CHAPTER V
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5.10 Analysis of the worthiness of SAGCP prepared with special focus on life skills attainment, personality development and vocational choices through Package Appraisal Proforma

5.11 Case Study of three higher secondary students

5.12 Tenability of Hypotheses

5.13 Discussion of Results
ANALYSIS AND INTERPRETATION OF DATA

Introduction

Analysis is the editing, segmenting and consolidation of data through conceptualizing and representing data so as to reach meaningful conclusions. Interpretation of data means drawing of inferences from the collected facts after an analytical study. It is the process of establishing relationship between the variables. In this chapter the investigator presented the analysis of data collected with the help of different statistical techniques. The study entitled “Developing a Strategically Aligned SAGCP with Special Focus on Life Skills Attainment, Personality Development and Vocational Choices of Students at Higher Secondary Level” combined both quantitative and qualitative interpretations so as to generalize the effect of guidance and counseling and the impact of the SAGCP on attainment of life skills, development of personality and choice of vocation of students at higher secondary level. Pretest-posttest non equivalent group design served as the blueprint for the study. Qualitative aspect of the study comprises of semi-structured interview and focus group discussion with school counsellors, principals and teachers of higher secondary schools of Kerala. Quantitative data collected by experiment with the developed Guidance and Counselling package with select higher secondary students of two schools of Kerala state and it was compared with two prevailing groups. The prevailing Group I is the students counselled by a school counsellor and prevailing group II is the students counselled by trained classroom practitioners. The data collected were subjected to appropriate statistical analysis.
The data collected have been analyzed and synchronize with discussion in alignment with objectives of the study under the following sections.

**Objectives of the Study**

1. To identify the current strategies adopted for providing guidance and counselling programmes in Higher Secondary Schools of Kerala.

2. To Develop and validate a Strategically Aligned SAGCP (SAGCP) with Special Focus on Life Skills Attainment, Personality development and Vocational choices of students at Higher Secondary level.

3. To find out the effect of SAGCP on Life Skills Attainment, personality development and vocational choices of higher secondary students in the experimental group.

4. To compare the effect of SAGCP on Life Skills Attainment, personality development and vocational choices of higher secondary students in the experimental group with prevailing groups.

5. To compare the effect of prevailing guidance and counseling programmes conducted by school counsellor with that of the trained classroom practitioner on Life Skills Attainment, personality development and vocational choices of higher secondary students.

6. To find out the gender differences in the effectiveness of package (SAGCP) with regard to life skills attainment, personality development and vocational choices.

7. To compare the effect of SAGCP as a strategy for the guidance and counseling with regard to life skills attainment, personality development and vocational choices of students opted different subjects.
8. To compare the effectiveness of SAGCP as a strategy for the guidance and counseling with regard to life skills attainment, personality development and vocational choices of students belonging to government and aided schools.

9. To find out the effect of SAGCP on set levels of dimensions of life skills attainment of higher secondary students in the experimental group.

10. To find out the effect of SAGCP on set levels of dimensions of personality development of higher secondary students in the experimental group.

11. To assess feedback from students under experimentation through a package appraisal questionnaire.

12. To conduct case studies with a purpose of finding out the effect of individual counseling of select higher secondary students.

Statistical Techniques Used

Different types of statistical techniques were employed in the present study. The following statistical techniques were employed to codify the results and reaching valid conclusions.

- Descriptive Statistics
- t-test
- ANOVA
- ANCOVA
- Estimation of Adjusted means
- Percentage analysis
- Scheff Post-hoc analysis

The visual representation of the summary of analysis undertaken mentioned above is shown in figure 5.1
Analysis and Interpretation of Data

**VISUAL PORTRAITS OF ANALYSIS OF DATA**

**Section I**

The Current Strategies Adopted for Providing Guidance and Counselling Programmes in Higher Secondary Schools

- Present Status of guidance and counselling
- Need for provision of guidance and counselling
- Constraints for imparting Guidance and Counselling
- Alternative modes for imparting Guidance and Counselling

**Semi-structured Interview**

**Section II**

Analysis of Pretest-posttest scores of Experimental group with that of prevailing groups on life skills attainment, Personality development and vocational choices on total sample and subsample

- Analysis of Pretest-posttest scores of Experimental group
- Analysis of Pretest-posttest scores of Experimental group with that of prevailing groups
- Analysis of Pretest-posttest scores of Experimental group based on subsamples-gender, optional subjects and type of school
- Dimension wise analysis of Life skills and Personality

**t-test, ANOVA, ANCOVA, Scheff Post Hoc, Percentage Analysis**

**Section III**

Analysis of the worthiness of SAGCP prepared by administering Package Appraisal Proforma

**Section IV**

Case Study of three higher secondary students Problems:
- Problem Cases: 1) Maladjustment, 2) Learning disabled 3) Emotionally disturbed

*Figure 5.1 Visual Portrait of Analysis of Data*
Summary of Analysis Done

Analysis done has been summarized under the following heads:

5.1 The Current Strategies Adopted for Providing Guidance and Counselling Programmes in Higher Secondary Schools of Kerala.

5.1.1 Current Status of Guidance and Counselling Programmes in Schools.

5.1.2 Need for Providing Guidance and Counselling Programmes in School

5.1.3 Constraints for imparting Guidance and Counselling Programmes in Schools.

5.1.4 Alternative modes for imparting Guidance and Counselling Programmes in Schools.

Concluding thoughts

5.2. Effect of SAGCP on Life Skills Attainment, Personality Development and Vocational Choices of Higher Secondary Students in the Experimental Group

5.2.1 Effect of SAGCP on life skills attainment of students

5.2.2 Effect of SAGCP on Personality Development of Students in the Experimental Groups

5.2.3 Effect of SAGCP on the Vocational Choices of Students in the Experimental group.

Concluding thoughts

5.3 Comparison of the Effect of SAGCP on Life Skills Attainment, Personality Development and Vocational Choices of Higher Secondary Students Trained with SAGCP (Experimental Group) and Students Trained in Prevailing School Counselling Programmes (Prevailing Group I and Prevailing Group II)

5.3.1 Comparison of the Effect of SAGCP and Prevailing School Counselling Programmes on Life skills attainment
5.3.1.1 Comparison of the Effect of SAGCP with prevailing group I for the attainment of life skills

5.3.1.2 Comparison of the Effect of SAGCP with prevailing group II for the attainment of life skills

5.3.2 Comparison of the Effect of SAGCP and Prevailing School Counselling Programmes on Personality development

5.3.2.1 Comparison of the Effect of SAGCP with prevailing group I for the Personality development

5.3.2.2 Comparison of the Effect of SAGCP with prevailing group II for the Personality development

5.3.3 Comparison of the Effect of SAGCP and prevailing groups for the Vocational choices

5.3.3.1 Comparison of the Effect of SAGCP with prevailing group I for the Vocational choices

5.3.3.2 Comparison of the Effect of SAGCP with prevailing group II for the Vocational choices

Concluding thoughts

5.4 Comparison of The Effect of Existing Guidance and Counseling Programmes [Prevailing Group 1- Students Trained by a School Counselor with that of Prevailing Group II -Students Trained by Trained Classroom Practitioners] on Life Skills Attainment, Personality Development And Vocational Choices of Higher Secondary Students.

5.4.1 Comparison of effect of Life skills Attainment in the Prevailing Group I and Prevailing Group II

5.4.2 Comparison of effect of Personality development in the Prevailing Group I and Prevailing Group II
5.4.3 Comparison of Effect of Prevailing Guidance and Counselling on the Vocational Choices of Students in the prevailing groups.

Concluding thoughts

5.5 Effect of SAGCP on Life Skills Attainment, Personality Development and Vocational Choices of Students in the Experimental Group with Respect to Gender

5.5.1 Comparison of effect of SAGCP on Life skills Attainment of higher secondary school students in Experimental group with respect to gender

5.5.2 Comparison of effect of SAGCP on Personality development of higher secondary school students in Experimental group with respect to gender

5.5.3 Comparison of effect of SAGCP on Vocational choices of higher secondary school students in Experimental group with respect to gender

Concluding thoughts

5.6 Effect of SAGCP on Life Skills Attainment, Personality Development and Vocational Choices of Students in the Experimental Group with respect to Optional Subjects.

5.6.1 Comparison of effect of SAGCP on Life skills attainment of higher secondary school students in the experimental group with respect to their subjects.

5.6.2 Comparison of effect of SAGCP on Personality Development of higher secondary school students in the experimental group with respect to their subjects.

5.6.3 Comparison of effect of SAGCP on Vocational choices of higher secondary students in experimental group with respect their subjects.

Concluding thoughts

5.7. Effect of SAGCP on Life Skills Attainment, Personality Development and Vocational Choices of Students in the Experimental Group with respect to type of school
5.7.1 Comparison of effect of SAGCP on Life skills attainment in higher secondary school students in the Experimental with respect type of school

5.7.2 Comparison of effect of SAGCP on Personality development in higher secondary school students in the Experimental with respect type of school

5.7.3 Comparison of effect of SAGCP on Vocational choices in higher secondary school students in the Experimental with respect type of school

Concluding thoughts

5.8 Compare the Effect of SAGCP on the dimensions of Life Skills Attainment of Higher Secondary Students in Experimental Group

Concluding thoughts

5.9 Compare the Effect of SAGCP on the dimensions of Personality Development of Higher Secondary Students in Experimental Group

Concluding thoughts

5.10 Analysis of the worthiness of SAGCP prepared with special focus on life skills attainment, personality development and vocational choices through Package Appraisal Proforma

Concluding thoughts

5.11 Case Study of three higher secondary students

Case I: Problem: Maladjustment.

Case II: Problem: Learning disabled.

Case III: Problem: Emotionally disturbed

Concluding thoughts

5.12 Tenability of Hypotheses

5.13 Discussion of Results

Conclusion
5.1 THE CURRENT STRATEGIES ADOPTED FOR PROVIDING GUIDANCE AND COUNSELLING PROGRAMMES IN HIGHER SECONDARY SCHOOLS OF KERALA.

An interview conducted with teachers, principals and school counselors of various higher secondary schools of Kerala by administering semi-structured interview schedule in order to understand the current strategies adopted for providing guidance and counselling programmes to students at higher secondary level. The analysis is based on the four probes for interaction namely,

- **Current Status of Guidance and Counselling Programmes in Schools.**
- **Need for Providing Guidance and Counselling Programmes in School**
- **Constraints for Providing Guidance and Counselling Programmes in School**
- **Alternative modes for imparting Guidance and Counselling Programmes in Schools.**

5.1.1 Current Status of Guidance and Counselling Programmes in Schools.

The item 1-5 of semi-structured interview scale revealed the current status of imparting guidance and counselling services for students at higher secondary level. In most of the school, guidance and counselling services are providing for students once or twice in an academic year. In some schools there is a school counsellor and their duties are conducting guidance and counselling programmes for students and also provide individual counselling for solving problems. But there is no regular programmes for providing guidance and counselling for all students at higher secondary level. Investigator felt that although implemented guidance and counselling
in most of the higher secondary school in Kerala, it is in an infancy stage and no regular programmes for empowering students to cultivate essential life skills, developing personality and enabling them to select proper career choices etc. However it is alarming that majority of higher secondary students of Kerala have no equal access to guidance and counselling programmes.

5.1.2 Need for Providing Guidance and Counselling Programmes in School

The item (6-7) aims to find out the need for providing Guidance and Counselling Programmes for students at higher secondary level. Most of the teachers were in flavour of implementing guidance and counselling practices for students. They argued that the students at higher secondary level are in the adolescence stage and they confront with multiplicity of problems. Consequently students are very anxious and they face even unethical problems in the class room. In order to remove their anxiety and perplexity and to create a conducive climate for learning they should be given proper guidance and counselling. Through a well organized guidance and counselling programmes, the students enable to solving problems they continuously faced with. It equips the students in enriching the perspective and promoting the attitude towards resolving educational, vocational and personal problems. The majority of School counsellors and teachers, whose teaching experience ranged from 10 years to 30 years, unanimously agreed that Guidance and Counselling services in High schools need to be improved. There is a lot of work that needs to be done for the services to be effective and accessible to all learners.

5.1.3 Constraints for imparting Guidance and Counselling Programmes in Schools.

The third section (item 8-11) deals with the constraints or ‘road blocks’ which cause to remain mute amidst of the pathways of implementing the guidance and
counselling programmes in classrooms at higher secondary level. The prominent constraints are the following:

- Lack of qualified counsellors
- Lack of in service training for student counselling techniques
- Scarcity of time for arranging counselling sessions
- Overcrowded class rooms
- Overload of curricular frame
- Lack of adequate institutional facility
- Insufficient fund

The investigator felt that even though the educators are aware of the guidance and counselling programmes, the existing school system works within several constraints shows some impediments in implementing these programmes.

5.1.4 Alternative modes for imparting Guidance and Counselling Programmes in Schools.

The final (fourth) section (item 11-15) of the interview focuses on the suggestive modes for setting guidance and counselling programmes for students at higher secondary level. The suggestive measures put forth by teachers, counsellors and other experts reveal to focus on the revamping the existing guidance and counselling system and preferential modalities with special reference to life skills attainment, personality development and vocational choices. The following are the alternative measures emerged from the experts for providing guidance and counselling programmes:

- Appointing trained and qualified counsellors
- Provision of periods for conducting guidance and counselling sessions
- Allocation of funds
- Provision of infrastructure facilities
• Arrange orientation programme for training various attractive strategies
• Implementation a unified curricular frame for all students
• Assure equal accessibility of guidance and counseling programs to all students in the country

Focus Group Discussion

Apart from the interview the investigator conducted a focus group discussion with higher secondary teachers and experts. The team in the focus group discussion includes Principal, School counselor, teachers, psychologist and a social worker. In the discussion all the team members shared their ideas regarding the needs and problems of students and they unanimously opined that guidance and counseling is inevitable in the current scenario. They pointed out the present situation of providing guidance and counseling is quite inadequate and it is devoid of solving the latest problems that arise from the complexity of social milieu. The consensus reached was that through a well planned and systematically organized guidance and counseling programme, most of the problems of students can be prevented or controlled to a great extent.

Concluding thoughts

The current system of providing guidance and counselling programmes for higher secondary students were inadequate. Though the educators are aware of the preponderance of imparting guidance and counselling programmes, they rarely implement it in a proper manner due to several constraints. The impediments are emerged mainly consists of the overcrowded class rooms, lack of qualified teachers, lack of in-service training for student counselling techniques, scarcity of time for arranging counselling sessions, overload of curricular frame, lack of adequate institutional facility and insufficient fund. The suggestive measures to implement
fruitful guidance and counselling practices emerged as multiple perspectives and
dynamic ideas include appointment of trained and qualified counsellors, provision of
periods for conducting guidance and counselling sessions, allocation of funds,
provision of infrastructure facilities, arrange orientation programme for training
various attractive strategies and implementation of a unified curricular frame for all
students. All the findings that emerged from the interview urged the investigator to
develop a strategically aligned guidance and counseling package for higher secondary
students. In this demarcated society, the indispensable element of imparting these
programmes with special focus on empowering students for nurturing essential life
skills, developing personality and enabling students to select proper vocational
choices.

From the study of prevailing system of guidance and counseling in schools,
the investigator could identify the experimental priorities over the existing strategies.
Comparison of Prevailing guidance and counseling programme with the experimental
strategies presented on table 5.1

Table 5.1

*Comparison of Prevailing guidance and counseling programme with the experimental
strategies*

<table>
<thead>
<tr>
<th><strong>Prevailing</strong></th>
<th><strong>Experimental</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactive</td>
<td>Planned, based on priorities</td>
</tr>
<tr>
<td>Crisis counselling only</td>
<td>Both preventive and crisis counselling</td>
</tr>
<tr>
<td>Individual guidance &amp;</td>
<td>Both Individual and Group guidance</td>
</tr>
<tr>
<td>counseling only</td>
<td>&amp;counselling</td>
</tr>
<tr>
<td>Uneven service to students</td>
<td>Consistent service to all Students</td>
</tr>
<tr>
<td>Information dissemination</td>
<td>Developing strategies</td>
</tr>
<tr>
<td>Task oriented</td>
<td>Student goal attainment oriented</td>
</tr>
<tr>
<td>Unstructured Programme</td>
<td>Designed programme</td>
</tr>
<tr>
<td>Immenseasurable</td>
<td>Evaluated and improved, based</td>
</tr>
<tr>
<td></td>
<td>on evaluation results</td>
</tr>
<tr>
<td>Counsellors only</td>
<td>Counselor + all school staff+Parents</td>
</tr>
</tbody>
</table>
ANALYSIS OF EXPERIMENTAL DATA COLLECTED

The data required for the study collected by using the tools Life Skills Attainment Scale, Personality development Index and Vocational Choice Scale and conducted an experiment to validate SAGCP. A three group pretest-posttest nonequivalent group design with one experimental group and two prevailing groups were selected for the study. The sample consists of a total of 720 students allotted them equally in the three groups (240 in each group). A pretest and posttest was conducted and the data analyzed with appropriate statistical techniques. The data and results are presented in the following heads:

5.2 EFFECT OF SAGCP ON LIFE SKILLS ATTAINMENT, PERSONALITY DEVELOPMENT AND VOCATIONAL CHOICES OF HIGHER SECONDARY STUDENTS IN THE EXPERIMENTAL GROUP

5.2.1 Effect of SAGCP on life skills attainment of students

During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment by administering Life Skills Attainment Scale. The differences between the pre-test and post-test mean scores of the experimental group were tested for significance by finding the critical ratio and My.x (Post-test means score adjusted for pre-test scores). The data and results of the test of significance are given in the table below.
Table 5.2

Data and Results of Test of Significance for the difference between Pre-test and Post-Test Scores of Life skills Attainment of students in the Experimental Group

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>No. Of Pupils</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Critical Ratio</th>
<th>Level Of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>240</td>
<td>134.36</td>
<td>5.88</td>
<td>86.71</td>
<td>Significant At 0.01</td>
</tr>
<tr>
<td>Posttest</td>
<td>240</td>
<td>163.870</td>
<td>10.52</td>
<td></td>
<td>0.01 Level</td>
</tr>
</tbody>
</table>

The posttest mean scores of the experimental group (163.870) are greater than that of the pretest mean score (134.36). The critical ratio obtained is 86.71, which is highly significant at 0.01 levels. It is obvious from the table that the SAGCP prepared by the investigator is an effective package for developing the life skills.

The above result was obtained by conducting the experiment in a non-equivalent group of students. So it need not be the same as the results that would have been obtained in an equated group of students. So the scores were treated statistically to obtain the posttest mean scores adjusted for pretest scores. The post test mean scores My adjusted for pretest scores \(x\) obtained by applying ANCOVA. \(\text{My}.x= 163.82\) represents the post test mean score of the students in the equivalent group. (Refer table No:5.11 ) Since the maximum score of the Life skills attainment is 200, the obtained My.x score 163.82 is very high. This shows that SAGCP is very effective for the attainment of life skills.
5.2.2 Effect of SAGCP on Personality Development of Students in the Experimental Group

The differences between the pretest and posttest mean scores of the experimental group were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.3

Data and Results of Test of Significance of Pretest and Post-Test Scores in Personality development in the Experimental group

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>240</td>
<td>169.73</td>
<td>8.690</td>
<td>66.12</td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>Posttest</td>
<td>240</td>
<td>191.69</td>
<td>11.757</td>
<td></td>
<td>0.01 level</td>
</tr>
</tbody>
</table>

During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment by administering Personality Development Index. The pre test and Posttest mean scores of the experimental group (191.69) are greater than that of the pretest mean score (169.73). The critical ratio obtained is 66.12, which is highly significant at 0.01 levels. Since the mean of the posttest scores in experimental group is greater than that of the pretest mean score, it is inferred that SGACP is effective for developing the personality of students in the experimental group.

Since the experiment was conducted in a non-equivalent group, the scores were treated statistically to obtain the posttest mean scores adjusted for pretest scores. The post test mean scores My adjusted for pretest scores (x) obtained by applying
ANCOVA. (My.x = 191.60) represents the post test mean score of the students in the equivalent group. (Refer table No:5.23) Since the maximum score of Personality development is 250, the obtained My.x score 191.60 is very high. This shows that SAGCP is very effective for developing personality.

