CHAPTER –V
FINDINGS, INTERPRETATIONS, RECOMMENDATIONS AND
SUGGESTIONS

5.1 INTRODUCTION
This chapter consists of five sections. The first section deals findings of the study. The section explains the interpretations of the study. The third section deals with the recommendations of the study. The last section concerns suggestions for further research followed by conclusion.

5.2 FINDINGS

SECTION I

1. The level of interpersonal intelligence of higher secondary+1 biology students is average (70.0%).

2. The level of dimensions of interpersonal intelligence such as empathy (70.3%), amiability (70.1%), social persuasion (72.1%), guidance (71.4%), respectful behaviour (69.7%) of higher secondary+1 biology students is average.

3. The level of interpersonal intelligence - empathy of higher secondary +1 biology students with respect to background variables such as Gender- Male (72.8%), Female (72.7%); Community- SC &ST (73.5%), MBC (63.8%), BC (73.5%), OC (71.4%); Religion- Hindu (69.6%), Christian (74.2%), Muslim (72.0%); No of Siblings- One (70.2%), Two (75.2%), More than Two (66.1%); (e) Locality of students – Rural(76.1%), Urban(69.0%) ; Residence - day-scholar (71.2%), Hosteller (74.0%); Type of family- Nuclear (73.1%), Joint (72.8%); Medium of instruction - Tamil (69.3%), English (74.3%); Locality of School- Rural (74.6%),
Urban (75.5%); Nature of school- Boys (70.6%), Girls (67.5%); Co-Education (74.2%), Type of school – Govt. (71.6%), unaided (77.5%), Govt. aided (77.2%); Father’s education- Illiterate (72.7%), School level (72.72%), College level (73.45%), Professional level(65.78); Mother’s education- Illiterate (74.36%), School level (74.49%), College level (67.07%), Professional level(78.57%); Father’s occupation – Unemployed (75.2%), Farmer (71.05%), Govt.(73.91%), Private (70.28); Mother’s occupation – House wife (75.05%), Farmer (74.06%), Govt.(81.7%), Private (71.87%); Parents monthly income- Upto Rs.10000 (76.0%), Rs.10000-20000 (69.51%), Rs.20000-30000(65.95%), Above Rs.30000 (75.0%); No. of schools transfer - One time (73.5%), Two times (75.7%), Three times (64.3%); More than three times (86.0%), Social activities- NCC (74.9%), NSS (71.9%), RRC (77.2), None of these (74.9%); Games you like- Individual games (80.6%), Group games (69.9%) is average.

4. The level of interpersonal intelligence - amiability of higher secondary+1 biology students with respect to background variables such as Gender- Male (69.6%), Female (71.1%); Community- SC &ST (68.1%), MBC (67.3%), BC (73.7 %), OC (50.0%); Religion- Hindu (69.6%), Christian (61.7%), Muslim (65.9%); No of Siblings- One (70.1%), Two (68.8%), More than Two (67.8%) ; (e) locality of students – Rural(70.0%), Urban(74.6%); Residence - Day-scholar (71.1%), Hosteller (69.3 %); Type of family- Nuclear (69.4%), Joint (65.9%); Medium of instruction - Tamil (74.9%), English (69.2%), Locality of School- Rural (73.2%), Urban (69.7%); Nature of school- Boys (67.1%), Girls (73.3%), Co-Education (74.7%); Type of school – Govt. (68.4%), unaided (72.6%), Govt. aided (71.6%); Father’s education- Illiterate (66.56%), School level (74.32%),
College level (68.14%), Professional level(68.42); Mother’s education- Illiterate (80.84%), School level (66.66%), College level (74.4%), Professional level(67.85%); Father’s occupation – Unemployed (85.12%), Farmer (68.56%), Govt.( 71.42%), Private (72.465); Mother’s occupation - House wife (69.23%), Farmer (73.28%) , Govt.( 73.17%), Private (78.12%); Parents monthly income-Upto Rs.10000 (67.35%), Rs.10000-20000 (75.2%), Rs.20000-30000(72.34%), Above Rs.30000 (69.44 %); No. of Schools transfer - One time (68.8%), Two times (70.0%), Three times (71.4%), More than three times (62.8%); Social activities- NCC (79.1%), NSS (68.4%), RRC (72.55), None of these (67.1%); Games you like- Individual games (67.8%), Group games (73.1%) is average.

5. The level of interpersonal intelligence - social persuasion of higher secondary+1 biology students with respect to background variables such as Gender- Male (70.6%), Female (70.8%); Community- SC &ST (70.4%), MBC (75.9%), BC (67.3%), OC (64.3%); Religion- Hindu (72.5%), Christian (63.3%), Muslim (70.7%); No of Siblings- One (72.6%), Two (71.3%), More than Two (62.7%); (e) Locality of students – Rural(68.3%), Urban(73.2%); Residence - day-scholar (72.3%), Hosteller (69.8%); Type of family- Nuclear (67.9%), Joint (75.0%); Medium of instruction - Tamil (69.7%), English (67.3%); Locality of School- Rural (71.8%), Urban (74.4%); Nature of school- Boys (73.7%), Girls (77.6%), Co-Education (70.0%); Type of school – Govt. (76.5%), Unaided (67.5%), Govt. aided (72.3%); Father’s education- Illiterate (74.84%), School level (69.05%), College level (69.02%), Professional level(71.05); Mother’s education- Illiterate (75.21%), School level (68.07%), College level (73.17%), Professional level(67.85%); Father’s occupation – Unemployed (68.6%), Farmer (71.92%),
Govt. (75.0%); Private (70.28); Mother’s occupation - Housewife (67.98%), Farmer (74.85%), Govt. (75.69%), Private (62.5%); Parents monthly income - Upto Rs.10000 (72.77%), Rs.10000-20000 (72.35%), Rs.20000-30000 (80.85%), Above Rs.30000 (72.22%); No. of Schools transferred - One time (74.0%), Two times (70.8%), Three times (69.6%), More than three times (76.7%); Social activities - NCC (70.0%), NSS (67.6%), RRC (70.2%); None of these (71.7%); Games you like - Individual games (72.0%), Group games (73.3%) is average.

