show better academic achievement with the exploitation of their creative thinking and intelligence.

5.4. SUGGESTIONS FOR FURTHER STUDIES

The investigator suggest the following topics for further studies in the area of hemisphericity:

A STUDY ON CREATIVE THINKING OF HIGHER SECONDARY STUDENTS IN RELATION TO THEIR BRAIN DOMINANCE AND SELF-CONCEPT

A META-COGNITIVE STUDY ON ACADEMIC ACHIEVEMENT AND LEARNING STYLE OF STUDENTS OF SECONDARY CLASSES

A STUDY ON LANGUAGE ATTAINMENT AND SCIENTIFIC APTITUDE OF HIGHER SECONDARY STUDENTS IN RELATION WITH DOMINANCE OF HEMISPHERICITY

A CRITICAL STUDY ON BRAIN DOMINANCE IN DECIDING LANGUAGE DEVELOPMENT AND LOCUS OF CONTROL OF STUDENTS OF SECONDARY CLASSES

A COMPARATIVE STUDY ON DOMINANCE OF HEMISPHERICITY OF SECONDARY AND HIGHER SECONDARY STUDENTS IN RURAL, URBAN AND SEMI-URBAN AREAS IN RELATION TO THEIR INTELLIGENCE AND EMOTIONAL MATURITY