5.2.1.3 Section III: Effect of SAGCP on the Vocational Choices of Students in the Experimental group.

During the experimental study the investigator conducted a pre-test and post-test by using Vocational Choice Scale. The differences between the percentage of the pre-test and post-test mean scores of the experimental group were tested for significance by finding the critical ratio. The data and results presented in Table.

Table 5.4

*Pretest and posttest scores of Vocational choices of experimental group, (N=3600)*

<table>
<thead>
<tr>
<th>Vocations</th>
<th>Experimental group</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pretest</td>
<td>%</td>
<td>posttest</td>
<td>%</td>
</tr>
<tr>
<td>Teaching</td>
<td>303</td>
<td>8.416</td>
<td>619</td>
<td>17.2</td>
</tr>
<tr>
<td>Medical</td>
<td>650</td>
<td>18.055</td>
<td>345</td>
<td>9.58</td>
</tr>
<tr>
<td>Engineering</td>
<td>1438</td>
<td>39.9444</td>
<td>679</td>
<td>18.9</td>
</tr>
<tr>
<td>Central Govt</td>
<td>308</td>
<td>8.55555</td>
<td>527</td>
<td>14.6</td>
</tr>
<tr>
<td>State Govt: Employ</td>
<td>370</td>
<td>10.2777</td>
<td>798</td>
<td>22.2</td>
</tr>
<tr>
<td>Artistic</td>
<td>130</td>
<td>3.61111</td>
<td>106</td>
<td>2.94</td>
</tr>
<tr>
<td>Conventional</td>
<td>31</td>
<td>0.86111</td>
<td>21</td>
<td>0.58</td>
</tr>
<tr>
<td>miscellaneous</td>
<td>370</td>
<td>10.2777</td>
<td>505</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>3600</td>
<td>100</td>
<td>3600</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 5.3 shows that the critical ratios of percentages of the pretest and posttest scores of Vocational choices of experimental group. The critical ratio of Teaching (3.57), Medical (3.5), Engineering (9.61), Central Govt (2.57), State Govt Employ (2.25), Artistic (0.284), Conventional (0.02) and miscellaneous (1.66). From the critical ratios it is clear that the difference in the percentages of pretest and post test of teaching, medical, engineering, central govt and state govt employ are significant ($p< 0.05$ level). But, the remaining areas of vocations like artistic, conventional and other miscellaneous jobs were not found significant. This indicates that students generally do not like to work in their traditional professions. Pretest and posttest scores of traditional jobs were very low apart from non-significance of their critical ratios. Post-test scores of the other vocations were significantly higher than the pretest scores indicates that SAGCP was effective for selecting proper vocation.

The post-test mean scores of the vocational choices in each areas of experimental group are greater than that of the pre-test mean score. The critical ratio obtained in each category revealed that SGACP is effective for developing the abilities in the vocational choices of students in the experimental group. This very evident from figure 5.2
**Figure 5.2:** Graphical representation of pretest-posttest of vocational choices among experimental group

**Concluding thoughts**

Guidance and counselling aim at orient individuals to face the ever-changing challenges in today's fast-moving era. From the findings of the study it is obvious that the developed SAGCP with special focus on life skills attainment, personality development and vocational choices is an effective package and acts as a holistic and comprehensive framework for developing students at higher secondary level. The variety of strategies enabled students to develop a positive attitude and energy in every sphere of life. The powerful picture of information in the package strengthened the minds of the learners by bridging rational ideas and concepts. That is why the students exhibit remarkable improvement in the life skills attainment, personality development and vocational choices, after the implementation of the SAGCP.
5.3 Comparison of the effect of SAGCP on Life skills attainment, Personality development and Vocational choices of higher secondary students trained with SAGCP (experimental group) and students trained in prevailing school counselling programmes (prevailing group I and prevailing group II)

In this section the performance of the students in the experimental group on Life skills attainment, Personality development and vocational choices were compared with the prevailing guidance and counseling programmes. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The scores obtained were analyzed in detail and are given under the heads.

5.3.1 Comparison of the Effect of SAGCP and Prevailing School Counselling Programmes (Prevailing Group I) and (Prevailing Group II) for Life Skills Attainment

5.3.1.1 Comparison of the Effect of SAGCP and prevailing group I for the attainment of life skills

To find out the effect of SAGCP on Life Skills Attainment of Higher Secondary Students in experimental group with prevailing groups in terms of total sample were compared using t-test. The results of analysis and interpretation are given under the following sub heads.

5.3.1.1.1 Comparison of pre-test scores in life skills attainment of students in the Experimental group and prevailing group I

The differences between the mean scores of the pre-test of two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.
Table 5.6

Data and results of test of significance of pre-test scores in life skills Attainment in the Experimental and prevailing group

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>134.762</td>
<td>7.020</td>
<td>0.127</td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td>Prevailing group 1</td>
<td>240</td>
<td>134.687</td>
<td>5.765</td>
<td>0.127</td>
<td>at 0.05 level</td>
</tr>
</tbody>
</table>

The critical ratio of pretest score obtained was 0.1278 which is not even significant at 0.05 levels. This shows that there is no significant difference between the means of the pre-test scores of students in the experimental group and prevailing group. Therefore the two groups do not differ significantly in their life skills attainment. So it is inferred that before the experiment the two groups were more or less same in life skills attainment.

5.3.1.1.2 Comparison of post-test scores in life skills attainment of students in the Experimental group and prevailing group 1

The differences between the posttest mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.
Table 5.7

Data and Results of Test of Significance of Post-Test Scores in Life skills Attainment in the Experimental and Prevailing Group

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>163.87</td>
<td>10.52</td>
<td>27.984</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Prevailing group1</td>
<td>240</td>
<td>142.16</td>
<td>5.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Above table shows the mean scores of the posttest of the experimental group and prevailing group. The mean scores of experimental group (163.870) are greater than that of the prevailing group (142.16). The critical ratio obtained is 27.98404, which is highly significant at 0.01 levels. Since the mean of experimental group is greater than that of the prevailing group, it is inferred that experimental group is better than the prevailing group.

5.3.1.1.3 Comparison of gain scores in life skills attainment of students in the Experimental and Prevailing group

In this section the performances of students in the experimental group and prevailing groups were compared by testing the significance of the difference between the mean of the gain scores in life skills attainment of the two groups. For this the critical ratio is found out and tested for significance. The data and results of the test of significance are given in the following table.
Table 5.8

_data and results of test of significance of the gain scores in life skills attainment of students in the Experimental and Prevailing group_

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group</td>
<td>240</td>
<td>6.641</td>
<td>1.654</td>
<td>15.90</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>29.108</td>
<td>7.475</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Above table shows the mean scores of the gain scores of the experimental group and prevailing group. The mean scores of the experimental group (29.1083) are greater than that of the prevailing group (6.641187). The obtained critical ratio is 15.90 which are highly significant at 0.01 levels. From the table it is clear that the mean of experimental group is greater than that of the prevailing group and it is tentatively inferred that experimental group is better than the prevailing group.

Only by analyzing the pre-test scores, post-test scores, gain scores and by finding out critical ratio it cannot be concluded that the two groups may or may not differ significantly in their life skills attainment after the conduction of the experiment. Also the investigator selected two intact classroom groups without considering any variables like sex, age, socio economic status etc. So it is necessary to analyze the data using the statistical technique ‘Analysis of covariance’ (ANCOVA) for arriving at valid and reliable conclusions.
5.3.1.1.4 Comparison of life skills attainment of the Experimental and Prevailing group I based on pre- test and post- test scores using ANCOVA

The pre-test and post-test scores of the prevailing and experimental groups were subjected to ANCOVA to determine the effectiveness of SAGCP on life skills attainment of Higher Secondary level. The summary of analysis of variance of pre-test(x) and post-test(y) scores taken separately is given in the following table.

Table 5.9

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SSx</th>
<th>SSy</th>
<th>MSx(Vx)</th>
<th>MSy(Vy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>0.675</td>
<td>56550.20833</td>
<td>0.675</td>
<td>56550.20833</td>
</tr>
<tr>
<td>Within groups</td>
<td>478</td>
<td>19725.03</td>
<td>34517.65833</td>
<td>40.42013</td>
<td>70.73290642</td>
</tr>
<tr>
<td>Total</td>
<td>479</td>
<td>19725.7</td>
<td>91067.86667</td>
<td>41.09513</td>
<td>56620.94124</td>
</tr>
</tbody>
</table>

\[ F_x = \frac{0.675}{40.42} = 0.0167 \]

\[ F_y = \frac{56550.208}{70.73290} = 799.4894 \]

From the table F, for df 1/479

F at 0.05 level = 3.86

F at 0.01 level = 6.66

The obtained Fx and Fy ratios were tested for significance. The table life skills of F ratio for df 1/479 is 3.86 at 0.05 level. So the obtained Fx is not significant at 0.05 level ( Fx = 0.0167; p > 0.05). Since the F test applied to the pre-test scores Fx falls for short of significance at 0.05 level, it is clear that the x means do not differ significantly.
The table life skills of F ratio for df 1/40 is 7.01 at 0.01 level. So the obtained F<sub>y</sub> is significant at 0.01 level (F<sub>y</sub> = 799.48; p < 0.01). Since the F<sub>y</sub> falls beyond the 0.01 level of significance, it can be tentatively interpreted that there was significant difference between the y means of the two groups. The final y scores were adjusted for differences in initial x scores. For that SS<sub>y</sub> has been adjusted for any variability in y and SS<sub>y,x</sub>, and F ratio, F<sub>y,x</sub> were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in experimental and prevailing groups is given in the following table.

Table 5.10

Summary of analysis of covariance of pre-test and post-test scores in life skills attainment of students in the Experimental and Prevailing groups.

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SS&lt;sub&gt;x&lt;/sub&gt;</th>
<th>SS&lt;sub&gt;y&lt;/sub&gt;</th>
<th>SS&lt;sub&gt;x,y&lt;/sub&gt;</th>
<th>SS&lt;sub&gt;y,x&lt;/sub&gt;</th>
<th>MS&lt;sub&gt;y,x&lt;/sub&gt;</th>
<th>SD&lt;sub&gt;y,x&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>0.675</td>
<td>56550.20</td>
<td>195.375</td>
<td>56122.70</td>
<td>56122.71</td>
<td>4.759</td>
</tr>
<tr>
<td>Within groups</td>
<td>477</td>
<td>19725.03</td>
<td>34517.65</td>
<td>21523.82</td>
<td>11030.99</td>
<td>22.65091</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>488</td>
<td>19725.7</td>
<td>91067.86</td>
<td>21719.2</td>
<td>67153.70</td>
<td>56145.36</td>
<td></td>
</tr>
</tbody>
</table>

F<sub>y,x</sub> = 56122.71/22.65091 = 2477.72

From the table F, for df 1/478

F at 0.05 level = 3.86

F at 0.01 level = 6.66

The obtained F<sub>y,x</sub> ratio was tested for significance. Since the table life skills of F ratio for df 1/478 is 7.01 at 0.01 level the obtained F<sub>y,x</sub> ratio is highly significant even at 0.01 level(F<sub>y,x</sub> = 2477.72; p < 0.01). It is clear from the significant F<sub>y,x</sub> ratio
that the two final means which depend upon the experimental and prevailing variables differ significantly after they have been adjusted for initial difference on \( x \).

**Comparison of Adjusted ‘y’ means**

The adjusted means of post-test scores \((x,y)\) means of students in the experimental and prevailing groups were calculated. The difference between the adjusted \( y \) means was tested for significance. The data for adjusted \( y \) means of post-test scores of students in experimental and prevailing groups are given in the following table.

Table 5.11

*Data for adjusted means of post-test scores in life skills attainment in the Experimental and Prevailing group I*

<table>
<thead>
<tr>
<th>Groups</th>
<th>( N )</th>
<th>( M_x )</th>
<th>( M_y )</th>
<th>( M_{y,x}(\text{adjusted}) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>240</td>
<td>134.7625</td>
<td>163.8708</td>
<td>163.8299</td>
</tr>
<tr>
<td>Prevailing I</td>
<td>240</td>
<td>134.6875</td>
<td>142.1625</td>
<td>142.2034</td>
</tr>
<tr>
<td>General means</td>
<td></td>
<td>134.725</td>
<td>153.0167</td>
<td>153.0166667</td>
</tr>
</tbody>
</table>

\( SE_{m} \) between two adjusted means = 0.035

life skills = 163.82-142.20/.035= 545

From the \( t \) table, for \( df = 478 \)

\( t \) at 0.05 level = 1.96

\( t \) at 0.01 level = 2.58

Adjusted \( y \) means for pre-test scores are tested for significance for \( df \) 1/478The obtained \( t \) life skills is 545 and the table life skills for significant difference for \( df478 \) is 2.58 at 0.01 level( \( t = 545; p< 0.01 \)). The significant difference between the adjusted \( y \) means indicates that the students of the experimental and prevailing
groups differ significantly in their life skills attainment in the post-test. So the mean of the post-test scores of experimental and prevailing groups clearly show that the experimental group is superior in the life skills attainment. It may therefore be interpreted that the life skills attainment of students taught through SAGCP is better than those of students taught through prevailing method. This very evident from figure 5.2

![Graphical representation of adjusted mean of Life skills attainment among Experimental group and Prevailing group I](image)

*Figure 5.3 Graphical representation of adjusted mean of Life skills attainment among Experimental group and Prevailing group I*

### 5.3.1.2 LIFE SKILLS OF STUDENTS IN THE EXPERIMENTAL AND PREVAILING GROUP II

#### 5.3.2.1 Comparison of pre-test scores in life skill attainment of students in the Experimental and Prevailing group II

The differences between the pre-test mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.
Table 5.12

Data and results of test of significance of pre-test scores in life skill attainment in the Experimental and Prevailing group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>134.762</td>
<td>7.020</td>
<td>0.18</td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>134.870</td>
<td>5.391</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The critical ratio obtained is 0.18 which is not even significant at 0.05 level. This shows that there is no significant difference between the means of the pre-test scores of students in the experimental group and Prevailing group II. Therefore the two groups do not differ significantly in their life skill attainment. So it is inferred that before the experiment the two groups were more or less same in life skill attainment.

5.3.1.2 Comparison of post-test scores in life skills of students in the Experimental and Prevailing group II

The differences between the mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.13

Data and results of test of significance of post-test scores in life skills based behavior of students in the Experimental and Prevailing group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>136.841</td>
<td>5.070</td>
<td>35.837</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>163.870</td>
<td>10.526</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table clearly shows that the mean scores of the experimental group (163.8708) is greater than that of the Prevailing group II (136.8416). The critical ratio obtained is 35.83732, which is highly significant even at 0.01 level. Since the mean of experimental group is greater than that of the Prevailing group II, it is inferred that experimental group is better than the Prevailing group II.

**Comparison of gain scores in life skill attainment of students in the Experimental and Prevailing group II**

The performances of students in both the groups were compared by testing the significance of the difference between the mean of the gain scores in life skill attainment of the two groups. For this the critical ratio is found out and tested for significance. The data and results of the test of significance are given in the following table.

Table 5.14

*Data and results of test of significance of the gain scores in life skill Attainment of students in the Experimental and Prevailing group II*

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>29.108</td>
<td>1.970</td>
<td></td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>6.641</td>
<td>2.655</td>
<td>19.86</td>
</tr>
</tbody>
</table>

The table clearly shows that the mean scores of the experimental group (29.1083) is greater than that of the Prevailing group II (6.641187). The obtained critical ratio is 19.86 which is highly significant even at 0.01 level. Since the mean of
experimental group is greater than that of the Prevailing group II, it is inferred that experimental group is better than the Prevailing group II.

Only by analyzing the pre-test scores, post-test scores, gain scores and by finding out critical ratio it cannot be concluded that the two groups may or may not differ significantly in their life skill attainment after the conducting the experiment. Also the investigator selected two intact class room groups without considering any variables like sex, age, socio economic status etc. So it is necessary to analyze the data using the statistical technique ‘Analysis of covariance ’(ANCOVA).

**Comparison of life skill attainment of the Experimental and Prevailing group II based on pre-test and post-test scores using ANCOVA**

For arriving at valid and reliable conclusions the investigator adopted the statistical technique ANCOVA. This analysis was made to compare the effectiveness of SACGP with the Prevailing group II. This was made with respect to the scores obtained for the life skill attainment as a whole. The pre-test and post-test scores of the Prevailing group II and experimental groups were subjected to ANCOVA to determine the effectiveness of SAGCP on life skill attainment over Present Activity Oriented Method. The summary of analysis of variance of pre-test(x) and post-test(y) scores taken separately is given in the following table.

Table 5.15

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SSx</th>
<th>SSy</th>
<th>MSx(Vx)</th>
<th>MSy(Vy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>1.408333</td>
<td>87669.10208</td>
<td>1.408333</td>
<td>87669.10208</td>
</tr>
<tr>
<td>Within groups</td>
<td>478</td>
<td>18726.46</td>
<td>32628.97917</td>
<td>38.37389</td>
<td>66.86266223</td>
</tr>
<tr>
<td>Total</td>
<td>479</td>
<td>18727.87</td>
<td>120298.0813</td>
<td>39.78222</td>
<td>87735.96475</td>
</tr>
</tbody>
</table>

*Summary of analysis of variance of pre-test(x) and post-test(y) scores in life skill attainment of the Experimental and Prevailing group II, taken separately.*
Analysis and Interpretation of Data

\[ F_x = \frac{1.408333}{38.37389} = 0.0367 \]

\[ F_y = \frac{87669.10208}{66.86266223} = 1311.18 \]

From the table F, for df 1/478

F at 0.05 level = 3.86

F at 0.01 level = 7.88

The obtained \( F_x \) and \( F_y \) ratios were tested for significance. The table life skills of F ratio for df 1/478 is 3.86 at 0.05 level. So the obtained \( F_x \) is not significant at 0.05 level (\( F_x = 0.00051 \; p > 0.05 \)). Since the F test applied to the pre-test scores \( F_x \) falls for short of significance at 0.05 level, it is clear that the x means do not differ significantly.

The table life skills of F ratio for df 1/478 is 7.88 at 0.01 level. So the obtained \( F_y \) is significant at 0.01 level (\( F_y = 51.12; \; p < 0.01 \)). Since the \( F_y \) falls beyond the 0.01 level of significance, it can be tentatively interpreted that there was significant difference between the y means of the two groups. The final y scores were adjusted for differences in initial x scores. For that \( SS_y \) has been adjusted for any variability in y and \( SS_{y,x} \), and F ratio, \( F_{y,x} \) were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in experimental and Prevailing group II is given in the following table.

Table 5.16

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>( SS_x )</th>
<th>( SS_y )</th>
<th>( SS_{x,y} )</th>
<th>( SS_{y,x} )</th>
<th>( MS_{y,x} ) (( V_{y,x} ))</th>
<th>( Sd_{y,x} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>1.408333</td>
<td>87669.102</td>
<td>-351.379</td>
<td>88398.207</td>
<td>88398.21</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>477</td>
<td>18726.46</td>
<td>32628.91</td>
<td>19564.73</td>
<td>12188.45</td>
<td>25.55232</td>
<td>5.052</td>
</tr>
<tr>
<td>Total</td>
<td>478</td>
<td>18727.87</td>
<td>120298.08</td>
<td>19213.35</td>
<td>100586.6627</td>
<td>88423.76</td>
<td></td>
</tr>
</tbody>
</table>
F<sub>y.x</sub> = 88398.21/25.02763 = 3459.49

From the table F, for df 1/477

F at 0.05 level = 3.88

F at 0.01 level = 7.01

The obtained F<sub>y.x</sub> ratio was tested for significance. Since the table life skills of F ratio for df 1/477 is 3.88 at 0.01 level the obtained F<sub>y.x</sub> ratio is highly significant even at 0.01 level (F<sub>y.x</sub> = 3459.49; p < 0.01). It is clear from the significant F<sub>y.x</sub> ratio that the two final means which depend upon the experimental and Prevailing group II variables differ significantly after they have been adjusted for initial difference on x.

The adjusted means of post-test scores (x,y means) of students in the experimental and Prevailing group IIs were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of students in experimental and Non-counselling groups are given in the following table.