6. The level of interpersonal intelligence - guidance of higher secondary+1 biology students with respect to background variables such as Gender - Male (66.4%), Female (70.0%); Community - SC & ST (70.9%), MBC (73.9%), BC (68.0%), OC (64.3%); Religion - Hindu (71.7%), Christian (64.1%), Muslim (71.3%); No of Siblings - One (67.9%), Two (71.8%), More than Two (76.3%); (e) Locality of students - Rural (70.1%), Urban (70.6%); Residence - day-scholar (68.6%), Hosteller (68.8%); Type of family - Nuclear (71.0%), Joint (72.5%); Medium of instruction - Tamil (68.0%), English (74.3%); Locality of School - Rural (68.0%), Urban (74.2%); Nature of school - Boys (67.1%), Girls (66.3%), Co-Education (70.7%); Type of school - Govt. (67.1%), unaided (69.3%), Govt. Aided (75.3%); Father’s education - Illiterate (74.84%), School level (69.37%), College level (79.64%), Professional level (68.42); Mother’s education - Illiterate (71.83%), School level (66.97%), College level (68.3%), Professional level (75.0%); Father’s occupation - Unemployed (71.07%), Farmer (69.3%), Govt. (76.4%), Private (67.4); Mother’s occupation - Housewife (72.55%), Farmer (68.95%), Govt. (76.82%), Private (63.97%); Parents monthly income - Upto Rs.10000 (70.70%), Rs.10000-20000 (73.57%), Rs.20000-30000 (68.08%), Above Rs.30000 (72.22%);
(75.0%); No. of schools transfer - One time (70.2%), Two times (69.5%); Three times (64.3%), More than three times (81.4%); Social activities- NCC (74.1%), NSS (70.7%), RRC (65.5), None of these (65.5%); Games you like- Individual games (67.4%), Group games (71.3%) is average.

7. The level of interpersonal intelligence - respectful behaviour of higher secondary+1 biology students with respect to background variables such as Gender- Male (69.8%), Female (72.1%); Community- SC &ST (71.7%), MBC (67.3%), BC (72.3%), OC (71.4%); Religion- Hindu (70.0%), Christian (64.8%), Muslim (75.0%); No of Siblings- One (69.6%), Two (71.3%), More than Two (74.6%); ( (e) Locality of students – Rural(73.7%), Urban(73.4%) ; Residence -day-scholar (71.3%), Hosteller (71.9%); Type of family- Nuclear (69.1%), Joint (77.2%); Medium of instruction - Tamil (69.3%), English (71.0%); Locality of School- Rural (74.0%), Urban (73.4%); Nature of school- Boys (61.8%), Girls (78.0%), Co-Education (75.5%); Type of school – Govt. (65.2%), unaided (65.7%), Govt. aided (76.8%); Father’s education- Illiterate (73.31%), School level (67.14%), College level (77.0%), Professional level(63.15); Mother’s education- Illiterate (76.33%), School level (66.2%),College level (69.51%), Professional level(71.42%); Father’s occupation – Unemployed (73.55%),Farmer (70.9%), Govt.(69.56%), Private (76.08); Mother’s occupation - House wife (67.98%), Farmer (73.67%), Govt.( 68.29%), Private (59.37%); Parents monthly income- Upto Rs.10000 (69.67%), Rs.10000-20000 (69.51%), Rs.20000-30000(74.46%), Above Rs.30000 (80.55%); No. of Schools transfer - One time (72.2%),Two times (72.0%), Three times (75.0%), More than three times (69.8%); Social activities- NCC (72.2%), NSS (69.5%), RRC (71.3), None of
these (70.0%); Games you like- Individual games (70.1%), Group games (70.0%) is average.

8. The level of interpersonal intelligence in total of higher secondary+1 biology students with respect to background variables such as Gender- Male (67.7%), Female (72.7%); Community- SC &ST (69.9%), MBC (70.8%), BC (68.3%), OC (71.4%); Religion- Hindu (71.8%), Christian (67.2%), Muslim (65.9%); No of Siblings- One (69.3%), Two (71.3%), More than Two (61.0%); (e) Locality of students – Rural (70.7%), Urban (67.5%); Residence - Day-scholar (70.1%), Hosteller (70.8%), Type of family- Nuclear (70.4%), Joint (71.0%); Medium of instruction - Tamil (71.8%), English (67.3%); Locality of school- Rural (67.7%), Urban (72.5%); Nature of school- Boys (68.0%), Girls (67.1%), Co-Education (71.5%); Type of school – Govt. (68.7%), unaided (67.8%), Govt. aided (73.5%); Father’s education- Illiterate (72.4%), School level (68.26%), College level (70.8%), Professional level (65.78); Mother’s education- Illiterate (74.64%), School level (66.66%), College level (74.4%), Professional level (60.71%); Father’s occupation – Unemployed (73.55%), Farmer (70.9%), Govt. (69.56%), Private (76.08); Mother’s occupation - House wife (70.27%), Farmer (69.94%), Govt. (70.73%), Private (62.5%); Parents monthly income- Upto Rs.10000 (69.41%), Rs.10000-20000 (65.44%), Rs.20000-30000 (61.7%), Above Rs.30000 (80.55%); No. of schools transfer - One time (67.8%), Two times (70.4%), Three times (66.1%), More than three times (62.8%); Social activities- NCC (71.9%), NSS (67.6%), RRC (70.2), None of these (66.7%); Games you like- Individual games (70.1%), Group games (69.3%) is average.
9. The level of emotional maturity of higher secondary+1 biology students is average (69.7%).

10. The level of dimensions of emotional maturity such as Emotional stability (68.8%), emotional progression (62.0%), social adjustment (67.7%), personality integration (73.6%), independence (67.0%) of higher secondary+1 biology students is average.