Table 5.17

Data for adjusted means of post-test scores in life skill attainment in the Experimental and Prevailing group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>M&lt;sub&gt;x&lt;/sub&gt;</th>
<th>M&lt;sub&gt;y&lt;/sub&gt;</th>
<th>M&lt;sub&gt;y,x&lt;/sub&gt;(adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>240</td>
<td>134.7625</td>
<td>163.8708333</td>
<td>163.9274</td>
</tr>
<tr>
<td>Prevailing II</td>
<td>240</td>
<td>134.8708</td>
<td>136.8416667</td>
<td>136.7851</td>
</tr>
<tr>
<td>General means</td>
<td>240</td>
<td>134.8167</td>
<td>150.35625</td>
<td>-</td>
</tr>
</tbody>
</table>

SE<sub>m</sub> between two adjusted means = 0.258

t<sub>life skills</sub> = 27.14/.0421 = 644.33

From the t table, for df = 478

t at 0.05 level = 1.96
Analysis and Interpretation of Data

At 0.01 level  = 2.58

Adjusted y means for pre-test scores were tested for significance for df 1/478. The obtained t life skills is 644.33 and the table life skills for significant difference for df478 is 2.58 at 0.01 level (t = 644.33; p < 0.01). The significant difference between the adjusted y means indicates that the students of the experimental and Prevailing group IIs differ significantly in their in the post-test. So the mean of the post-test scores of experimental and Prevailing group IIs clearly show that the experimental group is superior in the life skills attainment. It may therefore be interpreted that the students taught through life skills is better than those of students taught through Prevailing group II teaching. The graphic representation of this section is shown below:

![Graphical representation of adjusted mean of Life skills attainment among Experimental group and Prevailing group II](image)

Figure 5.4 Graphical representation of adjusted mean of Life skills attainment among Experimental group and Prevailing group II

5.3.2 Analysis of data with respect on personality development of higher secondary students in experimental group with prevailing groups

In this section the performance of the students in two groups based on Personality development is evaluated.
5.3.2.1 Analysis of data with respect on personality development of higher secondary students in experimental group with prevailing group I

5.3.2.2 Analysis of data with respect on personality development of higher secondary students in experimental group with prevailing group II

5.3.2.1 Analysis of data with respect on personality development of higher secondary students in experimental group with prevailing groups

During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The scores obtained were analyzed in detail and are given under the heads.

5.3.2.1.1 Comparison of pre-test scores in Personality development of students in the Experimental and prevailing group I

The differences between the mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.18

Data and results of test of significance of pre-test scores in Personality development in the Experimental and prevailing group I

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>169.733</td>
<td>8.690</td>
<td>0.196</td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td>Prevailing I</td>
<td>240</td>
<td>169.570</td>
<td>9.377</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The critical ratio obtained is .1969 which is not even significant at 0.05 levels. This shows that there is no significant difference between the means of the pre-test
scores of students in the experimental group and prevailing group. Therefore the two
groups do not differ significantly in their Personality development. So it is inferred
that before the experiment the two groups were more or less same in Personality
development.

**Comparison of post-test scores in Personality development of students in the Experimental and Prevailing group I**

The differences between the mean scores of the two groups were tested for
significance by finding the critical ratio. The data and results of the test of
significance are given in the table below.

Table 5.19

*Data and Results of Test of Significance of Post-Test Scores in Personality
development in the Experimental and Prevailing Group I*

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>191.691</td>
<td>11.756</td>
<td>15.40</td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>Prevailing group</td>
<td>240</td>
<td>176.737</td>
<td>9.372</td>
<td></td>
<td>0.01 level</td>
</tr>
</tbody>
</table>

The table clearly shows that mean scores of the experimental group (191.69)
are greater than that of the prevailing group (176.73). The critical ratio obtained is
15.40, which is highly significant even at 0.01 level. Since the mean of experimental
group is greater than that of the prevailing group, it is inferred that experimental
group is better than the prevailing group.
Comparison of gain scores in Personality development of students in the Experimental and Prevailing group I

The performances of students in both the groups were compared by testing the significance of the difference between the mean of the gain scores in Personality development of the two groups. For this the critical ratio is found out and tested for significance. The data and results of the test of significance are given in the following table.

Table 5.20

Data and results of test of significance of the gain scores in Personality development of students in the Experimental and Prevailing group I

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group</td>
<td>240</td>
<td>5.144</td>
<td>1.794</td>
<td></td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>Experimental</td>
<td>240</td>
<td>21.958</td>
<td>7.166</td>
<td>14.00</td>
<td>0.01 level</td>
</tr>
</tbody>
</table>

The table clearly indicates that the mean scores of the experimental group (21.95) is greater than that of the prevailing group (5.14). The obtained critical ratio is 14.00 which is highly significant even at 0.01 level. Since the mean of experimental group is greater than that of the prevailing group, it is inferred that experimental group is better than the prevailing group.

Only by analyzing the pre-test scores, post-test scores, gain scores and by finding out critical ratio it cannot be concluded that the two groups may or may not differ significantly in their Personality development after the conduction of the experiment. Also the investigator selected two intact class room groups without
considering any variables like sex, age, socio economic status etc. So it is necessary to analyze the data using the statistical technique ‘Analysis of covariance ’ (ANCOVA).

Comparison of Personality development of the Experimental and Prevailing group I based on pre- test and post- test scores using ANCOVA

For arriving at valid and reliable conclusions the investigator adopted the statistical technique ANCOVA. This analysis was made to compare the effectiveness of SAGCP on students at students at Higher Secondary level. This was made with respect to the scores obtained for the Personality development as a whole.

The pre- test and post- test scores of the prevailing and experimental groups were subjected to ANCOVA to determine the effectiveness of SAGCP on Personality development of Higher Secondary level. The summary of analysis of variance of pre-test(x) and post- test(y) scores taken separately is given in the following table.

Table 5.21

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SS$_x$</th>
<th>SS$_y$</th>
<th>MS$_x$(V$_x$)</th>
<th>MS$_y$(V$_y$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>3.16875</td>
<td>26835.25</td>
<td>3.16875</td>
<td>26835.25</td>
</tr>
<tr>
<td>Within groups</td>
<td>478</td>
<td>39065.73</td>
<td>54027.65</td>
<td>81.72747</td>
<td>113.0285</td>
</tr>
<tr>
<td>Total</td>
<td>479</td>
<td>39068.9</td>
<td>80862.9</td>
<td>84.89622</td>
<td>26948.28</td>
</tr>
</tbody>
</table>

$F_x = 3.168/81.72 = 0.0387$

$F_y = 26835.25/113.0285 = 237.42$

From the table $F$, for df 1/479

$F$ at 0.05 level = 3.86

$F$ at 0.01 level = 6.66
Analysis and Interpretation of Data

The obtained $F_x$ and $F_y$ ratios were tested for significance. The table Personality development of $F$ ratio for df $1/479$ is 3.86 at 0.05 level. So the obtained $F_x$ is not significant at 0.05 level ($F_x = 0.0387; p > 0.05$). Since the $F$ test applied to the pre-test scores $F_x$ falls short of significance at 0.05 level, it is clear that the $x$ means do not differ significantly.

The table Personality development of $F$ ratio for df $1/240$ is 7.01 at 0.01 level. So the obtained $F_y$ is significant at 0.01 level ($F_y = 237.42; p < 0.01$). Since the $F_y$ falls beyond the 0.01 level of significance, it can be tentatively interpreted that there was significant difference between the $y$ means of the two groups.

The final $y$ scores were adjusted for differences in initial $x$ scores. For that SS$_y$ has been adjusted for any variability in $y$ and SS$_{y,x}$, and $F$ ratio, $F_{y,x}$ were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in experimental and prevailing groups is given in the following table

Table 5.22

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SS$_x$</th>
<th>SS$_y$</th>
<th>SS$_{x,y}$</th>
<th>SS$_{y,x}$</th>
<th>MS$<em>{y,x}$ (V$</em>{y,x}$)</th>
<th>Sd$_{y,x}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>3.16875</td>
<td>26835.25</td>
<td>291.6062</td>
<td>26195.03</td>
<td>26195.03</td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>477</td>
<td>39065.73</td>
<td>54027.65</td>
<td>42999.23</td>
<td>6698.855</td>
<td>14.04372</td>
<td>3.74</td>
</tr>
<tr>
<td>Total</td>
<td>478</td>
<td>39068.9</td>
<td>80862.9</td>
<td>43290.84</td>
<td>32893.89</td>
<td>26209.07</td>
<td></td>
</tr>
</tbody>
</table>

$F_{y,x} = 26195.03/14.04372 = 1865.24$

From the table $F$, for df $1/477$

$F$ at 0.05 level $= 3.86$

$F$ at 0.01 level $= 6.66$
The obtained $F_{y,x}$ ratio was tested for significance. Since the table Personality development of F ratio for df 1/477 is 7.01 at 0.01 level the obtained $F_{y,x}$ ratio is highly significant even at 0.01 level ($F_{y,x} = 1865.24; p < 0.01$). From the table it is obvious that from the significant $F_{y,x}$ ratio that the two final means which depend upon the experimental and prevailing variables differ significantly after they have been adjusted for initial difference on $x$. The adjusted means of post-test scores ($x, y$ means) of students in the experimental and prevailing groups were calculated. The difference between the adjusted $y$ means was tested for significance. The data for adjusted $y$ means of post-test scores of students in experimental and prevailing groups are given in the following table.

Table 5.23

**Data for adjusted means of post-test scores in Personality development in the Experimental and Prevailing group I**

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>$M_x$</th>
<th>$M_y$</th>
<th>$M_{y,x}$ (adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>240</td>
<td>169.7333</td>
<td>191.6917</td>
<td>191.6022</td>
</tr>
<tr>
<td>Prevailing</td>
<td>240</td>
<td>169.5708</td>
<td>176.7375</td>
<td>176.8269</td>
</tr>
<tr>
<td>General means</td>
<td>480</td>
<td>169.6521</td>
<td>184.2146</td>
<td></td>
</tr>
</tbody>
</table>

$SE_m$ between two adjusted means = 0.031

Personality development = 191.60 - 176.82 / 0.031 = 437.12

From the t table, for df = 478

t at 0.05 level = 196

t at 0.01 level = 2.58

Adjusted $y$ means for pre-test scores are tested for significance for df 1/478

The obtained t Personality development is 437.12 and the table Personality development
development for significant difference for df478 is 2.58 at 0.01 level (t = 437.12; p < 0.01). The significant difference between the adjusted y means indicates that the students of the experimental and prevailing groups differ significantly in their Personality development in the post-test. So the mean of the post-test scores of experimental and prevailing groups clearly show that the experimental group is superior in the Personality development. It may therefore be interpreted that the Personality development of students taught through SAGCP is better than those of students taught through prevailing group I. The graphic representation of this section is shown below:

![Graphical representation of adjusted mean of Personality development among Experimental and Prevailing groupI](image)

**Figure 5.5** Graphical representation of adjusted mean of Personality development among Experimental and Prevailing groupI

5.3.2.2 **Analysis of data with respect on personality development of higher secondary students in experimental group with prevailing group II**

In this section the performance of the students in experimental group and prevailing groups based on Personality development is evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-
test at the end of the treatment. The scores obtained were analyzed in detail and are given under the heads.

5.3.2.2.1 Comparison of pre-test scores in Personality development of students in the Experimental and prevailing group I

To find out the effect of SAGCP on Personality development of Higher Secondary Students in experimental group with Prevailing group II in terms of total sample were compared using t-test. The results of analysis and interpretation are given under the following sub heads.

5.3.2.2.2 Comparison of pre-test scores in Personality development of students in the Experimental and Prevailing group II

The differences between the mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.24

Data and results of test of significance of pre-test scores in Personality development in the Experimental and Prevailing group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>169.733</td>
<td>8.690</td>
<td>0.147</td>
<td>Not significant at 0.05 level</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>169.612</td>
<td>9.213</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table clearly shows that the critical ratio obtained is 0.147 which is not even significant at 0.05 levels. This implies that there is no significant difference between the means of the pre-test scores of students in the experimental group and Prevailing group II. Therefore the two groups do not differ significantly in their Personality development.
development. So it is inferred that before the experiment the two groups were more or less same in Personality development.

5.4.3 Comparison of post-test scores in Personality development of students in the Experimental and Prevailing group II

The differences between the mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.25

Data and Results of Test of Significance of Post-Test Scores in Personality development in the Experimental and Prevailing group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>191.691</td>
<td>11.756</td>
<td>21.65</td>
<td>Significant at 0.01</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>171.2</td>
<td>8.753</td>
<td></td>
<td>0.01 level</td>
</tr>
</tbody>
</table>

The table clearly shows that the mean scores of the experimental group (191.69) are greater than that of the Prevailing group II (171.2). The critical ratio obtained is 21.65, which is highly significant even at 0.01 levels. Since the mean of experimental group is greater than that of the Prevailing group II, it is inferred that experimental group is better than the Prevailing group II.

5.4.4 Comparison of gain scores in Personality development of students in the Experimental and Prevailing group II

The performances of students in the experimental group and prevailing groups were compared by testing the significance of the difference between the mean of the
gain scores in Personality development of the two groups. For this the critical ratio is found out and tested for significance. The data and results of the test of significance are given in the following table.

Table 5.26

*Data and results of test of significance of the gain scores in Personality development of students in the Experimental and Prevailing group II*

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing II group</td>
<td>240</td>
<td>5.1445</td>
<td>1.293</td>
<td>19.33</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Experimental group</td>
<td>240</td>
<td>21.958</td>
<td>1.587</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table clearly indicates that the mean scores of the experimental group (21.95) is greater than that of the Prevailing group II (5.14). The obtained critical ratio is 19.33 which are highly significant even at 0.01 levels. Since the mean of experimental group is greater than that of the Prevailing group II, it is inferred that experimental group is better than the Prevailing group II.

Only by analyzing the pre-test scores, post-test scores, gain scores and by finding out critical ratio it cannot be concluded that the two groups may or may not differ significantly in their Personality development after the conduction of the experiment. Also the investigator selected two intact class room groups without considering any variables like sex, age and socio economic status, the investigator used statistical technique ‘Analysis of covariance’ (ANCOVA).
Comparison of Personality development of the Experimental and Prevailing group II group based on pre- test and post- test scores using ANCOVA

For arriving at valid and reliable conclusions the investigator adopted the statistical technique ANCOVA. This analysis was made to compare the effectiveness of SAGCP on students at Higher Secondary level. This was made with respect to the scores obtained for the Personality development as a whole.

Comparison of effectiveness of SAGCP on Personality development with Prevailing group II

The pre- test and post- test scores of the Prevailing group II and experimental groups were subjected to ANCOVA to determine the effectiveness of SAGCP on Personality development of Higher Secondary level. The summary of analysis of variance of pre- test(x) and post- test(y) scores taken separately is given in the following table.

Table 5.27

Summary of analysis of variance of pre- test(x) and post- test(y) scores in Personality development of the Experimental and Prevailing group II, taken separately.

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SS(_x)</th>
<th>SS(_y)</th>
<th>MS(_x)(V(_x))</th>
<th>MS(_y)(V(_y))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>1.752083</td>
<td>50389.01</td>
<td>1.752083</td>
<td>50389.01</td>
</tr>
<tr>
<td>Within groups</td>
<td>478</td>
<td>38335.9</td>
<td>51349.58</td>
<td>80.20062</td>
<td>107.4259</td>
</tr>
<tr>
<td>Total</td>
<td>479</td>
<td>38337.65</td>
<td>101738.6</td>
<td>81.9527</td>
<td>50496.43</td>
</tr>
</tbody>
</table>

F\(_x\)=1.7520/80.20=0.0218

F\(_y\)=50389.01/107.4259=469.058

From the table F, for df 1/479
F at 0.05 level = 3.86
F at 0.01 level = 6.66

The obtained F_x and F_y ratios were tested for significance. The table Personality development of F ratio for df 1/479 is 3.86 at 0.05 level. So the obtained F_x is not significant at 0.05 level (F_x = 0.0218; p > 0.05). Since the F test applied to the pre-test scores F_x falls for short of significance at 0.05 level, it is clear that the x means do not differ significantly.

The table Personality development of F ratio for df 1/479 is 6.66 at 0.01 level. So the obtained F_y is significant at 0.01 level (F_y = 469.05; p < 0.01). Since the F_y falls beyond the 0.01 level of significance, it can be tentatively interpreted that there was significant difference between the y means of the two groups.

The final y scores were adjusted for differences in initial x scores. For that SS_y has been adjusted for any variability in y and SS_y,x, and F ratio, F_y,x were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in experimental and Prevailing group IIs is given in the following table.

Table 5.28

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SS_x</th>
<th>SS_y</th>
<th>SS_y,x</th>
<th>MS_y,x (V_y,x)</th>
<th>SD_y,x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1</td>
<td>1.752083</td>
<td>50389.01</td>
<td>297.1292</td>
<td>49745.79</td>
<td>49745.79</td>
</tr>
<tr>
<td>Within groups</td>
<td>477</td>
<td>38335.9</td>
<td>51349.58</td>
<td>41479.87</td>
<td>6467.905</td>
<td>13.55955</td>
</tr>
<tr>
<td>Total</td>
<td>478</td>
<td>38337.65</td>
<td>101738.6</td>
<td>41777</td>
<td>56213.7</td>
<td>49759.35</td>
</tr>
</tbody>
</table>

Summary of analysis of covariance of pre-test and post-test scores in Personality development of students in the Experimental and Prevailing group II.
\[ F_{y,x} = \frac{49745.79}{13.55} = 3668.69 \]

From the table F, for df 1/477

F at 0.05 level = 3.86

F at 0.01 level = 6.66

The obtained \( F_{y,x} \) ratio was tested for significance. Since the table Personality development of F ratio for df 1/477 is 6.66 at 0.01 level the obtained \( F_{y,x} \) ratio is highly significant even at 0.01 level (\( F_{y,x} = 3668.69; \ p < 0.01 \)). It is clear from the significant \( F_{y,x} \) ratio that the two final means which depend upon the experimental and Prevailing group II variables differ significantly after they have been adjusted for initial difference on x. The adjusted means of post-test scores (x, y means) of students in the experimental and Prevailing group II groups were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of students in experimental and Prevailing group II are given in the following table.

Table 5.29

Data for adjusted means of post-test scores in Personality development in the Experimental group and Prevailing group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>( M_x )</th>
<th>( M_y )</th>
<th>( M_{y,x} ) (adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>240</td>
<td>169.7333</td>
<td>191.6917</td>
<td>191.6263</td>
</tr>
<tr>
<td>Prevailing</td>
<td>240</td>
<td>169.6125</td>
<td>171.2</td>
<td>171.2654</td>
</tr>
<tr>
<td>General means</td>
<td></td>
<td>169.6729</td>
<td>181.4458</td>
<td></td>
</tr>
</tbody>
</table>
SE_{m} \text{ between two adjusted means} = 0.0310

T \text{ Personality development} = 191.60 - 171.26 / 0.030 = 663.52

From the t table, for df = 478

t \text{ at 0.05 level} = 1.96

t \text{ at 0.01 level} = 2.58

Adjusted y means for pre-test scores are tested for significance for df 1/478

The obtained t Personality development is 437.12 and the table Personality development for significant difference for df478 is 2.58 at 0.01 level (t = 663.52; p < 0.01). The significant difference between the adjusted y means indicates that the students of the experimental and Prevailing group II differ significantly in their Personality development in the post-test. So the mean of the post-test scores of experimental and Prevailing group IIIs clearly show that the experimental group is superior in the Personality development. It may therefore be interpreted that the Personality development of students taught through SAGCP is better than those of students of Prevailing group II. The graphical representation of this section is shown below:
5.4.3 Comparison of Effect of SAGCP on the Vocational Choices of Students in the prevailing groups.

During the experimental study the investigator conducted a pre-test and post-test to the students in the prevailing group I and prevailing II in order to find out the effect of prevailing guidance and counseling programmes by using Vocational Choice Scale. The differences between the percentage of the pre-test and post-test mean scores of the two groups were tested for significance by finding the critical ratio. The data and results presented in Table 5.30.
Table 5.30

Comparison of Effect of SAGCP on the Vocational Choices of Students in the Experimental and Prevailing groups.

| Subjects | Vocations | Experimental group | | | | | | Prevailing group I | | | | | | Prevailing group II | | | |
|----------|-----------|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|          |           | pretest | % | posttest | % | CR | pretest | % | posttest | % | CR | pretest | % | posttest | % | CR | |
| Teaching | Teaching  | 303     | 8.416 | 619     | 17.2 | 3.57 | 286     | 7.944 | 375     | 10.4 | 1.082 | 264     | 7.33 | 288     | 8 | 0.293 |
| Medical  | Medical   | 650     | 18.055 | 345     | 9.58 | 3.55 | 637     | 17.69 | 526     | 14.6 | 1.41 | 653     | 18.139 | 624     | 17.33 | 0.37 |
| Engineering | Engineering | 1438 | 39.94 | 679     | 18.9 | 9.61 | 1421    | 39.47 | 1234    | 34.3 | 2.76 | 1472    | 40.89 | 1447    | 40.19 | 0.38 |
| central  | central   | 308     | 8.55 | 527     | 14.6 | 2.57 | 291     | 8.083 | 398     | 11.1 | 1.296 | 296     | 8.22 | 307     | 8.528 | 0.135 |
| Govt: Employ | Govt: Employ | 370 | 10.27 | 798     | 22.2 | 2.256 | 415     | 11.527 | 534     | 14.8 | 0.627 | 416     | 11.55 | 436     | 12.11 | 0.190 |
| Artistic | Artistic  | 130     | 3.611 | 106     | 2.94 | 0.284 | 128     | 3.55 | 117     | 3.25 | 0.131 | 118     | 3.27 | 117     | 3.25 | 0.012 |
| Conventional | Conventional | 31 | 0.861 | 21     | 0.58 | 0.019 | 42     | 1.166 | 35     | 0.97 | 0.014 | 46     | 1.27 | 39     | 1.083 | 0.013 |
| Miscellaneous | Miscellaneous | 370 | 10.27 | 505     | 14 | 1.660 | 380     | 10.55 | 381     | 10.6 | 0.012 | 335     | 9.305 | 342     | 9.5 | 0.086 |
| TOTAL    |           | 3600    | 100  | 3600    | 100 |   | 3600    | 100  | 3600    | 100 |   | 3600    | 100  | 3600    | 100 |   |
In this section the vocational choices of the students in three groups is evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The scores obtained were analyzed in detail to understand the effect of SAGCP on their vocational choices. For analysis the percentages of the pre-test and post-test scores found and the critical ratios of the percentage calculated. The significant difference in the pretest-post test percentage indicates the effectiveness of the Package.

The critical ratios obtained from test of significance of difference between the percentages of Vocational choices for 8 choices in the experimental group, prevailing group1 and Prevailing group II were evaluated. The obtained critical ratios of experimental group for teaching is 3.57, medical is 3.55, engineering is 9.61, Central Govt is 2.5, Govt Employ is 2.25, Artistic is 0.28, conventional is 0.019 and miscellaneous is 1.66. From the critical ratios it is clear that the difference in the percentages of pretest and post test of teaching, medical, engineering, central govt, state govt employ are significant at 0.05 level, but other areas are not significant that means SAGCP was effective for selecting vocation. In the prevailing group 1 and prevailing group II obtained critical ratios of the pretest and post test percentages are not significant, that means Experimental group select proper vocational choices after the implementation of SAGCP. The graphical representation of this section is presented below:
Figure 5.7 Graphical representation of pretest-posttest vocational choices of Experimental, prevailing I and Prevailing II group

Concluding thoughts

The strategies embedded in the package led the students towards better performance than the prevailing groups. The significant difference between the adjusted y means indicates that the students of the experimental and prevailing groups differ significantly in their life skills attainment, personality development and vocational choices in the post-test. It may therefore be interpreted that the experimental group is better than those of students of Prevailing groups. The highly interactive and participative instructional methodology kept the experimental group on right track, strengthen their mind set to achieve a systematic way of conflicts resolution and modify their behavior.
5.4 Comparison of the Effect of Existing Guidance and Counseling Programmes 

[Prevailing Group 1- Students Trained by a School Counselor with that of 

Prevailing Group II- Students Trained by Trained Classroom Practitioners] on 

Life Skills Attainment, Personality Development and Vocational Choices of 

Higher Secondary Students.

In this section the performance of the students in Prevailing groups on Life skills attainment, Personality development and vocational choices were evaluated. During the experimental study the investigator conducted a pre- test in the beginning and a post- test at the end of the treatment. The scores obtained were analyzed in detail and are given under the heads.

5.4.1 Comparison of Life skills Attainment in the Prevailing Group I and 

Prevailing Group II

5.4.2 Comparison of Personality development in the Prevailing Group I and 

Prevailing Group II

5.4.3 Comparison of Effect of Prevailing Guidance and Counselling on the 

Vocational Choices of Students in the prevailing groups.

5.4.1 Comparison of Life skills Attainment in the Prevailing Group I and 

Prevailing Group II

To compare the effect of prevailing guidance and counseling programmes on Life Skills Attainment of higher secondary students in prevailing groups in terms of total sample were compared using t-test. The results of analysis and interpretation are given under the following sub heads.
5.4.1.1 Comparison of Pre-test scores of Life skills Attainment of students in the
Prevailing Group I and Prevailing Group II

The differences between the pretest mean scores of the two groups were tested
for significance by finding the critical ratio. The data and results of the test of
significance are given in the table below.

Table 5.31

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group I</td>
<td>240</td>
<td>134.687</td>
<td>5.765</td>
<td>0.13</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>134.762</td>
<td>7.020</td>
<td></td>
<td>at 0.01 level</td>
</tr>
</tbody>
</table>

The critical ratio obtained is 0.13 which is not even significant at 0.05 levels.
This shows that there is no significant difference between the means of the pre-
test scores of students in the Prevailing group I and prevailing group II. Therefore the two
groups do not differ significantly in their life skills attainment. So it is inferred that
before the experiment the two groups were more or less same in life skills attainment

5.4.1.1 Comparison of Post-test scores of Life skills Attainment of students in the
Prevailing Group I and Prevailing Group II

The differences between the mean post-test scores of the two groups were
tested for significance by finding the critical ratio. The data and results of the test of
significance are given in the table below.
Table 5.32

Data and Results of Test of Significance of Post-Test Scores in Life skills Attainment in the Prevailing Group I and Prevailing Group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group I</td>
<td>240</td>
<td>142.16</td>
<td>5.79</td>
<td>10.70</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>136.8416</td>
<td>5.070211</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table clearly shows that the mean scores of the Prevailing group I (142.16) is greater than that of the Prevailing group II (136.8416). The critical ratio obtained is 10.70, which is highly significant even at 0.01 level. Since the mean of Prevailing group I is greater than that of the prevailing group II, it is inferred that Prevailing group I is better than the prevailing group II.

5.4.1.3 Comparison of gain scores of Life skills Attainment of students in the Prevailing Group I and Prevailing Group II

The differences between the mean gain scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.
Table : 5.33

Data and results of test of significance of the gain scores in life skills attainment of students in the Prevailing Group I and Prevailing group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group I</td>
<td>240</td>
<td>7.525</td>
<td>1.443</td>
<td>44.08</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>1.729</td>
<td>1.436</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table clearly indicates that the mean scores of the Prevailing group I (7.525) is greater than that of the prevailing group II (1.72917). The obtained critical ratio is 44.08 which is highly significant even at 0.01 level. Since the mean of Prevailing group I is greater than that of the prevailing group II, it is inferred that Prevailing group I is better than the prevailing group II.

Only by analyzing the pre-test scores, post-test scores, gain scores and by finding out critical ratio it cannot be concluded that the two groups may or may not differ significantly in their life skills attainment after the conduction of the experiment. Also the investigator selected two intact class room groups without considering any variables like sex, age, socio economic status etc. So it is necessary to analyze the data using the statistical technique ‘Analysis of covariance ’ (ANCOVA).

5.4.1.4 Comparison of effectiveness Prevailing guidance and counseling programmes on Life skills attainment

The pre-test and post-test scores of the Prevailing group I and Prevailing group II were subjected to ANCOVA to determine the effectiveness of Prevailing guidance and counseling programmes on Life skills attainment of students at Higher
Secondary level. The summary of analysis of variance of pre-test(x) and post-test(y) scores taken separately is given in the following table.

Table 5.34

Summary of analysis of variance of pre-test(x) and post-test(y) scores in life skills attainment of the Prevailing group I and Prevailing group II taken separately.

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SSx</th>
<th>SSy</th>
<th>MSx(Vx)</th>
<th>MSy(Vy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1.00</td>
<td>1.75</td>
<td>3864.7</td>
<td>1.75</td>
<td>3864.68</td>
</tr>
<tr>
<td>Within groups</td>
<td>478.00</td>
<td>14785.15</td>
<td>14937.9</td>
<td>30.93</td>
<td>31.25</td>
</tr>
<tr>
<td>Total</td>
<td>479.00</td>
<td>14786.90</td>
<td>18802.6</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

\[ F_x = \frac{1.75}{30.93} = 0.06 \]

\[ F_y = \frac{3864.68}{31.25} = 123.67 \]

From the table F, for df 1/489

F at 0.05 level = 3.86

F at 0.01 level = 6.66

The obtained \( F_x \) and \( F_y \) ratios were tested for significance. The table life skills of F ratio for df 1/489 is 3.86 at 0.05 level. So the obtained \( F_x \) is not significant at 0.05 level (\( F_x = 0.06; p > 0.05 \)). Since the F test applied to the pre-test scores \( F_x \) falls for short of significance at 0.05 level, it is clear that the \( x \) means do not differ significantly.

The table life skills of F ratio for df 1/489 is 7.01 at 0.01 level. So the obtained \( F_y \) is significant at 0.01 level (\( F_y = 123.67; p < 0.01 \)). Since the \( F_y \) falls beyond the 0.01 level of significance, it can be tentatively interpreted that there was significant difference between the \( y \) means of the two groups.
The final y scores were adjusted for differences in initial x scores. For that SS_y has been adjusted for any variability in y and SS_y.x, and F ratio, F_y,x were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in Prevailing group I and Prevailing group II, is given in the following table.

Table 5.3

Summary of analysis of covariance of pre-test and post-test scores in life skills attainment of students in the Prevailing group I and Prevailing group II

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>f</th>
<th>SS_x</th>
<th>SS_y</th>
<th>SS_x,y</th>
<th>SS_y,x</th>
<th>MS_y,x(V_y,x)</th>
<th>Sd_y,x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1.00</td>
<td>1.75</td>
<td>3864.7</td>
<td>82.29</td>
<td>4025.76</td>
<td>4025.76</td>
<td>1.43</td>
</tr>
<tr>
<td>Within groups</td>
<td>477.00</td>
<td>14785.15</td>
<td>14937.9</td>
<td>14365.91</td>
<td>979.36</td>
<td>2.05</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>478.00</td>
<td>14786.90</td>
<td>18802.6</td>
<td>14283.62</td>
<td>5005.12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

F_y,x = 4025.76/2.05 = 1960.76

From the table F, for df 1/478

F at 0.05 level = 3.86

F at 0.01 level = 6.66

The obtained F_y,x ratio was tested for significance. Since the table life skills of F ratio for df 1/478 is 7.01 at 0.01 level the obtained F_y,x ratio is highly significant even at 0.01 level (F_y,x = 1960.76; p < 0.01). It is clear from the significant F_y,x ratio that the two final means which depend upon the Prevailing group I and Prevailing group II (non coun), variables differ significantly after they have been adjusted for initial difference on x. The adjusted means of post-test scores (x,y means) of students in the Prevailing group I and Prevailing group II were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y
means of post-test scores of students in Prevailing group I and Prevailing group II (non coun), are given in the following table.

Table 5.36

*Data for adjusted means of post-test scores in life skills attainment in the Prevailing group I and Prevailing group II*

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mx</th>
<th>My</th>
<th>M_{yx} (adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group I</td>
<td>240.00</td>
<td>134.59</td>
<td>142.1</td>
<td>142.18</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240.00</td>
<td>134.71</td>
<td>136.4</td>
<td>136.38</td>
</tr>
<tr>
<td>General means</td>
<td>480.00</td>
<td>134.65</td>
<td>139.28</td>
<td>-</td>
</tr>
</tbody>
</table>

SE_m between two adjusted means = 0.13

t life skills = 142.18 - 136.38 / 0.13 = 44.28

From the t table, for df = 478

t at 0.05 level = 196

t at 0.01 level = 2.58

Adjusted y means for pre-test scores are tested for significance for df 1/478

The obtained t life skills is 545 and the table life skills for significant difference for df 478 is 2.58 at 0.01 level ( t = 44.28; p < 0.01). The significant difference between the adjusted y means indicates that the students of the Prevailing group I and Prevailing group II differ significantly in their life skills attainment in the post-test. So the mean of the post-test scores of Prevailing group I and Prevailing group II clearly show that the Prevailing group I is superior in life skills attainment. It may therefore be interpreted that the life skills attainment of students taught through SAGCP is better than that of students taught through prevailing method. The graphical representation in this section presented below.
5.4.2 Comparison of Personality development in the Prevailing Group I and Prevailing Group II

To compare the effect of Prevailing guidance and counseling programmes on Personality development of Higher Secondary Students in prevailing groups in terms of total sample were compared using t-test. The results of analysis and interpretation are given under the following sub heads.

5.4.2.1 Comparison of Pre-test scores of Personality development of students in the Prevailing Group I and Prevailing Group II

The differences between the mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.
Table 5.37

Data and Results of Test of Significance of Pre-Test Scores Personality development in the Prevailing Group I and Prevailing Group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group I</td>
<td>240</td>
<td>169.570</td>
<td>9.377</td>
<td>0.049</td>
<td>Not Significant at 0.01 level</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>169.612</td>
<td>9.213</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The critical ratio obtained is 0.049 which is not even significant at 0.01 levels.
The table clearly shows that there is no significant difference between the means of
the pre-test scores of students in the Prevailing group I and prevailing group II.
Therefore the two groups do not differ significantly in their life skills attainment. So it
is inferred that before the experiment the two groups were more or less same in life
skills attainment.

5.4.2.2 Comparison of Post-test scores of Personality development of students in
the Prevailing Group I and Prevailing Group II

The differences between the post-test mean scores of the two groups were
tested for significance by finding the critical ratio. The data and results of the test of
significance are given in the table below.

Table 5.38

Data and Results of Test of Significance of Post-Test Scores in Personality
development in the Prevailing Group I and Prevailing Group II

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group I</td>
<td>240</td>
<td>176.73</td>
<td>9.372</td>
<td>6.69</td>
<td>Not Significant at 0.01 level</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>171.2</td>
<td>8.7538</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The table clearly shows that the mean scores of the Prevailing group I (176.73) is greater than that of the Prevailing group II (171.2). The critical ratio obtained is 6.69, which is significant even at 0.01 level. Since the mean of Prevailing group I is greater than that of the prevailing group II, it is inferred that Prevailing group I is better than the prevailing group II.

### 5.4.2.1 Comparison of gain scores of Personality development of students in the Prevailing Group I and Prevailing Group II

The differences between the mean gain scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.39

*Data and results of test of significance of the gain scores in Personality development of students in the Prevailing Group I and Prevailing group II*

<table>
<thead>
<tr>
<th>Groups</th>
<th>No. of pupils</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Critical ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group I</td>
<td>240</td>
<td>7.166</td>
<td>1.794</td>
<td>30.07</td>
<td>Significant at 0.01 level</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240</td>
<td>1.587</td>
<td>1.293</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table clearly shows that the mean scores of the gain scores of Prevailing group I (7.16) is greater than that of the Prevailing group II (1.58. The critical ratio obtained is 30.07, which is highly significant even at 0.01 level. Since the mean of Prevailing group I is greater than that of the prevailing group II, it is inferred that Prevailing group I is better than the prevailing group II.
5.4.2.4 Comparison of effectiveness Prevailing guidance and counseling programmes on Life skills attainment

The pre-test and post-test scores of the Prevailing group I and Prevailing group II were subjected to ANCOVA to determine the effectiveness of Prevailing guidance and counseling programmes on Life skills attainment of students at Higher Secondary level. The summary of analysis of variance of pre-test(x) and post-test(y) scores taken separately is given in the following table.

Table 5.40

Summary of analysis of variance of pre-test(x) and post-test(y) scores in personality development attainment of the Prevailing group I and Prevailing group II, taken separately.

<table>
<thead>
<tr>
<th>Sources of variation</th>
<th>df</th>
<th>SS_x</th>
<th>SS_y</th>
<th>MS_x(V_x)</th>
<th>MS_y(V_y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1.00</td>
<td>0.21</td>
<td>3679.7</td>
<td>0.21</td>
<td>3679.67</td>
</tr>
<tr>
<td>Within groups</td>
<td>478.00</td>
<td>41303.76</td>
<td>39306.9</td>
<td>86.41</td>
<td>82.23</td>
</tr>
<tr>
<td>Total</td>
<td>479.00</td>
<td>41303.97</td>
<td>42986.5</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

F_x = 0.21/86.41=0.00241

F_y = 3679.67/82.23=44.75

From the table F, for df 1/489

F at 0.05 level = 3.86

F at 0.01 level = 6.66

The obtained F_x and F_y ratios were tested for significance. The table personality development of F ratio for df 1/489 is 3.86 at 0.05 level. So the obtained F_x is not significant at 0.05 level (F_x = 0.00241; p > 0.05). Since the F test applied to
the pre-test scores $F_x$ falls short of significance at 0.05 level, it is clear that the $x$ means do not differ significantly. The table life skills of F ratio for df 1/489 is 7.01 at 0.01 level. So the obtained $F_y$ is significant at 0.01 level($F_y = 44.75; p < 0.01$). Since the $F_y$ falls beyond the 0.01 level of significance, it can be tentatively interpreted that there was significant difference between the $y$ means of the two groups. The final $y$ scores were adjusted for differences in initial $x$ scores. For that $SS_y$ has been adjusted for any variability in $y$ and $SS_{y,x}$, and $F$ ratio, $F_{y,x}$ were calculated. The summary of analysis of covariance of pre-test and post-test scores of students in Prevailing group I and Prevailing group II is given in the following table.

Table 5.41

*Summary of analysis of covariance of pre-test and post-test scores in personality development of students in the Prevailing group I and Prevailing group II*

<table>
<thead>
<tr>
<th>Sources of variation of f</th>
<th>SSx</th>
<th>SSy</th>
<th>SS_{x,y}</th>
<th>SS_{y,x}</th>
<th>MS_{y,x}(V_{y,x})</th>
<th>Sd_{y,x}</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among means</td>
<td>1.00</td>
<td>0.21</td>
<td>3679.7</td>
<td>-27.69</td>
<td>3733.10</td>
<td>3733.10</td>
</tr>
<tr>
<td>Within groups</td>
<td>477.00</td>
<td>41303.7</td>
<td>39306.9</td>
<td>39720.56</td>
<td>1108.81</td>
<td>2.32</td>
</tr>
<tr>
<td>Total</td>
<td>478.00</td>
<td>41303.9</td>
<td>42986.5</td>
<td>39692.88</td>
<td>4841.91</td>
<td></td>
</tr>
</tbody>
</table>

$F_{y,x} = \frac{3733.10}{2.32}=1605.94$

From the table F, for df 1/478

F at 0.05 level = 3.86

F at 0.01 level = 6.66
The obtained $F_{y,x}$ ratio was tested for significance. Since the table personality development of F ratio for df 1/478 is 7.01 at 0.01 level the obtained $F_{y,x}$ ratio is highly significant even at 0.01 level ($F_{y,x} = 1605.94; p < 0.01$). It is clear from the significant $F_{y,x}$ ratio that the two final means which depend upon the Prevailing group I and Prevailing group II, variables differ significantly after they have been adjusted for initial difference on x. The adjusted means of post-test scores (x, y means) of students in the Prevailing group I and Prevailing group II (non coun), groups were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of students in Prevailing group I and Prevailing group II are given in the following table.