11. The level of emotional maturity-emotional stability of higher secondary+1 biology students with respect to background variables such as Gender- Male (67.7%), Female (69.1%); Community- SC &ST (66.3%), MBC (66.5%), BC (71.2%), OC (64.3%); Religion- Hindu (67.9%), Christian (65.6%), Muslim (73.8%); No of Siblings- One (67.9%), Two (71.3%), More than Two (69.5%); (e) Locality of students – Rural(66.9%), Urban(70.1%); Residence - day-scholar (68.1%), Hosteller (71.4%); Type of family- Nuclear (67.9%), Joint (71.7%); Medium of instruction - Tamil (69.7%), English (65.4%); Locality of School- Rural (67.9%), Urban (68.7%); Nature of school- Boys (73.7%), Girls (74.9%), Co-Education (66.7%); Type of school – Govt. (70.6%), unaided (75.7%), Govt. aided (69.5%); Father’s education- Illiterate (69.01%), School level (68.58%), College level (70.8%), Professional level(68.42); Mother’s education- Illiterate (68.73%); School level (69.17%), College level (65.85%), Professional level(64.28%); Father’s occupation – Unemployed (65.28%), Farmer (67.7%), Govt.(70.18%), Private (63.76); Mother’s occupation - House wife (70.68%), Farmer (66.8%), Govt.(70.73%), Private (56.25%); Parents monthly income- Upto Rs.10000 (68.77%), Rs.10000-20000 (67.07%), Rs.20000-30000(70.21%), Above Rs.30000 (69.44%); No. of schools transfer - One time (67.1%), Two
times (71.2%), Three times (78.6%), More than three times (55.8%); Social activities- NCC (71.5%), NSS (66.4%), RRC (67.8); None of these (67.4%)

Games you like- Individual games (67.8%), Group games (69.4%) is average.

12. The level of emotional maturity-emotional progression of higher secondary +1 biology students with respect to background variables such as Gender- Male (61.1%), Female (62.8%); Community- SC &ST (61.5%), MBC (62.6%), BC (62.4%), OC (64.3%); Religion- Hindu (61.7%), Christian (61.7%), Muslim (69.5%); No of Siblings- One (61.6%), Two (62.4%), More than Two (62.7%); (e) Locality of students – Rural(64.9%), Urban(56.2%), Residence - day-scholar (60.4%), Hosteller (64.1%); Type of family- Nuclear (62.8%), Joint (59.8%); Medium of instruction - Tamil (62.5%), English (60.3%); Locality of School- Rural (63.5%), Urban (60.8%); Nature of school- Boys (57.0%), Girls (57.6%), Co-Education (64.4%); Type of school – Govt. (54.8%), unaided (63.5%), Govt. aided (65.4%); Father’s education- Illiterate (58.9%), School level (59.96%), College level (64.6%), Professional level(73.68); Mother’s education- Illiterate (67.04%), School level (61.03%), College level (64.63%), Professional level(64.28%); Father’s occupation – Unemployed (66.94%), Farmer (61.25%), Govt. (63.35%), Private (65.21%); Mother’s occupation – House wife (61.53%), Farmer (61.5%), Govt. (68.29%), Private (68.75%); Parents monthly income- Upto Rs.10000 (62.83%), Rs.10000-20000 (60.16%), Rs.20000-30000(76.6%), Above Rs.30000 (69.44%); No. of schools transfer - One time (62.5%), Two times (61.7%), Three times (64.3%), More than three times (62.8%); Social activities- NCC (63.5%), NSS (68.8%), RRC (63.7), None
of these (61.4%); Games you like- Individual games (61.5%), Group games (62.3%) is average.

13. The level of emotional maturity-social adjustment of higher secondary+1 biology students with respect to background variables such as Gender- Male (69.8%), Female (64.7%); Community- SC &ST (67.1%), MBC (70.4%), BC (67.1%), OC (71.4%); Religion- Hindu (66.7%), Christian (61.7%), Muslim (70.1%); No of Siblings- One (67.1%), Two (75.2%), More than Two (64.4%); (e) Locality of students – Rural(70.9%), Urban(78.1%); Residence - day-scholar (68.0%), Hosteller (66.1%); Type of family- Nuclear (66.7%), Joint (68.8%); Medium of instruction - Tamil (66.4%), English (67.3%); Locality of School- Rural (68.2%), Urban (67.2%); Nature of school- Boys (69.3%), Girls (78.8%), Co-Education (68.8%); Type of school – Govt. (67.4%), unaided (81.5%), Govt. aided (66.9%); Father’s education- Illiterate (66.56%), School level (66.82%), College level (67.25%), Professional level(73.68%); Mother’s education- Illiterate (65.91%), School level (67.6%), College level (62.2%), Professional level (67.85%); Father’s occupation – Unemployed (69.42%), Farmer (67.10%), Govt. (66.45%), Private (68.11%); Mother’s occupation - House wife (70.27%), Farmer (78.38%), Govt. (64.63%), Private (75.0%); Parents monthly income- Upto Rs.10000 (65.3%), Rs.10000-20000 (70.32%), Rs.20000-30000(65.95%), Above Rs.30000 (69.44%); No. Schools transfer - One time (67.6%), Two times (67.1%), Three times (73.2%), More than three times(74.4%); Social activities- NCC (67.7%), NSS 77.3%, RRC (68.4), None of these (66.4%); Games you like- Individual games (66.8%), Group games (68.6%) is average.
14. The level of emotional maturity-personality integration of higher secondary+1 biology students with respect to background variables such as Gender- Male (73.4%), Female (72.1%); Community- SC &ST (74.0%), MBC (75.1%), BC (71.2%), OC (57.1%); Religion- Hindu (73.5%), Christian (68.8%), Muslim (72.6%), No of Siblings- One (73.0%), Two (73.8%), More than Two (76.3%); (e) Locality of students – Rural (75.7%), Urban(74.1%); Residence - day-scholar (72.7%), Hosteller (70.3%); Type of family- Nuclear (72.8%), Joint (73.6%); Medium of instruction - Tamil (73.9%), English (72.4%); Locality of School- Rural (71.0%), Urban (75.9%); Nature of school- Boys (75.0%), Girls (72.2%), Co-Education (72.5%); Type of school – Govt. (78.1%), unaided (74.2%), Govt. aided (70.8%); Father’s education- Illiterate (71.77%), School level (74.0%), College level (76.1%), Professional level (68.42%); Mother’s education- Illiterate (72.11%), School level (72.61%), College level (69.51%), Professional level (71.42%); Father’s occupation – Unemployed (56.2%), Farmer (74.85%), Govt. (73.3%), Private (71.01%); Mother’s occupation - House wife (73.8%), Farmer (75.44%), Govt. (69.51%), Private (59.37%); Parents monthly income- Upto Rs.10000 (74.06%), Rs.10000-20000 (69.91%), Rs.20000-30000 (74.46%), Above Rs.30000 (66.66%); No. of schools transfer - One time (72.4%), Two times (73.7%), Three times (76.8%), More than three times (67.4%); Social activities- NCC (71.9%), NSS (77.0%), RRC (74.3), None of these (72.5%); Games you like- Individual games (71.4%), Group games (73.6%) is average.