Table 5.42

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>$M_x$</th>
<th>$M_y$</th>
<th>$M_{y,x}$ (adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevailing group I</td>
<td>240.00</td>
<td>169.57</td>
<td>176.7</td>
<td>176.76</td>
</tr>
<tr>
<td>Prevailing group II</td>
<td>240.00</td>
<td>169.61</td>
<td>171.2</td>
<td>171.18</td>
</tr>
<tr>
<td>General means</td>
<td>480.00</td>
<td>169.59</td>
<td>173.97</td>
<td>-</td>
</tr>
</tbody>
</table>

$SE_m$ between two adjusted means = 0.14

t life skills = 176.76 - 171.18 / 0.14 = 40.07

From the t table, for df = 478

t at 0.05 level = 196

t at 0.01 level = 2.58

Adjusted y means for pre-test scores are tested for significance for df 1/478

The obtained t life skills is 545 and the table personality variables for significant difference for df 478 is 2.58 at 0.01 level (t = 40.07; p < 0.01). The significant difference between the adjusted y means indicates that the students of the Prevailing group I and Prevailing group II differ significantly in their development in the post-
test. So the mean of the post-test scores of Prevailing group I and Prevailing group II clearly show that the Prevailing group I is superior in the personality variables. It may therefore be interpreted that the Personality development of students taught through SAGCP is better than those of students taught through prevailing method. The graphical representation of this section is shown below:

![Bar Graph]

*Figure: 5.9 Graphical representation of adjusted mean of Personality development among Prevailing group*

5.4.3 **Comparison of Effect of Prevailing Guidance and Counselling on the Vocational Choices of Students in the prevailing groups.**

In this section the vocational choices of the students in prevailing groups is evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The scores obtained were analyzed in detail to compare the effect of prevailing guidance and counseling programmes on their vocational choices. For analysis the percentages of the pre-test and post-test scores found and the critical ratios of the percentage calculated. The significant difference in the pretest-post test percentage indicates the effectiveness of the programmes.
Table 5.43

*Pretest-Posttest scores of vocational choices of students in the prevailing group I & Prevailing group II*

<table>
<thead>
<tr>
<th>Pre-test scores of prevailing group I &amp; Prevailing group II</th>
<th>Post test scores of prevailing group I &amp; Prevailing group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>pretest</td>
<td>%</td>
</tr>
<tr>
<td>286</td>
<td>7.944</td>
</tr>
<tr>
<td>637</td>
<td>17.69</td>
</tr>
<tr>
<td>1421</td>
<td>39.47</td>
</tr>
<tr>
<td>291</td>
<td>8.083</td>
</tr>
<tr>
<td>415</td>
<td>11.527</td>
</tr>
<tr>
<td>128</td>
<td>3.55</td>
</tr>
<tr>
<td>42</td>
<td>1.166</td>
</tr>
<tr>
<td>380</td>
<td>10.55</td>
</tr>
<tr>
<td>3600</td>
<td>100</td>
</tr>
</tbody>
</table>
The critical ratios obtained from test of significance of difference between the percentages of Vocational choices for 8 choices in the prevailing group I and Prevailing group II were evaluated. The obtained critical ratios of pretest scores of prevailing group I and prevailing group II revealed that there is no significant difference in the percentages of pretest scores of all the eight areas of vocation. But in the obtained critical ratios of posttest scores of prevailing group I and prevailing group II revealed that there is significant difference in the percentages of posttest scores of only one (Engineering -3.15) vocation, all the other seven areas of vocation of prevailing group I and prevailing group II are not significant, that means prevailing group I and prevailing group II students are not getting proper career guidance for the choice of proper vocation. The graphical representation of this section is shown below:

Figure:5.10 Graphical representation of percentage of vocational choices students in the prevailing groups
Concluding thoughts

Prevailing group I includes the students getting counseling by a school counselor and the prevailing group II includes the students getting guidance and counselling from a trained classroom practitioners. The interview with school counselors and higher secondary teachers indicated that there is no systematic guidance and counseling, especially in life skills attainment, personality development and vocational choices, in both cases. Though the educators are aware of the significance of imparting guidance and counselling programmes, they rarely implement it in a proper manner due to several constraints. It may therefore be interpreted that the improvement of students in these three variables in the experimental group are better than those of students taught through prevailing method.

5.5 Comparison of the Effect of SAGCP on Life Skills Attainment of Higher Secondary Students in Experimental Group with Prevailing Groups in Terms of Sub-Samples. (Gender, Optional Subjects and Type of School)

5.4.1 GENDER

In this section the comparison of the effect of SAGCP on life skills attainment of boys and girls in experimental group were evaluated. The analysis is done in the following heads:

5.5.1 Comparison of Life skills Attainment of higher secondary school students in Experimental group with respect to gender

5.5.2 Comparison of Personality development of higher secondary school students in Experimental group with respect to gender

5.5.3 Comparison of Vocational choices of higher secondary school students in Experimental group with respect to gender
5.5.1 Comparison of Life skills Attainment of higher secondary school students in Experimental group with respect to gender

To compare the effect of SAGCP on Life skills attainment of boys and girls t-test were used. The results of analysis and interpretation are given under the following sub heads.

5.5.1.1 Comparison of Pre-test scores of Life skills Attainment of of higher secondary school students in Experimental group with respect to gender

The differences between the pretest mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.44

Data and result of test of significance difference in the pretest and posttest mean scores of Life skills in Experimental group students with respect to gender

<table>
<thead>
<tr>
<th>Groups</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>Boys</td>
<td>120</td>
<td>134.45</td>
<td>5.858</td>
<td>0.23</td>
</tr>
<tr>
<td>Girls</td>
<td>120</td>
<td>134.28</td>
<td>5.935</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>Posttest Boys</td>
<td>120</td>
<td>163.82</td>
<td>10.630</td>
<td>0.08</td>
</tr>
<tr>
<td>Girls</td>
<td>120</td>
<td>163.93</td>
<td>10.467</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table clearly shows that the t value .230 for pretest scores of boys and girls in the experimental group which is less than the table value 1.96 at .05 level of significance that means there exists no significant difference between boys and girls in their life skills attainment score before giving the SAGCP. And obtained t value 0.08 for posttest scores of boys and girls in the experimental group which is also less than the table value 1.96 at .05 level of significance that means there exists no
significant difference between boys and girls in their life skills attainment score after giving the SAGCP. The obtained pretest mean score is less than the posttest mean score. So it is inferred that SAGCP is effective for improving life skills but there exists no significant difference in the boys and girls before and after the experiment.

For arriving valid conclusion the adjusted means of post-test scores (x, y means) of boys and girls were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of boys and girls in the experimental group students in are given in the following table.

Table 5.45

Data for adjusted means of post-test scores in Life skills attainment in the Experimental group with respect to gender

<table>
<thead>
<tr>
<th>Groups</th>
<th>gender</th>
<th>N</th>
<th>Mx</th>
<th>My</th>
<th>Mx.y</th>
<th>S.Em</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Boys</td>
<td>120.00</td>
<td>134.45</td>
<td>163.8</td>
<td>163.67</td>
<td>0.43</td>
<td>0.95</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>120.00</td>
<td>134.28</td>
<td>163.9</td>
<td>164.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.45 shows that the t values for experimental Group. The t values 0.95 for experimental group that is less than the table value 1.96 at 0.05 level of significance that means there exist no significant difference among the these three groups in their life skills attainment. The graphical representation of this section is shown below:
Figure: 5.11 Graphical representation of adjusted mean of Life skills attainment among boys and girls in the Experimental group

5.5.1 Comparison of Personality development of higher secondary school students in Experimental group with respect to gender

To compare the effect of SAGCP on personality development of boys and girls, t-test were used. The results of analysis and interpretation are given under the following sub heads.

5.5.2.1 Comparison of Pre-test scores of Personality development of higher secondary school students in Experimental group with respect to gender

The differences between the pretest mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.
Table 5.46

Data and result of test of significance difference in the pretest and posttest mean scores of personality development in Experimental group students with respect gender

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pretest</td>
<td>Boys</td>
<td>120</td>
<td>169.64</td>
<td>8.675</td>
<td>0.163</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Girls</td>
<td>120</td>
<td>169.83</td>
<td>8.741</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>Boys</td>
<td>120</td>
<td>191.59</td>
<td>11.802</td>
<td>0.131</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Girls</td>
<td>120</td>
<td>191.79</td>
<td>11.760</td>
<td></td>
</tr>
</tbody>
</table>

Above table shows that the obtained t value .163 for pretest scores of boys and girls in the experimental group, which is less than the table value 1.96 at .05 level of significance that means there exists no significant difference between boys and girls in their personality development score before giving the SAGCP and the obtained t value 0.131 for posttest scores of boys and girls in the experimental group which is also less than the table value 1.96 at .05 level of significance .that means there exists no significant difference between boys and girls in their personality development score after giving the SAGCP. The obtained pretest mean score is less than the posttest mean score. So it is inferred that SAGCP is effective for improving personality development but there exists no significant difference in the boys and girls before and after the experiment.

For arriving valid conclusion the adjusted means of post-test scores(x,y means) of boys and girls were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores
of boys and girls in the experimental group students in are given in the following table.

Table 5.47

*Data for adjusted means of post-test scores in Personality development of boys and girls in the Experimental group*

<table>
<thead>
<tr>
<th>Groups</th>
<th>gender</th>
<th>N</th>
<th>Mx</th>
<th>My</th>
<th>My.x</th>
<th>S.Em</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Boys</td>
<td>120</td>
<td>169.64</td>
<td>191.6</td>
<td>191.71</td>
<td>0.61</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>120</td>
<td>169.83</td>
<td>191.8</td>
<td>191.68</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table clearly indicates that the t values for experimental group is .04 for which is less than the table value 1.96 at 0.05 level of significance that means there exist no significant difference among the two groups in their personality development.

The graphical representation of this section is shown below:

*Figure 5.12 Graphical representation of adjusted mean of Personality development among boys and girls in the Experimental group*
5.5.1 **Comparison of Vocational choices of higher secondary school students in Experimental group with respect to gender**

In this section the vocational choices of the boys and girls in the experimental group is evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The scores obtained were analyzed in detail to compare the effect of prevailing guidance and counseling programmes on their vocational choices.

For analysis the percentages of the pre-test and post-test scores found and the critical ratios of the percentage calculated. The significant difference in the pretest-post test percentage indicates the effectiveness of the programmes. The percentages of the pre-test and post-test scores found on vocational choices and the critical ratios of the percentage is given in the following table.5.48
Table 5.49

*Pretest and posttest scores of Vocational choices of experimental Group (N=1800 for boys and girls)*

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Vocations</th>
<th>Pre test boys and girls</th>
<th>Post test boys and girls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pretest boys</td>
<td>%</td>
</tr>
<tr>
<td>EXPERIMENTAL</td>
<td>Teaching</td>
<td>121</td>
<td>6.722</td>
</tr>
<tr>
<td></td>
<td>Medical</td>
<td>207</td>
<td>11.5</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td>822</td>
<td>45.66</td>
</tr>
<tr>
<td></td>
<td>Govt: Employ</td>
<td>183</td>
<td>10.166</td>
</tr>
<tr>
<td></td>
<td>Artistic</td>
<td>60</td>
<td>3.33</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>16</td>
<td>0.888</td>
</tr>
<tr>
<td></td>
<td>misclns</td>
<td>192</td>
<td>10.66</td>
</tr>
</tbody>
</table>
The obtained critical ratios of percentage of pretest scores of Vocational choices of boys and girls in the experimental group reveal that there exists significant difference among boys and girls only in medical (3.86) and engineering (6.03) areas and there is no significant difference in all other six categories. But in the post test scores, the obtained critical ratio indicates that there exists significant difference in Teaching (2.37), medical (2.01), engineering (2.60) and central govt (3.52) areas and there is no significant difference in all other four categories. That means after the implementation of SAGCP, the gender difference found in the areas teaching, medical, engineering and central govt. In all other categories boys and girls preferred almost same choices. The graphical representation of this section is shown below:

*Figure 5.13* Graphical representation percentages of Vocational choices among boys and girls in the Experimental group
Concluding thoughts

The investigator included in her experiment to see whether or not there is any gender difference in life skills attainment, personality development and vocational choices. The results revealed that the boys and girls in the experimental group had the same development in life skills and personality. But there was gender difference found in vocational choices. The obtained critical ratios of percentage of pretest scores of Vocational choices of boys and girls in the experimental group reveal that there exists significant difference among boys and girls only in medical and engineering areas and there is no significant difference in all other six categories. But in the post test scores, the obtained critical ratio indicates that there exists significant difference in Teaching, medical, engineering and central govt areas and there is no significant difference in all other four categories. That means after the implementation of SAGCP, the gender difference found in the areas teaching, medical, engineering and central govt. In all other categories boys and girls preferred almost same choices. This implies that after the implementation of SAGCP the boys and girls preferred right choices according to their aptitude and talent based on their optional subjects.

5.6 Optional Subjects.

In this section the comparison of the effect of SAGCP on life skills attainment of science, commerce and humanities in experimental group were evaluated. The analysis is done in the following heads:

5.6.1 Comparison of Life skills Attainment of higher secondary school students in Experimental group with respect to optional subjects

5.6.2 Comparison of Personality development of higher secondary school students in Experimental group with respect to optional subjects
5.6.3 Comparison of Vocational choices of higher secondary school students in Experimental group with respect to optional subjects

5.6.1 Comparison of Life skills Attainment of higher secondary school students in Experimental group with respect to optional subjects

To compare the effect of SAGCP on Life skills attainment of students studying science, commerce and humanities groups F-test were used. The results of analysis and interpretation are given under the following sub heads.

5.6.1.1 Comparison of Pretest-posttest scores of Life skills Attainment of of higher secondary school students in Experimental group with respect to optional subjects

The differences between the pretest mean scores of the two groups were tested for significance by finding the F-value. The data and results of the test of significance are given in the table below.

Table 5.49

<table>
<thead>
<tr>
<th>Groups</th>
<th>Tests</th>
<th>Sum Of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pretest Between Groups</td>
<td>1817.50</td>
<td>2</td>
<td>908.750</td>
<td>33.340*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>6459.96</td>
<td>237</td>
<td>27.257</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>8277.46</td>
<td>239</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest Between Groups</td>
<td>7890.85</td>
<td>2</td>
<td>3945.42</td>
<td>50.288*</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>18594.1</td>
<td>237</td>
<td>78.456</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>26484.9</td>
<td>239</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at .01 level

Above table shows that the obtained F value 33.34 for pretest mean score of experimental group on the basis of their subjects which is greater than the table value 4.61 at .01 level of significance that means there exists a significant difference in the life skills attainment in the experimental group. The obtained F value 50.28 for
posttest mean score of experimental group on the basis of their subjects which is
greater than the table value 4.61 at .01 level of significance that means there exists a
significant difference in the life skills attainment in the experimental group in order to
find out the difference investigator scheff post hoc analysis it can be shown on the
table no 5.50

Table 5.50

* Scheff Post Hoch analysis pretest and posttest of Experimental group on the basis of
  their subjects *

<table>
<thead>
<tr>
<th>Experimental Subject</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Subset For Alpha = 0.05</td>
</tr>
<tr>
<td>Humanities</td>
<td>80</td>
<td>132.11</td>
</tr>
<tr>
<td>Commerce</td>
<td>80</td>
<td>132.74</td>
</tr>
<tr>
<td>Science</td>
<td>80</td>
<td>138.24</td>
</tr>
<tr>
<td>Sig.</td>
<td>.751</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The obtained mean score of science students (138.24) differ from the mean
scores of commerce and humanities students in pretest score of life skills attainment.
In the case of posttest the obtained mean score of science students 171.78 which is
also greater than the mean score of other subject and the obtained mean score in
posttest score is greater than the pretest mean scores. So it is inferred that science
students can attained more life skills compare to other subjects. The graphical
representation of this section is shown below:
**Figure 5.14** Mean plot for pretest of life skills attainment scores of higher secondary school students with respect their subjects

**Figure 5.15** Mean plot for posttest of life skills attainment scores of higher secondary school students with respect their subjects
5.6.2 Comparison of Personality development of higher secondary school students in Experimental group with respect to optional subjects

To compare the effect of SAGCP on Personality development of students studying science, commerce and humanities groups F-test were used. The results of analysis and interpretation are given under the following sub heads.

5.6.2.1 Comparison of Pretest-posttest scores of Personality development of higher secondary school students in Experimental group with respect to optional subjects

The differences between the pretest mean scores of the two groups were tested for significance by finding the F-value. The data and results of the test of significance are given in the table below.

Table 5.51

*Significant at .01 level

Above table shows that the obtained F value 9.42 for pretest mean score of experimental group on the basis of their subjects which is greater than the table value.
4.61 at .01 level of significance that means there exists a significant difference in the personality development in the experimental group and the obtained F value 18.83 for posttest mean score of experimental group on the basis of their subjects which is greater than the table value 4.61 at .01 level of significance that means there exists a significant difference in the personality development in the experimental group in order to find out the difference investigator Scheff post hoch analysis it can be shown on the table below.

Table 5.52

*Scheff Post Hoch analysis pretest and posttest of Experimental group on the basis of their subjects*

<table>
<thead>
<tr>
<th>Experimental Subject</th>
<th>N</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td>80</td>
<td>167.61</td>
<td>187.78</td>
</tr>
<tr>
<td>Commerce</td>
<td>80</td>
<td>168.54</td>
<td>189.46</td>
</tr>
<tr>
<td>Science</td>
<td>80</td>
<td>172.99</td>
<td>197.70</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>.783</td>
<td>1.000</td>
</tr>
</tbody>
</table>

The obtained mean score of science students (172.99) differ from the mean scores of commerce and humanities students in pretest score of personality development in the case of posttest the obtained means core science students 197.70 which is also greater than the mean score of other subject. And the obtained means score in posttest score is greater than the pretest mean scores So it is inferred that science students can attained more personality development compare to other subjects. The graphical representation of this section is shown below:
Figure 5.16 Mean plot for pretest of life skills attainment scores of higher secondary school students with respect their subjects

Figure 5.17 Mean plot for posttest Personality development scores of higher secondary school students with respect their subjects
5.6.3 Comparison of Vocational choices of higher secondary school students in Experimental group with respect to optional subjects

In this section the vocational choices of students studying science, commerce and humanities subjects in the experimental group is evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The scores obtained were analyzed in detail to compare the effect of SAGCP on their vocational choices. For analysis the percentages of the pre-test and post-test scores found and the critical ratios of the percentage calculated. The significant difference in the pretest-post test percentage indicates the effectiveness of the programmes. The percentages of the pre-test and post-test scores found on vocational choices and the critical ratios of the percentage is given in the following table.
Table 5.54

Data and results of pretest-posttest score of vocational choices of Science and Commerce

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Vocations</th>
<th>Pretest of Science and Commerce</th>
<th>Posttest of Science and Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>pretest</td>
<td>%</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>66</td>
<td>5.50</td>
<td>130</td>
</tr>
<tr>
<td>Medical</td>
<td>386</td>
<td>32.19</td>
<td>135</td>
</tr>
<tr>
<td>Engineering</td>
<td>529</td>
<td>44.1</td>
<td>404</td>
</tr>
<tr>
<td>central</td>
<td>50</td>
<td>4.170</td>
<td>139</td>
</tr>
<tr>
<td>Govt: Employ</td>
<td>77</td>
<td>6.422</td>
<td>161</td>
</tr>
<tr>
<td>Artistic</td>
<td>28</td>
<td>2.335</td>
<td>53</td>
</tr>
<tr>
<td>Conventional</td>
<td>5</td>
<td>0.417</td>
<td>11</td>
</tr>
<tr>
<td>misc1ns</td>
<td>58</td>
<td>4.837</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>1200</td>
</tr>
</tbody>
</table>
The table 5.54 shows that the Critical Ratios of vocational choices of students in the eight categories. From the table it is obvious that there is no significant difference in the pre-test except in the medical and engineering areas. This implies that the science and commerce students preferred almost same choice without based on the course selected before the experiment except for medical and engineering. The critical ratios of pretest scores of medical vacation was 4.72 and engineering was 5.49. But in the posttest scores the obtained t value for, Medical 2.56, Engineering 13.04, central 2.01 and miscellaneous 2.63 all the t value are greater than the table value, that means there is significant difference in the teaching medical, engineering, central and miscellaneous. All the other critical ratios in pre test and posttest is less than the table value that means there is no significant difference in the pretest and posttest of science and commerce students in their vocational choice. From the findings it is clear that SAGCP was effective for choosing proper vocation. In the pretest their vocational choices were not in the right way. But in the post test they opted more suitable vocation. The following table shows the Data and results of pretest-posttest scores of vocational choices of Science and Humanities.
Table 5.54