15. The level of emotional maturity-independence of higher secondary+1 biology students with respect to background variables such as Gender- Male (64.0%), Female (65.0%); Community- SC &ST (62.2%), MBC (67.3%), BC (66.9%),
OC (85.7%); Religion- Hindu (65.8%), Christian (69.5%), Muslim (71.3%); No of Siblings- One (66.8%), Two (66.8%), More than Two (62.7%); (e) Locality of students – Rural(68.9%), Urban(59.5%) , Residence - day-scholar (68.3%), Hosteller (60.9%); Type of family- Nuclear (60.9%), Joint (63.4%); Medium of instruction - Tamil (66.2%), English (67.3%); Locality of School- Rural 67.1%, Urban (67.0%); Nature of school- Boys (60.5%), Girls (60.0%), Co-Education (69.9%); Type of school – Govt. (49.7%), unaided (66.9%), Gvt. aided (69.2%); Father’s education- Illiterate (66.87%), School level (67.42%), College level (66.37%), Professional level(65.78%); Mother’s education- Illiterate (67.32%), School level (68.38%), College level (63.41%), Professional level(64.28%); Father’s occupation – Unemployed (57.85%), Farmer (62.84%), Govt.(70.18%),Private (58.7%); Mother’s occupation - House wife (68.2%), Farmer (63.45%), Govt.( 62.2%), Private (65.62%); Parents monthly income- Upto Rs.10000 (68.77%), Rs.10000-20000 (60.97%), Rs.20000-30000(74.46%), Above Rs.30000 (63.88%); No. of schools transfer - One time (67.7%), Two times (61.3%),Three times (69.6%); More than three times (65.1%); Social activities- NCC (68.4%), NSS (63.3%), RRC (66.7), None of these (68.6%); Games you like- Individual games (53.9%), Group games (68.3%) is average.

16. The level of emotional maturity in total of higher secondary+1 biology students with respect to background variables such as Gender- Male (68.9%), Female (66.7%); Community- SC &ST (71.4%), MBC (69.6%), BC (71.4%), OC (64.3%); Religion- Hindu (68.7%), Christian (64.8%), Muslim (75.0%); No of Siblings- One (69.0%), Two (71.8%), More than Two (74.6%); (e) Locality of students – Rural(69.4%), Urban(68.2%); Residence - day-scholar (70.0%),
Hosteller (65.1%), Type of family- Nuclear (69.2%), Joint (67.0%); Medium of instruction - Tamil (70.3%), English (65.0%); Locality of School- Rural (69.4%), Urban (70.2%); Nature of school- Boys (68.0%), Girls (67.1%), Co-Education (70.5%); Type of school – Govt. (71.9%), unaided 71.4%), Govt. aided (68.0%); Father’s education- Illiterate (66.87%), School level (68.9%),College level (76.1%), Professional level65.78%); Mother’s education- Illiterate (65.35%), School level (69.8%),College level (69.51%), Professional level(67.85%); Father’s occupation – Unemployed (68.6%), Farmer (68.85%), Govt.( 68.32%), Private (68.84%); Mother’s occupation - House wife (70.27%); Farmer (64.83%) , Govt. (73.17%), Private (62.5%); Parents monthly income- Upto Rs.10000 (69.03%), Rs.10000-20000 (69.1%), Rs.20000-30000(57.44%), Above Rs.30000 (66.66%); No, of Schools transfer - One time (69.9%), Two times (64.2%), Three times (75.0%), More than three times (60.5%); Social activities- NCC (67.7%), NSS (73.8%), RRC (73.7%), None of these (71.0%); Games you like- Individual games (69.1%), Group games (70.9%) is average.