Data and results of pretest-posttest of Science and Humanities

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Vocations</th>
<th>Pretest of Science and Humanities</th>
<th>Posttest of Science and Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>pretest</td>
<td>%</td>
</tr>
<tr>
<td>Teaching</td>
<td>Medical</td>
<td>Engineeri</td>
<td>central</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>66</td>
<td>5.50</td>
<td>107</td>
</tr>
<tr>
<td>Medical</td>
<td>386</td>
<td>32.1</td>
<td>9</td>
</tr>
<tr>
<td>Engineering</td>
<td>529</td>
<td>44.1</td>
<td>505</td>
</tr>
<tr>
<td>central</td>
<td>50</td>
<td>4.17</td>
<td>0</td>
</tr>
<tr>
<td>Govt: Employ</td>
<td>77</td>
<td>6.42</td>
<td>2</td>
</tr>
<tr>
<td>Artistic</td>
<td>28</td>
<td>2.33</td>
<td>5</td>
</tr>
<tr>
<td>Conventio nal</td>
<td>5</td>
<td>0.41</td>
<td>7</td>
</tr>
<tr>
<td>misclns</td>
<td>58</td>
<td>4.83</td>
<td>7</td>
</tr>
</tbody>
</table>

Analysis and Interpretation of Data
<table>
<thead>
<tr>
<th>Subjects</th>
<th>Vocations</th>
<th>Pretest of Science and Humanities</th>
<th>Posttest of Science and Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>pretest</td>
<td>%</td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
<td>66</td>
<td>5.50</td>
</tr>
<tr>
<td>Medical</td>
<td></td>
<td>386</td>
<td>32.19</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td>44.1</td>
<td>4.170</td>
</tr>
<tr>
<td>central</td>
<td></td>
<td>50</td>
<td>4.170</td>
</tr>
<tr>
<td>Govt. Employ</td>
<td></td>
<td>77</td>
<td>6.422</td>
</tr>
<tr>
<td>Artistic</td>
<td></td>
<td>2.355</td>
<td>49</td>
</tr>
<tr>
<td>misclns</td>
<td></td>
<td>5</td>
<td>0.417</td>
</tr>
<tr>
<td></td>
<td></td>
<td>58</td>
<td>4.837</td>
</tr>
</tbody>
</table>
The table 5.55 shows that the Critical Ratios of vocational choices. From the table it is obvious that there is no significant difference in the pre-test except in the medical area. This implies that the science and humanities students preferred almost same choice without based on the course selected before the experiment except for medical. For medical vocation in pretest was 4.75 that is significant and posttest scores were 2.59 is also significant at 0.05 level of significance. But in the posttest scores the obtained t value for, Engineering 10.62 central 2.37 and miscellaneous 2.39 all the t value are greater than the table value, that means there is significant difference in the medical, engineering, central govt and miscellaneous. All the other critical ratios in pre test and posttest is less than the table value that means there is no significant difference in the pretest and posttest of Science and humanities students in their vocational choice. From the findings it is clear that SAGCP was effective for choosing proper vocation. In the pretest their vocational choices were not in the right way. But in the post test they opted more suitable vocation. The following table shows the Data and results of pretest-posttest scores of vocational choices of Commerce and Humanities.
Table 5.55

Data and results of pretest-posttest of Science and Humanities

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Vocations</th>
<th>Pretest of Science and Humanities</th>
<th>Posttest of Science and Humanities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>pretest</td>
<td>%</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td></td>
<td>66</td>
<td>5.50</td>
</tr>
<tr>
<td>Medical</td>
<td></td>
<td>386</td>
<td>32.19</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td>529</td>
<td>44.1</td>
</tr>
<tr>
<td>central</td>
<td></td>
<td>50</td>
<td>4.170</td>
</tr>
<tr>
<td>Govt:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employ</td>
<td></td>
<td>77</td>
<td>6.422</td>
</tr>
<tr>
<td>Artistic</td>
<td></td>
<td>28</td>
<td>2.335</td>
</tr>
<tr>
<td>Conventional</td>
<td></td>
<td>5</td>
<td>0.417</td>
</tr>
<tr>
<td>miscnns</td>
<td></td>
<td>58</td>
<td>4.837</td>
</tr>
</tbody>
</table>
Above table shows that the all the Critical Ratio for pretest and posttest scores of commerce and humanities are less than the table value except the engineering vocation, that means there exists no significant difference in the all the vocational choice except engineering of commerce and humanities students in their pretest and posttest scores. The results revealed that humanities and commerce students opted almost similar vocations in the pretest and post test except engineering.

The graphical representation of this section is shown below:

![Graphical representation of the vocational choices of students in the experimental group with respect to optional subjects](image)

**Figure 5.18** Graphical representation of the vocational choices of students in the experimental group with respect to optional subjects

**Concluding thoughts**

In our society the students scoring good marks or grades in tenth class took science as their optional subjects. Very few students with good marks opted
commerce group as their optional subjects recently. This can have an influence on the performance of these students. With the astonishing significance attached to professional courses most of the science students are more competent and smarter than their counterparts. The obtained mean score of science students were higher than that of commerce and humanities students in pretest and post score of life skills attainment and personality development and the obtained mean score in posttest score is greater than the pretest mean scores. So it is inferred that science students were better in performance when compare to other subjects. The difference in the pretest post scores revealed that the SAGCP was effective for improving life skills and personality. In vocational choices also students in three subjects opted different vocations.

5.7 TYPE OF SCHOOL

In this section the comparison of the effect of SAGCP on life skills attainment of students studying in Government and aided school in the experimental group were evaluated. The analysis is done in the following heads:

5.7.1 Comparison of Life skills Attainment of higher secondary school students in Experimental group with respect to type of school

5.7.2 Comparison of Personality development of higher secondary school students in Experimental group with respect to type of school

5.7.3 Comparison of Vocational choices of higher secondary school students in Experimental group with respect to type of school
5.7.1 Comparison of Life skills Attainment of higher secondary school students in Experimental group with respect to type of school

To compare the effect of SAGCP on Life skills attainment of students studying in Government and aided school, t-test was used. The results of analysis and interpretation are given under the following sub heads.

5.7.1.1 Comparison of Pretest-posttest scores of Life skills Attainment of of higher secondary school students in Experimental group with respect to type of school

The differences between the pretest mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.56

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>School</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pretest</td>
<td>Aided</td>
<td>120</td>
<td>134.40</td>
<td>6.127</td>
<td>0.099</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Government</td>
<td>120</td>
<td>134.33</td>
<td>5.659</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>Aided</td>
<td>120</td>
<td>163.70</td>
<td>10.922</td>
<td>0.251</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Government</td>
<td>120</td>
<td>164.04</td>
<td>10.160</td>
<td></td>
</tr>
</tbody>
</table>

Above table shows that the obtained t value 0.099 for pretest scores of aided and government in the experimental group which is less than the table value 1.96 at .05 level of significance that means there exists no significant difference between
students belongs to aided and government school in their life skills attainment score before giving the SAGCP and the obtained t value 0.251 for posttest scores of aided and government in the experimental group which is also less than the table value 1.96 at 0.05 level of significance that means there exists no significant difference between aided and government in their life skills attainment score after giving the SAGCP. The obtained pretest mean score is less than the posttest mean score. So it is inferred that SAGCP is effective for improving life skills but there exists no significant difference in the aided and government before and after the experiment.

5.7.1.2 Estimation of adjusted mean scores

For the analysis investigator used estimation of adjusted mean scores. For arriving valid conclusion the adjusted means of post-test scores (x,y means) of life skills attainment of students studying in govt and aided schools were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of students in the experimental group students are given in the following table.

Table 5.57

<table>
<thead>
<tr>
<th>Groups</th>
<th>Type of School</th>
<th>N</th>
<th>Mx</th>
<th>My</th>
<th>My.x</th>
<th>S.Em</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>Govt</td>
<td>120.00</td>
<td>134.40</td>
<td>163.7</td>
<td>163.64</td>
<td>.43</td>
<td>1.10</td>
</tr>
<tr>
<td></td>
<td>Aided</td>
<td>120.00</td>
<td>134.33</td>
<td>164.0</td>
<td>164.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Above table shows that obtained t values for experimental group is 1.10 which is less than the table value 1.96 at 0.05 level of significance. That means there
exists no significant difference among the these three groups in their life skills. The graphical representation of this section is shown below:

![Graphical representation showing adjusted y’ means of Life skills attainment of students in Govt and aided school](image)

**Figure 5.19** Graphical representation showing adjusted y’ means of Life skills attainment of students in Govt and aided school

5.7.2 **Comparison of the effect of SAGCP on Personality development of higher secondary students in experimental group with respect to type of school**

To compare the effect of SAGCP on Life skills attainment of students studying in Government and aided school, t-test were used. The results of analysis and interpretation are given under the following sub heads.

5.7.2.1 **The pretest -posttest mean scores of personality development of students in Experimental group with respect type of school**

5.7.2.2 **Estimation of adjusted y’means (My.x)**
5.7.2.1 The pretest-posttest mean scores of personality development of students in Experimental group with respect type of school

The differences between the pretest mean scores of the two groups were tested for significance by finding the critical ratio. The data and results of the test of significance are given in the table below.

Table 5.58

Data and result of test of significance difference in the pretest-posttest mean scores of personality development of students in Experimental group with respect type of school

<table>
<thead>
<tr>
<th>Group</th>
<th>Test</th>
<th>School</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Pretest</td>
<td>Aided</td>
<td>120</td>
<td>169.54</td>
<td>8.869</td>
<td>0.341</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Government</td>
<td>120</td>
<td>169.93</td>
<td>8.541</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>Aided</td>
<td>120</td>
<td>191.30</td>
<td>12.564</td>
<td>0.515</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Government</td>
<td>120</td>
<td>192.08</td>
<td>10.930</td>
<td></td>
</tr>
</tbody>
</table>

Above table shows that the obtained t value 0.341 for pretest scores of aided and government in the experimental group which is less than the table value 1.96 at .05 level of significance that means there exists no significant difference between students of aided and govt schools in their personality development score before giving the SAGCP and the obtained t value 0.515 for posttest scores of aided and government in the experimental group, which is also less than the table value 1.96 at .05 level of significance that means there exists no significant difference between aided and government in their personality development score after giving the SAGCP. The obtained pretest mean score is less than the posttest mean score. So it is
inferred that SAGCP is effective for improving personality development but there exists no significant difference in the aided and government before and after the experiment.

5.7.2.2 Estimation of adjusted y’means (My.x)

For the analysis investigator used estimation of adjusted mean scores. For arriving valid conclusion the adjusted means of post-test scores(x,y means) of Personality development of students studying in govt and aided schools were calculated. The difference between the adjusted y means was tested for significance. The data for adjusted y means of post-test scores of students studying government and aided school in the experimental group students are given in the following table.

Table 5.59

<table>
<thead>
<tr>
<th>Groups</th>
<th>School</th>
<th>N</th>
<th>Mx</th>
<th>My</th>
<th>My.x</th>
<th>S.Em</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>Govt</td>
<td>120.00</td>
<td>169.54</td>
<td>191.3</td>
<td>191.54</td>
<td>0.61</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>Aided</td>
<td>120.00</td>
<td>169.93</td>
<td>192.1</td>
<td>191.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Above table shows that obtained t values for experimental group is 0.51 which is less than the table value 1.96 at 0.05 level of significance. that means there exists no significant difference among the these three groups in their personality development. The graphical representation of this section is shown below:
Figure 5.20 Graphical representation showing adjusted y’ means of Personality development of students in Govt and aided school

5.7.3 Comparison of Vocational choices in higher secondary school students in the Experimental with respect type of school

In this section the vocational choices of the students studying government and aided school in the experimental group is evaluated. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The scores obtained were analyzed in detail to compare the effect of prevailing guidance and counseling programmes on their vocational choices. For analysis the percentages of the pre-test and post-test scores found and the critical ratios of the percentage calculated. The significant difference in the pretest-post test percentage indicates the effectiveness of the programmes. The percentages of the pre-test and post-test scores found on vocational choices and the critical ratio of the percentage is given in the following table:
Table 5.60
Pretest and posttest scores of Vocational choices of experimental group with respect to type of schools

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Vocations</th>
<th>Pretest</th>
<th>%</th>
<th>pretest</th>
<th>%</th>
<th>CR</th>
<th>Posttest</th>
<th>%</th>
<th>posttest</th>
<th>%</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GOVT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AIDED</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>government</td>
<td></td>
<td>aid</td>
<td></td>
<td></td>
<td>government</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching</td>
<td>142</td>
<td>7.888</td>
<td>161</td>
<td>8.944</td>
<td>0.329</td>
<td>296</td>
<td>16.444</td>
<td>312</td>
<td>18.7</td>
<td>0.742</td>
<td></td>
</tr>
<tr>
<td>Medical</td>
<td>334</td>
<td>18.555</td>
<td>316</td>
<td>17.56</td>
<td>0.331</td>
<td>187</td>
<td>10.388</td>
<td>158</td>
<td>9.49</td>
<td>0.277</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>698</td>
<td>38.777</td>
<td>740</td>
<td>41.11</td>
<td>1.229</td>
<td>352</td>
<td>19.555</td>
<td>327</td>
<td>19.6</td>
<td>0.027</td>
<td></td>
</tr>
<tr>
<td>central</td>
<td>148</td>
<td>8.222</td>
<td>160</td>
<td>8.889</td>
<td>0.208</td>
<td>278</td>
<td>15.444</td>
<td>249</td>
<td>15</td>
<td>0.156</td>
<td></td>
</tr>
<tr>
<td>Govt:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employ</td>
<td>192</td>
<td>10.666</td>
<td>178</td>
<td>9.889</td>
<td>0.1475</td>
<td>385</td>
<td>21.38</td>
<td>413</td>
<td>24.8</td>
<td>0.969</td>
<td></td>
</tr>
<tr>
<td>Artistic</td>
<td>72</td>
<td>4</td>
<td>58</td>
<td>3.222</td>
<td>0.234</td>
<td>52</td>
<td>2.888</td>
<td>54</td>
<td>3.24</td>
<td>0.105</td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td>18</td>
<td>1</td>
<td>13</td>
<td>0.722</td>
<td>0.019</td>
<td>9</td>
<td>0.5</td>
<td>12</td>
<td>0.72</td>
<td>0.015</td>
<td></td>
</tr>
<tr>
<td>misclns</td>
<td>196</td>
<td>10.888</td>
<td>174</td>
<td>9.667</td>
<td>0.385</td>
<td>241</td>
<td>13.38</td>
<td>275</td>
<td>16.5</td>
<td>0.991</td>
<td></td>
</tr>
</tbody>
</table>
Above table shows that the test of significant difference in the percentage distribution of vocational choices in between govt and aided in the pretest and posttest scores of Experimental group it is clear that all the Critical Ratios (CR) in pretest and posttest of Govt and aided school are not significant in the at 0.05 level. So it is inferred that there exists no significant difference in the vocational choices of Govt school students and aided school students in their pretest and posttest scores of experimental group and it revealed that the SAGCP is equally effective for choosing vocations among students of Government and aided schools.

*Figure 5.21* Graphical representation showing vocational choices of students in Govt and aided school
Concluding thoughts

The investigator included the comparison of the students studying government and aided school in the effectiveness of SAGCP on life skills attainment, personality development and vocational choices. The results revealed that the students studying in both government and aided school in the experimental group had the same development in life skills, personality and vocational choices.

5.8 Compare the effect of SAGCP on the dimensions of Life skills attainment of higher secondary students in experimental group

In this section the effect of SAGCP on the components of life skills attainment of higher secondary students in experimental group is evaluated. The Life skills Attainment Scale consists of five dimensions viz. problem solving, interpersonal skills, self awareness, empathy, stress coping capacity. During the experimental study the investigator conducted a pre-test in the beginning and a post-test at the end of the treatment. The scores obtained were analyzed in detail to compare the effect of SAGCP on five dimensions of life skills. For analysis the percentages of the pre-test and post-test scores found and the critical ratios of the percentage calculated. The significant difference in the pretest-post test indicates the effectiveness of the programmes. The scores of the components wise pre-test and post-test scores and the critical ratios is given in the following table
Table 5.61

Data and result of the test of significant difference in the pretest and posttest scores
the dimensions of life skills

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Test</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>t</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-awareness</td>
<td>Pretest</td>
<td>24.90</td>
<td>240</td>
<td>2.084</td>
<td>76.22</td>
<td>P;&lt;0.05</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>32.92</td>
<td>240</td>
<td>2.719</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>Pretest</td>
<td>26.98</td>
<td>240</td>
<td>1.506</td>
<td>58.72</td>
<td>P;&lt;0.05</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>32.58</td>
<td>240</td>
<td>2.188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision making</td>
<td>Pretest</td>
<td>25.68</td>
<td>240</td>
<td>1.858</td>
<td>68.03</td>
<td>P;&lt;0.05</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>32.41</td>
<td>240</td>
<td>2.645</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress management</td>
<td>Pretest</td>
<td>28.97</td>
<td>240</td>
<td>1.090</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>33.08</td>
<td>240</td>
<td>2.003</td>
<td>32.74</td>
<td>P;&lt;0.05</td>
</tr>
<tr>
<td>Interpersonal</td>
<td>Pretest</td>
<td>27.84</td>
<td>240</td>
<td>1.175</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>32.88</td>
<td>240</td>
<td>2.016</td>
<td>49.06</td>
<td>P;&lt;0.05</td>
</tr>
</tbody>
</table>

The above table shows the obtained t value 76.22 for self-awareness, 58.72 for empathy, 68.03 for Decision making, 49.06 for interpersonal and 32.74 for Stress Management. All the t value are greater than the table value 2.58 at 0.01 level of significance, that means there exists a significant difference pretest and posttest mean scores. From the above finding it is clear that SAGCP is effective for developing all the select dimensions of life skills, but the package is more effective for the dimension self-awareness and less effective for dimension stress management. The graphical representation of this section is shown below:
Figure 5. 22 Graphical representation showing dimension wise pretest-posttest scores of Life skills attainment of students in the experimental group

Concluding thoughts

From the findings it is inferred that SAGCP is effective for developing all the dimensions of life skills attainment. As the purpose of the study was mainly aim at acquisition of life skills in students at higher secondary level, the investigator wanted to know the effect of package on dimension wise life skills. Out of the five dimensions problem solving, interpersonal skills, self awareness, empathy, stress coping capacity the most effectiveness found on Self awareness and the least effective on Stress management and all other dimensions scored almost same. From the results it is clear that the package was effective for developing all dimensions of life skills.
5.9 Comparison the Effect of SAGCP on the dimensions of Personality 
Development of Higher Secondary Students in Experimental Group

In this section the effect of SAGCP on the components of personality 
development of higher secondary students in experimental group is evaluated. The 
Personality development Index consists of six dimensions namely, social concern, 
emotional adjustment, assertiveness, value and culture, leadership, and self- 
confidence. During the experimental study the investigator conducted a pre-test in the 
beginning and a post-test at the end of the treatment. The scores obtained were 
analyzed in detail to compare the effect of SAGCP on six dimensions of personality. 
The significant difference in the pretest-posttest indicates the effectiveness of the 
programmes. The scores of the dimensions wise pretest and posttest scores and the 
critical ratios is given in the following table

Table 5.62

*Data and result of the test of significant difference in the pretest and posttest scores the dimensions of personality*

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Test</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional adjustment</td>
<td>Pretest</td>
<td>23.49</td>
<td>240</td>
<td>1.047</td>
<td>21.94</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>25.79</td>
<td>240</td>
<td>1.912</td>
<td></td>
</tr>
<tr>
<td>Social concern</td>
<td>Pretest</td>
<td>27.61</td>
<td>240</td>
<td>2.585</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>32.43</td>
<td>240</td>
<td>2.572</td>
<td>33.84</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>Pretest</td>
<td>43.13</td>
<td>240</td>
<td>3.231</td>
<td>32.37</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>48.08</td>
<td>240</td>
<td>3.531</td>
<td></td>
</tr>
<tr>
<td>Values</td>
<td>Pretest</td>
<td>24.40</td>
<td>240</td>
<td>1.666</td>
<td>28.31</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>27.95</td>
<td>240</td>
<td>2.678</td>
<td></td>
</tr>
<tr>
<td>Leadership</td>
<td>Pretest</td>
<td>27.87</td>
<td>240</td>
<td>1.831</td>
<td>30.80</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>35.78</td>
<td>240</td>
<td>3.531</td>
<td></td>
</tr>
<tr>
<td>Self confidence</td>
<td>Pretest</td>
<td>23.23</td>
<td>240</td>
<td>1.450</td>
<td>31.20</td>
</tr>
<tr>
<td></td>
<td>Posttest</td>
<td>26.96</td>
<td>240</td>
<td>1.568</td>
<td></td>
</tr>
</tbody>
</table>
The above table revealed the t values for emotional adjustment was 21.94, 33.84 for social concern, 32.37 for Assertiveness, 28.31 for values 30.80 for leadership, 31.20 for self confidence. All the t values are greater than the table value 2.58 at 0.01 level of significance, that means there exists a significant difference in the pretest and posttest mean scores. From the above finding it is clear that SAGCP is effective for developing all the select dimensions of life skills, but the package is more effective for the dimension Social concern and less effective for dimension Emotional adjustment. The graphical representation of this section is shown below:

![Graphical representation](image)

*Figure 5.23 Graphical representation showing dimension wise pretest-posttest scores of Personality development of students in the experimental group.*
Concluding thoughts

From the findings it is inferred that SAGCP is effective for developing all the dimensions of personality development. As the purpose of the study was aim at developing Personality of students at higher secondary level, the investigator wanted to know the effect of package on dimension wise personality. Out of the six dimensions the most effectiveness found on Social concern and the least effective on emotional adjustment. All other dimensions scored almost same that means the package was effective for developing all dimensions of personality.