17. The level of achievement in Biology of higher secondary+1 biology students is average (67.8).

18. The level of achievement in Biology of higher secondary+1 biology students with respect to background variables such as Gender- Male (74.7%), Female (68.3%); Community- SC &ST (67.1%), MBC (66.1%), BC (69.4%), OC (64.3%); Religion- Hindu (68.2%), Christian (80.5%), Muslim (65.9%); No of Siblings-One (66.2%), Two (70.8%), More than Two (67.8%); (e) Locality of students – Rural(73.7%), Urban(70.8%); Residence - day-scholar (67.0%), Hosteller (64.1%); Type of family- Nuclear (68.7%), Joint (71.4%); Medium of instruction
- Tamil (65.3%), English (63.6%); Locality of School- Rural (72.0%), Urban (71.5%); Nature of school- Boys (74.1%), Girls (72.9%), Co-Education (63.3%); Type of school – Govt. (67.1%), unaided (64.4%), Govt.aided (72.7%); Father’s education- Illiterate (66.87%), School level (67.62%), College level (66.37%), Professional level(65.78%); Mother’s education- Illiterate (68.16%), School level (73.86%), College level (69.51%), Professional level(50.0%); Father’s occupation – Unemployed (76.85%), Farmer (68.85%), Govt. (64.63%), Private (66.66%); Mother’s occupation - House wife (75.46%), Farmer (64.83%), Govt. (73.17%),Private (71.87%); Parents monthly income- Upto Rs.10000 (69.67%), Rs.10000-20000 (72.35%), Rs.20000-30000(70.21%), Above Rs.30000 (77.77%); No. of schools transfer - One time (69.3%), Two times (67.5%), Three times (71.4%), More than three times (62.8%); Social activities- NCC (67.7%), NSS (69.1%), RRC (71.3%) , None of these (64.0%); Games you like- Individual games (62.8%), Group games (69.6%) is average.

SECTION II

19. There is significant difference between male and female higher secondary +1 biology students in their empathy, amiability, guidance, respectful behaviour and interpersonal intelligence in total. Whereas there is no significant difference between male and female higher secondary +1 biology students in their social persuasion.

20. There is no significant difference between rural and urban higher secondary +1 biology students in their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.
21. There is significant difference between day-school and hosteller higher secondary +1 biology students in their empathy, amiability, guidance, respectful behaviour and interpersonal intelligence in total. Whereas there is no significant difference between day scholar and hosteller higher secondary +1 biology students in their social persuasion.

22. There is significant difference between rural and urban school higher secondary +1 biology students in their empathy, amiability, social persuasion, respectful behaviour and interpersonal intelligence in total. Whereas there is no significant difference between rural and urban higher secondary +1 biology students in their guidance.

23. There is no significant difference between Tamil and English medium higher secondary +1 biology students in their empathy and social persuasion. Whereas there is significant difference between Tamil and English medium higher secondary +1 biology students in their amiability, guidance respectful behaviour and interpersonal intelligence in total.

24. There is no significant difference between nuclear and joint family higher secondary +1 biology students in their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.

25. There is significant difference between individual games and group games of higher secondary +1 biology students in their amiability, social persuasion, guidance and interpersonal intelligence in total. Whereas there is no significant difference between individual game and group games of higher secondary +1 biology students in their empathy and respectful behaviour.
26. There is no significant difference between male and female higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment and emotional maturity in total. Whereas there is significant difference between male and female higher secondary +1 biology students in their personality integration, and independence.

27. There is significant difference between rural and urban higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment and emotional maturity in total. Whereas there is no significant difference between rural and urban higher secondary +1 biology students in their personality integration, and independence.

28. There is no significant difference between day scholar and hosteller higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

29. There is no significant difference between rural and urban school higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

30. There is no significant difference between Tamil and English medium higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

31. There is no significant difference between nuclear and joint family higher secondary +1 biology students in their emotional stability, emotional progression,
social adjustment, personality integration, independence and emotional maturity in total.

32. There is no significant difference between individual games and group games higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

33. There is significant difference between male and female higher secondary +1 biology students in their achievement in Biology.

34. There is no significant difference between rural and urban higher secondary +1 biology students in their achievement in Biology.

35. There is significant difference between day scholar and hosteller higher secondary +1 biology students in their achievement in Biology.

36. There is no significant difference between rural and urban school higher secondary +1 biology students in their achievement in Biology.

37. There is significant difference between Tamil and English medium higher secondary +1 biology students in their achievement in Biology.

38. There is significant difference between nuclear family and joint family higher secondary +1 biology students in their achievement in Biology.

39. There is no significant difference between individual games and group game of higher secondary +1 biology students in their achievement in Biology.

SECTION – III

40. There is no significant difference among SC&ST, MBC, BC and OC higher secondary +1 biology students in their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.
41. There is no significant difference among Hindu, Christian and Muslim higher secondary +1 biology students in their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.

42. There is no significant difference among one sibling, two siblings, and more than two siblings of higher secondary +1 biology students in their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.

43. There is significant difference among government, unaided and govt. aided higher secondary +1 biology students in their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.

44. There is significant difference among boys, girls and co-education higher secondary +1 biology students in their empathy, amiability, guidance, respectful behaviour, and interpersonal intelligence in total. Whereas there is no significant difference among boys, girls and co-education higher secondary +1 biology students in their social persuasion.

45. There is no significant difference among one time, two times, three time and more than three times school transferred of higher secondary +1 biology students in their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.

46. There is no significant difference among NCC, NSS RRC and none of these higher secondary +1 biology students in their empathy, amiability, social
persuasion, and guidance, respectful behaviour and interpersonal intelligence in total.

47. There is no significant difference among SC&ST, MBC, BC and OC secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

48. There is no significant difference among Hindu, Christian and Muslim higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

49. There is no significant difference among one sibling, two siblings, and more than two siblings of higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

50. There is significant difference among government, unaided and govt. aided higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

51. There is significant difference among boys, girls and co-education higher secondary +1 biology students in their social adjustment and emotional maturity in total. Whereas there is no significant difference among boys, girls and co-education higher secondary +1 biology students in their emotional stability, emotional progression, personality integration, and independence.
52. There is no significant difference among one time, two times, three times and more than three times school transferred of higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

53. There is no significant difference among NCC, NSS, RRC, and none of these higher secondary +1 biology students in their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

54. There is no significant difference among SC&ST, MBC, BC and OC higher secondary +1 biology students in their achievement in Biology.

55. There is no significant difference among Hindu, Christian and Muslim higher secondary +1 biology students in their achievement in Biology.

56. There is no significant difference among one sibling, two siblings, and more than two siblings of higher secondary +1 biology students in their achievement in Biology.

57. There is significant difference between government, unaided and govt. aided higher secondary +1 biology students in their achievement in biology.

58. There is significant difference among boys, girls and co-education higher secondary +1 biology students in their achievement in Biology.
59. There is no significant difference among one time, two times, three times and more than three times school transferred of higher secondary +1 biology students in their achievement in Biology.

60. There is no significant difference among NCC, NSS, RRC and none of these higher secondary +1 biology students in their achievement in Biology.

SECTION –IV

61. There is no significant association between father’s education of higher secondary +1 biology students and their empathy, amiability, social persuasion, guidance respectful behaviour and interpersonal intelligence in total.

62. There is no significant association between mother’s education of higher secondary +1 biology students and their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.

63. There is no significant association between father’s occupation of higher secondary +1 biology students and their empathy, amiability, social persuasion, guidance, respectful behavior and interpersonal intelligence in total.

64. There is no significant association between mother’s occupation of higher secondary +1 biology students and their empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total.

65. There is no significant association between parent’s monthly income and interpersonal intelligence of higher secondary +1 biology students and the dimension of empathy, amiability, social persuasion, guidance, respectful and interpersonal intelligence in total.
66. There is no significant association between father’s education of higher secondary +1 biology students and their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

67. There is significant association between mother’s education of higher secondary +1 biology students and their emotional progression and personality integration. Whereas there is no significant association between mother’s education of higher secondary +1 biology students and their emotional stability, social adjustment, independence and emotional maturity in total.

68. There is no significant association between father’s occupation of higher secondary +1 biology students and their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

69. There is no significant association between mother’s occupation of higher secondary +1 biology students and their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

70. There is no significant association between parent’s monthly income of higher secondary +1 biology students and their emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total.

71. There is no significant association between father’s education and achievement in Biology of higher secondary +1 biology students.
72. There is no significant association between mother’s education and achievement in biology of higher secondary +1 biology students.

73. There is no significant association between father’s occupation and achievement in Biology of higher secondary +1 biology students.

74. There is no significant association between mother’s occupation and achievement in Biology of higher secondary +1 biology students.

75. There is no significant association between parent’s monthly income and achievement in Biology of higher secondary +1 biology students.

SECTION -V

76. There is significant relationship between interpersonal intelligence and achievement in Biology of higher secondary +1 biology students.

77. There is no significant relationship between emotional maturity and achievement in Biology of higher secondary +1 biology students.

78. There is significant relationship between interpersonal intelligence and emotional maturity of higher secondary +1 biology students.

5.3 INTERPRETATIONS

According to Loukesh Koul (1984) “Interpretation calls for a careful, logical and critical examination of the results obtained after analysis, keeping in view the limitations of the sample chosen, the tools selected and used in the study”.

The level of interpersonal intelligence, emotional maturity and achievement in Biology of higher secondary +1 biology students in Tirunelveli district is average. Generally, in the recent past, there is an exposure among the students community on the
necessity of human network, rapport and also importance of team work. Keeping this in mind, all the educational institutions have been slowly providing adequate instructional and infrastructural facilities, and also conducting many extracurricular activities to imbibe empathy, amiability, social persuasion, guidance and respectful behaviour, emotional stability, emotional progression, social adjustment, personality integration, and independence right from the primary education to higher education. In addition to this, there are several opportunities in and around for the students. Faculty members, peer members and various media pave the way to develop interpersonal intelligence and emotional maturity among the students and ultimately students attain achievement in biology. This may be the various reasons for the average level of students in interpersonal intelligence, emotional maturity and achievement. It is the order of the day in developing high level of interpersonal intelligence, emotional maturity and achievement among the higher secondary +1 biology students.

The ‘t’ test result shows that female students are better than male higher secondary +1 biology students in their empathy, amiability, guidance, respectful behaviour and interpersonal intelligence in total. This may due to the fact that naturally, the female students have the capacity to recognize emotions that are being experienced by another and also understand the intentions, motivations and desires of other people. This finding is in agreement with the finding of Premavathi (2012) and Vijay Amirtharaj and Porgio (2009).

The ‘t’ test result reveals that day-scholar students are better than hostellers with respect to empathy, amiability, guidance, respectful behaviour and interpersonal intelligence in total. This may be due to the fact that the day scholar students get more love and affection from their home and have sharing mind, good adjustment in their
family circle, helping tendency, the quality inspires love and kindness, sharing of work. They are having more chances to understand the society and also they are getting guidance and counseling from elders and family member. So their interpersonal intelligence is high.

The ‘t’ test result shows that rural schools are better than urban counterparts in their empathy, amiability, social persuasion, respectful behaviour and interpersonal intelligence in total. This may be due to the fact that the rural schools engage often co-curricular activities and extra-curricular activities for developing interpersonal relationship among the students and also students are given chances to collaborate with the society in their day today life.

The ‘t’ test result shows that Tamil medium students are better than English medium higher secondary +1 biology students in their amiability, guidance, respectful behaviour and interpersonal intelligence in total. This may be due to the fact that Tamil medium students have good foundations in mother tongue and spontaneous overflowing of language in revealing and sharing the matters, respect others opinion and friendliness and also skilled at assessing the emotions, motivations, desires and intentions of those around them. This finding is in agreement with the finding of Premavathi (2012).

The ‘t’ test result reveals that the students like group games are better than their counterparts in terms of amiability, social persuasion, guidance and interpersonal intelligence in total. This may be due to the fact that students like group games have mutual understanding within their groups. So they have the high level of amiability, social persuasion, guidance and interpersonal intelligence.
The ‘F’ test result shows that the government aided school students are better than their counterparts with respect to empathy, amiability, social persuasion, guidance, respectful behaviour and interpersonal intelligence in total. This may be due to the fact that the aided schools may conduct the yoga classes and create co-operating discussion with the class students and establishing positive relationship with society people. The aided school teachers help the children gain in understanding of their feelings through the co-curricular activities and inter school competitions.