5.10 Analysis of the worthiness of SAGCP prepared with special focus on life skills attainment, personality development and vocational choices of students at higher secondary level through Package Appraisal Proforma

Package Appraisal Proforma

Package Appraisal Proforma was really meant for collecting the responses of students in accordance with the clearly stated statements with respect to the three areas of package namely, career guidance, Life skills orientation and personality development training provided to students. The Package Appraisal proforma administered to the total students who are exposed to the SAGCP in the experimental group. The data collected through the Package Appraisal Proforma is given in the table
Table: 5.63

*Data for the analysis of the responses obtained from the Package Appraisal Proforma*

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Statements</th>
<th>To a greater extent</th>
<th>To a certain extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>SAGCP endowed me to enhance the skill in articulating and crystallising the knowledge of various vocation.</td>
<td>89</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>SAGCP demonstrated the growing awareness and self confidence in choice of vocations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>SAGCP helped me to enhance the clear expressions of thoughts regarding the vocational choices.</td>
<td>87</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>SAGCP provided an opportunity for self judgment and self analysis in the process of selection of vocation.</td>
<td>90</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>SAGCP enabled me to fulfill the general vocational expectations.</td>
<td>74</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>SAGCP highlights the impact of selecting wrong choice of vocation.</td>
<td>92</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>SAGCP made me to broaden my occupational horizon.</td>
<td>91</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>SAGCP delineated faulty selections and their influencing factors.</td>
<td>89</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>SAGCP made me to engage in the intellectual selection procedures in vocational choices.</td>
<td>85</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>10.</td>
<td>SAGCP endowed me to deploy the understanding of the world of work.</td>
<td>87</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td>11.</td>
<td>SAGCP provided orientation towards the significance of imbibing various life skills to lead a successful life.</td>
<td>89</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SAGCP equipped me for enhancing awareness about the first aids for snake bite, electric shock, dog bite and burns.</td>
<td>84</td>
<td>16</td>
<td>-</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>---</td>
</tr>
<tr>
<td>13.</td>
<td>SAGCP provided awareness on common diseases and STDs such as AIDS, Hepatitis etc.</td>
<td>88</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>14.</td>
<td>The multiple training strategies used in the SAGCP was very effective and interesting.</td>
<td>87</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>SAGCP helped to reduces my stress level and enable me to manage stressful situation.</td>
<td>78</td>
<td>22</td>
<td>-</td>
</tr>
<tr>
<td>16.</td>
<td>SAGCP enabled me to solve the problems scientifically in a systematical way.</td>
<td>84</td>
<td>26</td>
<td>-</td>
</tr>
<tr>
<td>17.</td>
<td>SAGCP helped me to develop an empathetic attitude towards suffering people.</td>
<td>89</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>SAGCP empowered me take proper decision in right time in a proper manner.</td>
<td>82</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>SAGCP scaffold me to develop communication skills and more sophisticated interpersonal skills.</td>
<td>86</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>SAGCP helped me to amplify the capacity to interact with others without any hesitation.</td>
<td>84</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td><strong>PERSONALITY DEVELOPMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>SAGCP helped to take a strong decision to adopt values in my life.</td>
<td>89</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>SAGCP enabled me to interact with my peers in fruitful discussions.</td>
<td>91</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>SAGCP provided ample opportunity to consider the view points of others.</td>
<td>93</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>SAGCP equiped me to have a diversified vision and move towards proper direction and face challenges in a fruitful manner.</td>
<td>86</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>SAGCP enlightened me to motivate to achieve maximum by using my capacities and abilities in a proper way.</td>
<td>87</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Response</td>
<td>Percentage</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>SAGCP endowed me to realize the various aims of education help me live as a socially benefitted citizen.</td>
<td>88</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>SAGCP made me assertive and embolden me to express my opinion without any hesitation.</td>
<td>92</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>SAGCP integrated the experiences through creating a self awareness and thus improve my self confidence.</td>
<td>84</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>The experiences through the SAGCP effected a personal transformation of emotional maturity and I have developed a habit of regularly assessing my emotional behavior.</td>
<td>87</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Guidance and Counselling Programme can make me confident and reasonable which will enable me to lead a successful life.</td>
<td>92</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

The qualitative analysis of above percentages of responses of students in each area reveal that the SAGCP was effective for the attainment of life skills, development of personality and choice of vocation. The percentages that emerged from the Strategy Evaluation Proforma throws light on the actual responses of students about the effectiveness of the Package for empowering higher secondary students.

**Concluding thoughts**

The responses collected through the administration of Package Appraisal Proforma shed light on the extent of effect of SAGCP on life skills attainment, personality development and vocational choices of students at higher secondary level. Most of the participants agreed that the package was fruitful for enhancing their life skills, improving personality development and equipping them for the right choice of vocation.
5.11 Case Study of Three Higher Secondary Students

CASE I:

Case is a boy studying in plus one course in a government higher secondary school. He is an intelligent student. He was hard working during his previous school days. He secured good grades in his SSLC examination. He has completed his studies in an aided school till tenth. But after tenth he is shifted to a government school for plus one course. Here started his problems. He became sad and emotionally disturbed and turned into ‘regularly irregular’. He used to absent in school days and became academically backward.

He is the only son of his mother. His father expired during his childhood. His mother is working as daily worker in a private firm with Rs.200/day. Mother was very much worried about her son’s bad condition. She didn’t understand the exact problem of his son.

Problem: maladjustment.

Subsidiary: He was unable to concentrate in his studies, got low marks in the first terminal examination and a condition of loneliness.

Problem behaviours

- Now remains always in a depressed mood
- Sits in the class with lack of interest
- Does not mingle with friends
- Absent in many days
- Level of participation in curricular and extra-curricular activities are very poor
- Responds indifferently in the classroom.
- Sometimes exhibits traits of nervousness
Probable causes of maladjustment (hypotheses)

- Poor adaptability in the new school
- Change of school climate
- Strange teachers
- Inferiority complex due to his poor family background
- Lack of friends
- Unattractive physical features

Data collection:

Data collected through

- Informal discussion with select classmates,
- Discussion with class teachers of present and previous classes.
- Participant and non-participant observation.
- Administered psychological tests such as personality, self concept etc
- Sentence completion tests

Analysis of data collected:

Qualitative analysis of data revealed the following facts:

- Academically good up to tenth
- Got 86% marks in his SSLC examination
- Actively participated in all the activities in the school
- He was the class leader during 8th standard
- Intelligent and hardworking
- Punctual in most matters

Actual causes of the Problem

On the basis of analysis of data collected revealed the following causes emerge:
• Poor adaptability in the new school
• Missing old friends
• Missing old teachers
• Lack of attention from teachers
• Unable to mingle with his classmates.
• Difficulty to follow medium of instruction (English)

Counselling Strategies used

• Individual counselling sessions for enhancing self confidence and a positive attitude organized once in a week for 4 months.
• Through interacting sessions, providing occasions for developing communication skills and let him interact with his classmates.
• With the co-operation of teachers, provided occasions for leadership in some class activities like group discussions, debates etc. and also gave personal attention on him by class teacher.
• Simulated interaction exercises were also organized.

Follow up

• Observation of the activities in the classroom and outside
• A careful watch on the attendance of the boy
• Meeting with his mother
• Periodic assessment of overall performance of the boy

Improvement after Counselling

• Became regular in attendance
• Exhibited remarkable improvement in classroom interaction
• Secured good marks in the second and model examinations
• Improvement in the self confidence to a great extent
• Began to participate in extra-curricular activities
• Became smart in all aspects to a great extent

CASE II

Case is a girl studying in an aided higher secondary school at Ernakulam district. She is studying in plus one class. She is a learning disabled student who is suffering multiple problems such as dyslexia, dysgraphia and speech disorder. She is mildly mentally retarded. She is good looking, fair and has financially average background. She is severely emotionally disturbed due to inferiority complex and always found gloomy. When she speaks, eyes were flowing with tears.

She is coming from a financially average family. Her father is a business man and mother is working in a private firm. She has one brother who is studying for engineering course.

Problem: Learning disabled.

Subsidiary:
• Reading disability
• Writing disability
• Speech impairment, stuttering
• Loneliness.
• Inferiority complex

Probable causes of maladjustment (hypotheses)
• Negligence of Parents
• Poor adaptability in the school
• Attitude of teachers
• Inferiority complex due to disability
• Lack of friends
Analysis and Interpretation of Data

Data collection:

Data are collected through the following sources

- discussion with parents
- informal discussion with selected classmates,
- discussion with class teachers of present and previous classes.
- participant and non-participant observation.
- administered psychological tests such as personality, self concept etc
- sentence completion tests

Analysis of data collected:

Qualitative analysis of data revealed the following facts:

- Academically backward
- Write examination with the help of Scribe
- Parents show partiality to her
- Teachers are not so supportive
- She didn’t get any resource facility to improve learning disability

Problem behaviours

- Reading and writing problems
- Spelling mistakes in English and Malayalam
- Aggressive behaviour and one day she was punished her mother
- Complain that nobody like to speak to her
- She remains always depressed mood
- Sometimes students made fun and tease her while she speak due to her starting trouble
- Does not mingle with friends
• Absent in many days

**Actual causes of the Problem**

On the basis of analysis of data collected revealed the following causes emerge:

• Lack of facilities to rectify defects
• Lack of proper caring and attention of teachers
• Inferiority complex due to her weaknesses
• Integrated educational setup instead of special school
• Absence of trained or resource person in the school
• Overcrowded classroom
• Negligence from parents

**Counselling Strategies used**

• Reading and Writing exercises
• Individual counselling sessions once in a week for 4 months.
• Through interacting sessions, providing occasions for developing communication skills and let him interact with his classmates.
• Simulated interaction exercises were also organized.
• Referred her to consult a speech therapist
• Counselling sessions to her parents

**Follow up**

• Observation of the activities in the classroom and outside
• A careful watch on the daily activities
• Meeting with her Parents
• Periodic assessment of overall performance of the boy

**Improvement after Counselling**

• Became regular in attendance
• Exhibited remarkable improvement in social interaction
• Improved reading and writing skills
• Improvement in the self concept to a great extent
• Reduced aggressive behaviour
• Became smart in all aspects to a great extent

CASE III

This girl was studying in plus one class in a higher secondary school in Ernakulam district. She is emotionally disturbed due to the impact of her family. Her parents were almost separated, not legally. Her father is a government employ (Lineman in KSEB). Her mother is a house wife. Their marriage was love marriage without the consent of their parents. Her father was a severe alcoholic and always quarrelled with her mother and her. She is the only daughter. She never saw a good relationship between their parents even from her childhood. When she grows the disturbances also grow with her. Now the actual cause of their separation was the father’s illegal relationship with another lady. Now her mother is going for daily labour in various places. Her father didn’t help them for any matter. They don’t have own house and staying in a rented house. These all matters adversely affected her mental well-being and studies.

Problem: Emotionally disturbed

Subsidiary:
• Unable to concentrate in studies
• Always thinking about her family especially mother
• Gloomy and not interested in any fun
• Over anxiety about her future
• Loneliness
Analysis and Interpretation of Data

- Inferiority complex

**Probable causes of maladjustment (hypotheses)**

- Negligence of Parents
- Poor family environment
- Poor adaptability in the school
- Attitude of teachers
- Inferiority complex due to poverty
- Lack of friends

**Data collection:**

Data collected through

- Discussion with parents
- Informal discussion with selected classmates,
- Discussion with class teachers of present and previous classes.
- Participant and non-participant observation.
- administered psychological tests such as personality, self concept, level of stress etc
- sentence completion tests

**Analysis of data collected:**

Qualitative analysis of data reveals the following facts:

- Broken family due to separated parents
- Mother is struggling for life
- Lack of self-confidence
- Scores of level of stress is very high
- Pessimistic attitude towards life
- Unable to concentrate in studies
• Negative attitude towards married life

• Hatred of men

Actual causes of the Problem

On the basis of analysis of data collected revealed the following causes emerge:

• Broken family

• Lack of proper caring and attention of parents

• Father’s attitude towards them

• Fear of whether they can survive in the society

• Lack of security in life

• Teacher’s negative attitude towards her

• Lack of a true friend

Counselling Strategies used

• Individual counselling sessions for enhancing self confidence and a positive attitude organized once in a week for 4 months.

• Through interacting sessions, providing occasions for developing communication skills and let him interact with his classmates.

• Provide awareness about the significance of study and create a strong desire to earn a good job

• Counselling sessions for developing a feeling to face all the difficulties and challenges through hardwork

• Counselling sessions to her mother to empower her by strengthening a optimistic attitude

• Discussion with teachers to give an empathetic attitude and personal attention towards her
Follow up

- Observation of the activities in the classroom and outside
- A careful watch on the daily activities
- Meeting with her mother
- Periodic assessment of overall performance of the girl
- Discussion with teachers

Improvement after counselling

- Exhibited remarkable improvement in self-confidence
- Now she is very optimistic about her future
- She is a hardworking student
- Improvement in the marks
- She could enjoy fun and jokes
- Found comfortable most of the time
- She has presented a recitation written by her in school level competition and got second prize.
- Became regular in attendance

Concluding thoughts

From the findings it is obvious that the individual counselling sessions were found effective for improving the behaviour of students. These three case studies substantiated the results of the study and revealed the significance of imparting guidance and counselling to students at higher secondary level. Even though the teachers are aware of the problems of students, they are not getting enough time to analyze and solve the problems systematically. So these students become more disturbed sometimes results in suicidal attempt.
5.12 TENABILITY OF HYPOTHESES

The study provided sufficient evidences to decide the validity of the hypotheses set for it. The hypotheses formulated for the study are being tested for their tenability in this section:

Hypotheses 1:

*The prevailing modalities of guidance and counseling are inadequate for enhancing life skills attainment, developing personality and choosing proper vocation of students at higher secondary level.*

For the purpose of analysis, the above hypothesis was converted into null hypothesis as,

*The prevailing modalities of guidance and counseling are adequate for enhancing life skills attainment, developing personality and choosing proper vocation of students at higher secondary level.*

The analysis of the data collected through semi-structured interview schedule and focus group discussion with higher secondary school teachers, Principals and school counselors revealed that the prevailing system of providing guidance and counselling programmes for higher secondary students is inadequate. Though the educators are aware of the significance of imparting guidance and counselling programmes, they rarely implement it in a proper manner due to several constraints such as overcrowded class rooms, lack of qualified teachers, lack of in-service training based on student counselling techniques, scarcity of time for arranging counselling sessions, overload of curricular frame, lack of adequate institutional facility and insufficient fund. The suggestive measures to implement fruitful guidance and counselling practices emerged as multiple perspectives along with dynamic ideas...
include appointment of trained and qualified counsellors, provision of a time frame for conducting guidance and counselling sessions, allocation of timely and proper funds, provision of infrastructure facilities, arrange orientation programme for training various attractive strategies and implementation of a unified curricular frame for imparting guidance and counseling to all students.

Therefore, it can be conclusively stated that prevailing modalities of guidance and counseling programmes are inadequate for enhancing life skills attainment, developing personality and choosing proper vocation of students at higher secondary level. Thus the study hypothesis is accepted.

Hypothesis II: The strategically aligned guidance and counseling package (SAGCP) prepared with special focus on life skills attainment, personality development and vocational choices, is an effective technique for students at higher secondary level.

For the purpose of analysis, the above hypothesis was converted into null hypothesis as,

The strategically aligned guidance and counseling package (SAGCP) prepared with special focus on life skills attainment, personality development and vocational choices, is not an effective technique for students at higher secondary level.

From the following findings it can be said that hypothesis II formulated for the study is tenable.

The analysis of data of the differences between the pre-test and post-test mean scores of the life skills attainment, personality development and vocational choices of experimental group were tested for significance by finding the critical ratio and My.x (Post-test means score adjusted for pre-test scores) calculated for the life skills
attainment, personality development. The data and results of the test of significance are given below.

\[ M_1 = 134.36, M_2 = 163.87, t = 86.71, p < 0.01 \text{(Life Skills Attainment)} \]

My.$x= 163.82$ (Maximum Score is 200, N=240)

\[ M_1 = 169.73, M_2 = 191.69, t = 66.12, p < 0.01 \text{ (Personality Development)} \]

My.$x= 191.60$ (Maximum Score is 250, N=240)

The obtained critical ratios of experimental group for teaching is $3.57$ medical is $3.55$, engineering is $9.61$, central govt is $2.5$, govt employ is $2.25$, artistic is $0.28$, conventional is $0.019$ and miscellaneous is $1.66$. From the critical ratios it is clear that the difference in the percentages of pretest and post test of teaching, medical, engineering, central govt, state govt employ are significant at 0.05 level, but other areas are not significant that means SAGCP was effective for selecting vocation that means Experimental group select proper vocational choices after the implementation of SAGCP.

From the above findings, it can be stated that the strategically aligned guidance and counseling package (SAGCP) prepared with special focus on life skills attainment, personality development and vocational choices, is an effective technique for upbringing students at higher secondary level. Thus the hypothesis is accepted.

Hypothesis III: The package (SAGCP) is more effective than the existing school programmes of guidance and counseling with regard to attainment of life skills, development of personality and choice of vocation.

For the purpose of analysis, the above hypothesis was converted into null hypothesis as,
Hypothesis III: *The package (SAGCP) is less effective than the existing school programmes of guidance and counseling with regard to attainment of life skills, development of personality and choice of vocation.*

The following findings support that Hypothesis III is tenable

**The analysis was done as three parts:**

1) Comparison of the effect of SAGCP with that of the prevailing groups on the life skills attainment
2) Comparison of the effect of SAGCP with that of the prevailing groups on the Personality development
3) Comparison of the effect of SAGCP with that of the prevailing groups on the Vocational choices

**Comparison of the effect of SAGCP with that of the prevailing groups on the life skills attainment**

a) Effect of SAGCP on the life skills attainment of students in the experimental and prevailing group I

b) Effect of SAGCP on the life skills attainment of students in the experimental and prevailing group II

a) *Effect of SAGCP on the life skills attainment of students in the experimental and prevailing group I*

To find out the effect of SAGCP on Life Skills Attainment of Higher Secondary Students in experimental group with prevailing group I, the differences between the mean scores of the pre-test of two groups were tested for significance by finding the critical ratio.