The ‘F’ test result shows that the co-education school students are better than their other counterparts with respect to empathy, amiability, guidance, respectful behaviour and interpersonal intelligence in total. This may be due to the fact that the co-education school students are learning together in the classroom and on homework, assignments which provides the opportunity to learn from each other intellectually, as well as socially. This finding is in agreement with the finding of Rani and Porgio (2010).

The ‘t’ test result shows that male students are better than female higher secondary school +1 biology students in their personality integration and independence. This may be due to the fact that the male students are to assess the emotional state of others and to influence their opinions and behavior. Female students are less emotionally stable, sober, reserved and shy compared to male students. Male Students make new friends and develop new peer groups in school. The male students adjust with the environment. This finding is an agreement with the findings of Subramanian and Veliappan (2013) and Rajkumar (2012). Whereas this finding is not agree with the findings of Dchennareddy (2005)
The ‘t’ test result shows that rural students are better than urban school higher secondary +1 biology students in their emotional stability emotional progression, social adjustment, independence and emotional maturity in total. This may be due to the fact that the family background of rural students is providing more socialization for the children. They have joint family, good neighborhood relation and free from busy way of life. While urban people they are goal oriented and busy running for them. They find no time to mingle with others, but mingle with media.

The ‘F’ test result shows that the good aided school students are better than their counterparts with respect to emotional stability, emotional progression, social adjustment, personality integration, independence and emotional maturity in total. This may be due to the fact that the govt. aidedd school teachers help the children gain in understanding of their feelings through the use of books, games, puppets, interactive storytelling or role-plays. This leads to the development of emotional maturity. This finding is an agreement with the finding of Panimalar Roja Sasikumar and Parimala Fathima (2013).

The ‘F’ test result shows that the co-education school students are better than their counterparts with respect to social adjustment and emotional maturity in total. This may be due to the fact that co-education schools students don’t have any hesitation and fear over sharing their ideas. This will be of help to develop emotional maturity.

The ‘t’ test result shows that female students are better than male higher secondary +1 biology students in their achievement in Biology. This may be due to fact that the female students are highly competitive in memory.
There is significant difference between day-scholar and hostellers in their achievement in Biology. Day scholars are found to be better than hostellers and this may be due to the fact the day scholar students receive more love and affection and moral support from their parents whereas the hostellers are deprived of.

There is significant difference between Tamil and English medium higher secondary +1 biology students in their achievement in Biology. The English medium students are better than the Tamil medium students. This may be due to the fact that the English medium students are given opportunity on infrastructural and instructional facilities and they are arranged to scores marks.

There is significant difference between Nuclear Family and Joint Family higher secondary +1 biology students in their achievement in Biology. The Joint Family students are better than the nuclear family students. This may be due to the fact that the joint family members are motivated their children in proper manner through various resources.

There is significant difference among government, unaided and government aided higher secondary +1 biology students in their achievement in Biology. The aided school students are found to be better than their counterparts. This may be due to the fact that the aided schools attend extra classes apart from the regular class hours that strengthen their achievement.

The ‘F’ test result shows that the co-education school students are found to be better achievement in Biology than their counterparts. This may be due to the fact that
co-educational students are more motivated to study better because of the healthy competition that exists between the opposite sex present in the class.

The chi-square analysis shows that there is significance association between mother’s education in their emotional progression and personality integration in terms of emotional maturity. This may be due to the fact that educated mothers spend more time to support and guide their children to gain good conduct, and success in life. Besides, the educated mothers are more involved in their child’s personality development.

There is significant correlation between interpersonal intelligence and achievement in Biology of higher secondary +1 biology students. This may be due to the fact that in general academic achievement in any discipline needs and demands good interpersonal skills that help to relate with others and interact with others that would probably help in clarifying their doubts and in the process of reinforcing what has already been learnt. Further, maintenance of a smooth relationship will contribute a lot in developing a good mental health and no doubt these factors would augment achievement in Biology.

There is significant correlation between interpersonal intelligence and emotional maturity of higher secondary +1 biology students. This may be due to the fact that, being in good books of others would be not only healthy, a sign of good interpersonal intelligence, and also be at a positive advantage position in inculcating emotional maturity. Further, having a higher level of emotional maturity will be contributing to develop good interpersonal intelligence and vice versa.
5.4 RECOMMENDATIONS

The following recommendations are suggested by the investigator:

**Enhancement of interpersonal intelligence**

1. Strategies for developing interpersonal intelligence skills should be included in the higher secondary education curriculum.

2. In order to develop interpersonal intelligence skills in male students, give exposure on joint family system by the parents and imbibe the values such as good rapport, interpersonal relationship and so on by the teacher.

3. The head of the institution should be very particular about the development of sound interpersonal intelligence among students through their leadership behaviour.

4. Interpersonal behavioural skills should be developed among the English medium students through the social activities like NCC, NSS, YRC, RRC, and other social activities.

5. A close relationship between the roles played by the students, teachers, principal and administrators are desirable for the development of interpersonal intelligence among the youth.

6. The teacher should use more cooperative learning and good rapport with students in the classroom, so that students could feel free to interact better.

7. Innovative teaching strategies may be incorporated to develop interpersonal skills.

8. All the school should take care of the physical health of their students by encouraging sports, games and other community activities.

9. Discussion, debate and workshops may be conducted to develop the interpersonal communicative skills.
10. The seminar, symposium, workshops should be conducted with the help of experts from different institutions.

11. Teachers should improve teacher-student interaction as well as students’ interaction inside the class by giving discussion sessions.

12. Each and every student should be given an opportunity to participate in extra-curricular activities like quiz, drama and so on. This will improve the interpersonal intelligence.

13. The teachers should arrange science exhibition, club activities, and field trip.

14. Media programmes can be very informative and educative so that can be arranged for the development of students’ interpersonal communicative skills.

Enhancement of Emotional maturity

1. Help the children gain in understanding of their feelings through the use of books, sports and games, puppets, interactive storytelling and role-plays.

2. Teach children to identify and verbalize their feelings, as well as to read the emotional signals from other children and adults.

3. The students should be helped in realizing his/her emotional strength and weakness.

4. Seminars and talks on emotional maturity should be frequently arranged.

5. In order to improve the emotional maturity of the students sharing about group activities, picnics, tours, seminars, group discussion, cultural programme like dancing, singing, dramas, sports, and games should be regularly arranged.
6. It is an important for teacher and parents to convey their children the importance of emotional maturity by being emotionally expressive towards them.

7. Guidance and counseling centers should be started in schools so that the students can be helped to solve educational and emotional problems.

8. Group activities and team work may be encouraged in classroom teaching.

9. Co-curricular and extra-curricular activities should be given importance in the school campus, so that we can develop emotional maturity among the students.

10. Parents should create congenial environment at home, which may help the children to be emotionally balanced and have good emotional maturity.

11. Teachers and parents should help the children to express their emotions freely in the classroom and home respectively.

12. Curriculum of higher secondary schools should be modified, so that lessons relating to emotional and social skills are given importance in the classroom activities.

13. Teachers and parent play an important role in developing emotional maturity. Therefore, they should be good role models.

14. Participating in group activities like N.S.S, N.C.C, Scout and Guides and other social activities will ensure the development of emotional maturity.

15. Children should be taught to develop and maintain a positive attitude towards life.
16. The higher secondary school time table should be so arranged with provisions for creativity, fine arts, physical exercise, which will definitely pave way for emotional catharsis and social outlooks.

17. Watch a child’s facial expressions, posture, play or art work for signs that a child is experiencing a strong negative emotion. Then offer constructive ways to defuse it, such as painting, dialogue or taking a time out.

**Enhancement of Achievement in Biology**

1. The teachers should be trained and retrained on the job to improve on the innovative strategies in inquiry training model in Biology classrooms. This could be done by the Government or relevant professional bodies or experts in the field of biology.

2. There should be proper provisions of laboratory facilities or equipments which are necessary for effective inquiry strategies. Inquiry through laboratory work is very much essential because Biology is best taught in well equipped Biology laboratories and students learn Biology with much ease if taught through activities in the laboratory.

3. The nation’s biological science curriculum should be made in view to accommodate an inquiry based science program for the students. In this, more time should be allocated to biology in the schools time table to provide for application of biology practical/ laboratory skills.

4. Conduct extra classes in morning and evening.

5. Conduct more practical sessions.

6. Organize and arrange local fieldtrips.

7. Encourage Biology related group activities,

8. Conduct remedial teaching.

10. Establish “Nature Appreciation Club (NAC) in school and encourage students to be involved Biology related activities through this club.

11. Conduct parent-teacher meeting regularly.

12. Encourage students’ participation in Biology seminar.

13. Constant workshops and seminars should be made available by government for teachers to attend for the improvement of their teaching skills. Teachers and students should change their attitudes positively towards the teaching and learning of biology.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

The investigator suggests the following topics of research that could be further explored for the further research:

1. The present study is limited to Tirunelveli district. Similar could be done in the other district.

2. An Experimental study on relationship between interpersonal intelligence and performance in subject of arts and sciences college students may be conducted.

3. Influence of interpersonal intelligence on emotional intelligence of higher secondary students may be conducted.

4. A comparative study of relationship between interpersonal intelligence and academic achievement of matriculation and non-matriculation school students may be conducted.

5. A study on interpersonal intelligence of prospective teachers/sports students/educational administrators/ engineering students may be conducted.
6. A study on relationship between interpersonal intelligence of students and teaching competency of teachers may be conducted.

7. A study on emotional maturity and self-concept in the higher secondary students can be conducted.

8. A study on interpersonal intelligence, cognitive self-management and scholastic performance of the higher secondary students may be conducted.

9. A critical study on relationship between thinking style and interpersonal intelligence of the higher secondary students may be conducted.

10. A comparative study of self-concept, adjustment, motivation and emotions of adolescences may be conducted.

11. An experimental study on emotional maturity and Leadership style among the higher secondary students may be conducted.

12. A study on the psycho-social problem and emotional maturity of tribal students’ can be conducted.

13. A comparative study on relationship between emotional maturity and academic achievement of college students.

14. A study on self-esteem and emotional maturity of teachers working at various levels may be conducted.

15. A study on Emotional maturity and personality of the students at various levels may be conducted.

5.6 CONCLUSION

Teaching is an activity that is based on interaction between the senior (the teacher) and the junior (the learner). The purpose of the interaction is to enhance learners learning in specific learning task. To perform this task in an organized way and to
maximize benefits of this interaction, it is necessary that the teacher should be proficient in interpersonal skills and students should be dynamic interpersonal intelligence. Interpersonal skills are our ways of dealing and feeling that influence our interactions with each other. Being bold, quiet, authoritarian, cooperative, active or passive, having quality to work in team or helping people who are in distress, listening to people’s views who are in difficulty, the ability to interact well with others by using empathy and understanding intentions, motivations and feelings of other people, all these are essential skills for students community now a days and it manifests itself in an ability to cooperate with others, communicate effectively.

Having a high interpersonal intelligence is pivotal to success in student’s achievement. Any successful personal development strategy for advancement lies in integrating High-Tech and High-Touch. Developing dynamic people skills is the ‘holy grail’ to effective interpersonal skills and the development of meaningful interpersonal relationships. Dynamic people skills will propel interpersonal power and relationships to a whole new level. Top executives have achieved their successes by mastering the art of magnetic and effective interpersonal intelligence.

At the outset, skills are for shaping material things so that they cater more for the comfort of man and also for shaping attitudes, feelings, desires, emotions and impulses of man, so that they may confer more peace, more joy and more fortitude on man. Education is a character building process enhancing one’s skills and making him/her rational, capable, responsive and intelligently independent. Education generates the will - power to moulding one’s heart head and life. Education is a powerful instrument of emotional, social and economic change. So, changing is the order of the day and need of the hour.