$M_1=134.76, M_2=134.68, t=0.127, p>0.01$ (Pretest scores of experimental and prevailing group I on Life Skills Attainment)
M1=163.87, M2=142.16 t= 27.98  p < 01( Posttest scores of experimental and prevailing group I on Life Skills Attainment)

M1=6.64, M2=29.10 t= 15.90  p < 01(gain scores of experimental and prevailing group I on Life Skills Attainment)

My.x1= 163.8299, My.x2= 142.2034 (Maximum Score is 200, N=240)

**Life skills of students in the experimental and prevailing group II**

For Comparison of pre-test scores in life skill attainment of students, the differences between the mean scores of the Experimental and Prevailing group II were tested for significance by finding the critical ratio. The data and results of the test of significance are given below.

M1=134.87, M2=134.76, t= 0.18 p > 0.01( Pretest scores of experimental and prevailing group II on Life Skills Attainment)

M1=163.87, M2=136.84 t= 35.83  p < 0.01( Posttest scores of experimental and prevailing group II on Life Skills Attainment)

M1=6.64, M2=29.10 t= 19.86  p < 0.01(gain scores of experimental and prevailing group II on Life Skills Attainment)

My.x1= 163.9274, My.x2= 136.7851 (Maximum Score is 200, N=240)

**Effect of SAGCP on the Personality Development**

a) Effect of SAGCP on the Personality development of students in the experimental and prevailing group I

b) Effect of SAGCP on the Personality development of students in the experimental and prevailing group II
Effect of SAGCP on the Personality Development of Students in the experimental and prevailing group I

In this section the performance of the students in two groups based on Personality development evaluated. Comparison of pre-test scores, post test scores and gain scores in Personality development of students in the Experimental and prevailing group I were tested for significance by finding the critical ratio. Then My.x is calculated.

\[ M_1=169.73, \ M_2=169.57, \ t=0.1969 \ p > 0.01 \] (Pretest scores of experimental and prevailing group I on Personality development)

\[ M_1=191.69, \ M_2=176.73, \ t=15.40 \ p < 0.01 \] (Posttest scores of experimental and prevailing group I on Personality development)

\[ M_1=29.95, \ M_2=5.14, \ t=14 \ p < 0.01 \] (Gain scores of experimental and prevailing group I on Personality development)

My.x1= 191.6022, My.x2= 176.8269 (Maximum Score is 250, N=240)

The above results substantiate the Hypothesis III

Analysis of Data with Respect on Personality Development of Higher Secondary Students in Experimental Group with Prevailing Group II

In this section the performance of the students in two groups based on Personality development evaluated. Comparison of pre-test scores, post test scores and gain scores in Personality development of students in the Experimental and prevailing group II were tested for significance by finding the critical ratio. Then My.x calculated.

\[ M_1=169.73, \ M_2=169.61, \ t=0.147 \ p > 0.01 \] (Pretest scores of experimental and prevailing group II on Personality development)
M1=191.69, M2=171.2 t = 21.65  p < 0.01 (Posttest scores of experimental and prevailing group II on Personality development)

M1=21.95, M2=5.14 t= 19.33  p < 0.01 (gain scores of experimental and prevailing group II on Personality development)

My.x1= 191.6263, My.x2= 171.2654 (Maximum Score is 250, N=240)

The above results substantiate the Hypothesis 3

**Comparison of effect of SAGCP on the vocational choices of students in the experimental group and prevailing groups.**

**Effect of SAGCP on the Vocational Choices**

b) Effect of SAGCP on the Vocational Choices of students in the experimental and prevailing group I

c) Effect of SAGCP on the Vocational Choices of students in the experimental and prevailing group II

**Effect of SAGCP on the Vocational Choices of students in the experimental and prevailing group I**

For analysis the percentages of the pre test and post-test scores and the critical ratios of the percentage revealed that there is significant difference in the pretest-post test percentage and this implies the SAGCP was effective for the choice of vocation.

The critical ratios obtained from test of significance of difference between the percentages of Vocational choices for 8 choices in the experimental group, prevailing group I and Prevailing group II were evaluated. The obtained critical ratios of experimental group for teaching is 3.57, medical is 3.55, engineering is 9.61, Central Govt is 2.5, State Govt Employ is 2.25, Artistic is 0.28, conventional is 0.019 and miscellaneous is 1.66. From the critical ratios it is clear that the difference in the percentages of pretest and post test of teaching, medical, engineering, central govt,
state govt employ are significant at 0.05 level, but other areas are not significant that means SAGCP was effective for selecting vocation. In the prevailing group I and prevailing group II, the obtained critical ratios of the pretest and post test percentages are not significant, that means Experimental group select proper vocational choices after the implementation of SAGCP.

From the above findings, it is clear that the strategically aligned guidance and counseling package (SAGCP) is more effective than the existing school programmes of guidance and counseling with regard to attainment of life skills, development of personality and choice of vocation of students at higher secondary level. Thus the hypothesis is accepted.

**Hypothesis IV:** There exists significant difference in the effectiveness of prevailing mode of guidance and counselling programmes conducted by school counsellors and classroom practitioners with regard to attainment of life skills, development of personality and choice of vocation of students at higher secondary level.

For the purpose of analysis, the above hypothesis was converted into null hypothesis as,

**There exists no significant difference in the effectiveness of prevailing mode of guidance and counselling programmes conducted by school counsellors and classroom practitioners with regard to attainment of life skills, development of personality and choice of vocation of students at higher secondary level.**

The analysis was done as three parts:

1) Comparison of the effect of prevailing guidance and counseling programmes (Prevailing group I and Prevailing group II) on life skills attainment.

2) Comparison of the effect of prevailing guidance and counseling programmes (Prevailing group I and Prevailing group II) on Personality development.
3) Comparison of the effect of prevailing guidance and counseling programmes (Prevailing group I and Prevailing group II) on Vocational choices.

a) Comparison of the effect of prevailing guidance and counseling programmes (Prevailing group I and Prevailing group II) on life skills attainment

To find out the effect of SAGCP on Life Skills Attainment of Higher Secondary Students in Prevailing group I with prevailing group I, the differences between the mean scores of the pre-test of two groups were tested for significance by finding the critical ratio.

From the following findings it can be said that Hypothesis IV is tenable

\[ M_1 = 134.69, \ M_2 = 134.76, \ t = 0.13 \ p > 01 \] (Pretest scores of Prevailing group I and prevailing group II on Life Skills Attainment)

\[ M_1 = 142.16, \ M_2 = 136.84, \ t = 10.70 \ p < 01 \] (Posttest scores of Prevailing group I and prevailing group II on Life Skills Attainment)

\[ M_1 = 7.52, \ M_2 = 1.72, \ t = 44.08 \ p < 01 \] (Gain scores of Prevailing group I and prevailing group II on Life Skills Attainment)

\[ M_{x1} = 142.18, \ M_{x2} = 136.38 \] (Maximum Score is 200, N=240)

From the above findings it is obvious that the difference between them statistically significant. So the null hypothesis rejected and the study hypothesis accepted.

2) Comparison of the effect of prevailing guidance and counseling programmes (Prevailing group I and Prevailing group II) on Personality development.

To find out the effect of SAGCP on Personality development of Higher Secondary Students in Prevailing group I with prevailing group II, the differences
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between the mean scores of the pre-test of two groups were tested for significance by finding the critical ratio.

The following findings support the hypothesis

M1=169.57, M2=169.61, t= 0.049 p > 01 (Pretest scores of Prevailing group I and prevailing group II on Personality development)

M1=176.73, M2=171.2, t= 6.64 p < 01( Posttest scores of Prevailing group I and prevailing group II on Personality development)

M1=7.16, M2=1.58, t= 30.07 p < 01(gain scores of Prevailing group I and prevailing group II on Personality development)

My.x1= 176.76, My.x2= 171.18 (Maximum Score is 200, N=240)

From the above findings it is obvious that the difference between them statistically significant. So the null hypothesis rejected and the study hypothesis accepted.

Comparison of the effect of prevailing guidance and counseling programmes (Prevailing group I and Prevailing group II) on Vocational Choices

The obtained critical ratios of pretest scores of prevailing group I and prevailing group II revealed that there is no significant difference in the percentages of pretest scores of all the eight areas of vocation. But in the obtained critical ratios of posttest scores of prevailing group I and prevailing group II revealed that there is significant difference in the percentages of posttest scores of only one (Engineering-3.15) vocation, all the other seven areas of vocation of prevailing group 1 and prevailing group II are not significant, that means prevailing group I and prevailing group II students are not getting proper career guidance for the choice of proper vocation.
From the above findings it is clear that the difference between them statistically not significant. So the null hypothesis is accepted and the study hypothesis is rejected except in the case of engineering category of vocational choices.

**Hypothesis V**: There is no gender difference in the effectiveness of package (SAGCP) with regard to life skills attainment, personality development and vocational choices of students at higher secondary level.

Analysis was done by three steps

a) Gender differences in the Life skills attainment

b) Gender differences in the Personality development

c) Gender differences in the Vocational choices

**Gender differences in the Life skills attainment**

My.x (boys)= 163.67, My.x (girls)=164.07, t= 0.95 p > 01  (Life skills Attainment of Experimental group)

From the above findings it is clear that the difference based on gender in the experimental group were statistically not significant. So the null hypothesis is accepted.

**Gender differences in the Personality development**

My.x(boys)= 191.71, My.x(girls)=191.68, t = 0.04 p > 01  (Personality development of Experimental group)

From the above findings it is clear that the difference between boys and girls in three groups were statistically not significant.

**Gender differences in the Vocational choices**

The obtained critical ratios of percentage of pretest scores of Vocational choices of boys and girls in the experimental group reveal that there exists significant
difference among boys and girls only in medical and engineering areas and there is no significant difference in all other six categories. But in the post test scores, the obtained critical ratio indicates that there exists significant difference in Teaching, medical, engineering and central govt areas and there is no significant difference in all other four categories. That means after the implementation of SAGCP, the gender difference found in the areas teaching, medical, engineering and central govt. In all other categories boys and girls preferred almost same choices.

From the above findings, it can be interpreted that there is no gender difference in the effectiveness of package (SAGCP) with regard to Life skills Attainment, Personality development but the gender differences found in the vocational choices of students at higher secondary level. Thus the null hypothesis is accepted in the case of life skills attainment and personality development, but in the case of vocational choices the null hypothesis is partially accepted.

**Hypothesis VI. There exists difference in the effectiveness of SAGCP as a strategy for the guidance and counseling of students opted different subjects.**

For the purpose of analysis, the above hypothesis was converted into null hypothesis as,

*There exists no significant difference in the effectiveness of SAGCP as a strategy for the guidance and counseling of students opted different subjects.*

Analysis was done by three steps

a) Differences in the Life skills attainment of students opted different subjects.

b) Differences in the Personality development of students opted different subjects.

c) Differences in the Vocational choices of students opted different subjects.
a) **Differences in the Life skills attainment of students opted different subjects.**

F (Pretest) = 33.34 \( p < 0.01 \) table value 4.61 at .01 level of significance (life skills attainment in the experimental group)

F (Posttest) = 50.28 \( p < 0.01 \) table value 4.61 at .01 level of significance (life skills attainment in the experimental group)

**Scheff post hoch analysis**

Mean score of science students = 171.78

Mean score of Humanities students = 158.35

Mean score of Commerce students = 161.49

Mean score of science students were greater than the mean score of other subjects and the obtained mean score in posttest score is greater than the pretest mean scores in the experimental group. So it is inferred that science students can attained more life skills compare to other subjects.

Thus the null hypothesis rejected and the study hypothesis is accepted.

**Differences in the Personality development of students opted different subjects.**

F (Pretest) = 9.42 \( p < 0.01 \) table value 4.61 at .01 level of significance (Personality development in the experimental group)

F (Posttest) = 18.83 \( p < 0.01 \) table value 4.61 at .01 level of significance (Personality development in the experimental group)

**Scheff post hoch analysis**

Mean score of science students = 197.70

Mean score of Humanities students = 187.78

Mean score of Commerce students = 189.46

Mean score of science students were greater than the mean score of other subjects and the obtained mean score in posttest score is greater than the pretest mean
scores in the experimental group. So it is inferred that science students can attained more personality development compare to other subjects.

Thus the null hypothesis rejected and the study hypothesis is accepted.

From the critical ratios of pretest scores of science and commerce, it is obvious that there is no significant difference in the pre-test except in the medical and engineering areas. This implies that the science and commerce students preferred almost same choice without based on the course selected before the experiment except for medical and engineering. The critical ratios of pretest scores of medical vacation was 4.72 and engineering was 5.49. But in the posttest scores the obtained t value for, Medical 2.56, Engineering 13.04, central 2.01 and miscellaneous 2.63 all the t value are greater than the table value, that means there is significant difference in the teaching medical, engineering, central and miscellaneous.

From the critical ratios of pretest scores of science and, it is obvious that there is no significant difference in the pre-test except in the medical area. For medical vocation in pretest was 4.75 that is significant and posttest scores were 2.59 is also significant at 0.05 level of significance. But in the posttest scores the obtained t value for, Engineering 10.62 central 2.37 and miscellaneous 2.39 all the t value are greater than the table value, that means there is significant difference in the medical, engineering, central govt and miscellaneous. All the other critical ratios in pre test and posttest is less than the table value that means there is no significant difference in the pretest and posttest of Science and humanities students in their vocational choice.

The critical ratio for pretest and posttest scores of commerce and humanities reveals there exists no significant difference in the all the vocational choice except engineering of commerce and humanities students in their pretest and posttest scores. The results revealed that humanities and commerce students opted almost similar
vocations in the pretest and post test except engineering. In the case of vocational choices null hypothesis is partially accepted.

From the above findings, it can be stated that there exists difference among students opted science, commerce and humanities subjects with regard to Life skills Attainment, Personality development and vocational choices. Thus the null hypothesis is accepted.

*Hypothesis VII: There exists no difference in the effectiveness of SAGCP as a strategy for the guidance and counselling of students belonging to government and aided schools.*

**Analysis was done by three steps**

a) Differences in the Life skills attainment of students studying in the government and aided schools

b) Differences in the Personality development of students studying in the government and aided schools

c) Differences in the Vocational choices of students studying in the government and aided schools

**Differences in the Life skills attainment of students studying in the government and aided schools**

The following findings support that the hypothesis 7 is tenable

\[
\text{My}_x(\text{Govt})= 163.64, \text{My}_x(\text{Aided})=164.11, \ t = 1.10 \ p > 01 \ \text{(Life skills Attainment of Experimental group)}
\]

From the above findings it is clear that the difference between Govt and Aided school students in the experimental group were statistically not significant. So the null hypothesis is accepted.
Differences in the Personality development

My.x(Govt)= 191.54, My.x(Aided) =191.85, t = 0.51 p > 01 (Personality development of Experimental group)

Differences in the vocational choices

The test of significant difference in the percentage distribution of vocational choices in between govt and aided in the pretest and posttest scores of Experimental group it is clear that all the Critical Ratios (CR) in pretest and posttest of govt and aided school are not significant in the at 0.05 level. so it is inferred that there exists no significant difference in the vocational choices of govt school students and aided school students in their pretest and posttest scores of Experimental group and it revealed that the SAGCP is equally effective for choosing vocations among students of Government and aided schools.

From the above findings it is clear that the difference between Govt and Aided school students with regard to life skills attainment, personality development and vocational choices were statistically not significant. So the null hypothesis is accepted.

Hypothesis VIII: The package (SAGCP) is equally effective for enhancing all set levels of dimensions of life skills.

For the purpose of analysis, the above hypothesis was converted into null hypothesis as,

The package (SAGCP) is not equally effective for enhancing all set levels of dimensions of life skills.

The obtained t value 76.22 for self-awareness, 58.72 for empathy, 68.03 for decision making, 49.06 for interpersonal and 32.74 for Stress Management. All the t value are greater than the table value 2.58 at 0.01 level of significance, that means
there exists a significant difference pretest and posttest mean scores. From the above finding it is clear that SAGCP is effective for developing all the select dimensions of life skills, but the package is more effective for the dimension self-awareness and less effective for dimension stress management. Thus the null hypothesis is accepted.

**Hypothesis IX: The package (SAGCP) is equally effective for enhancing all set levels of dimensions of personality development.**

For the purpose of analysis, the above hypothesis was converted into null hypothesis as,

*The package (SAGCP) is not equally effective for enhancing all set levels of dimensions of personality development.*

The $t$ values for emotional adjustment was 21.94, 33.84 for social concern, 32.37 for Assertiveness, 28.31 for values 30.80 for leadership, 31.20 for self confidence. All the $t$ values are greater than the table value 2.58 at 0.01 level of significance, that means there exists a significant difference in the pretest and posttest mean scores. From the above finding it is clear that SAGCP is effective for developing all the select dimensions of life skills, but the package is more effective for the dimension Social concern and less effective for dimension Emotional adjustment. So the null hypothesis is accepted.

### 5.13 Discussion of Results

The findings of the investigation enumerate the results of the tests of hypotheses which bring to light on certain points that are worthy to be considered. The results of the study revealed that the developed guidance and counselling package (SAGCP) has a positive effect on life skills attainment, personality development and vocational choices of students at higher secondary level. The study has proved that
even though the students of higher secondary level initially exhibited almost same status in the experimental and prevailing groups on the select three variables, the experimental group manifested remarkable enhancement in the life skills attainment, personality development and choice of vocation after the implementation of the package. From the findings of the study it was concluded that experimental group displayed better enrichment than the prevailing groups in life skills attainment, personality development and vocational choices.

The analysis of the results of semi-structured interview with select higher secondary school teachers, Principals and school counselors revealed that the prevailing system of providing guidance and counselling programmes is inadequate. Although the guidance and counseling programmes are carried out in most of the higher secondary schools in Kerala, it is not sufficient for the all round development of students and the class room practitioners are not thorough with the varied strategies and not well versed with systematic practices and their corresponding upshots as exposure for fruitful actions. A close scrutiny of the results revealed that the developed SAGCP is adequately covered all the essential areas of needs for driving the students at higher secondary level. The analysis of observational checklist till the end of the academic year enables the investigator to get a clear cut feedback about the efficaciousness and consistency of the effect of developed package on the thrust areas.

The investigator arrived at a conclusion that a certain level of deficiency to internalize the essential life skills and mould the personality and ability to choose proper vocation among higher secondary students. The existing strategies are not interesting and empowered enough to accomplish desired outcome in these areas. So the investigator aligned various advanced and appropriate strategies in order to
implement the guidance and counseling programmes for the holistic development of students at higher secondary level.

It is believed that there is gender difference in the emotional and intellectual aspects. Therefore the investigator included certain areas to see whether there is any gender difference in life skills attainment, personality development and vocational choices or not. The results revealed that the boys and girls in the experimental group had the same range of development in life skills and personality. But there was gender difference was found in vocational choices.

The general thought of people that the science students are better in intellectual, social, psychological and emotional aspects than commerce and humanities students. In the experimental study the investigator has taken optional subjects as subsample in order to find out the differences in the life skills attainment, personality development and vocational choices among the students studying science, commerce and humanities as their optional subjects. The results clearly indicated that the students studying science group is making better performance than that of their counterparts such as commerce and humanities groups in life skills attainment, personality development and vocational choices.

It is alleged that the students studying in aided school is excelled in studies than the students studying in Government schools in various academia. So the investigator also wanted to see whether there is any differences between aided and government school students in the experimental group or not. From the findings, it was consistently found that there is no difference in life skills attainment, personality development and vocational choices of students in experimental group. This finding is encouraging because it shows the allegation unfounded and unwanted with regard to the variables of the study.
From the results, it can be interpreted that the experimental group exhibited successful accomplishment in the attainment of all the select components of life skills viz. self awareness, stress management, empathy, inter-personal relations and problem solving skills. The strategically aligned package provided ample opportunities for illuminate all the select dimensions of their personality that prompt to modify their attitude, behavior and character in all aspects.

The package was exclusively sufficient in bridging new concepts and ideas among students in this technologically advanced era. The study revealed that the SAGCP enlightened higher secondary students in the right selection of vocation. By familiarizing the world of work, nature of various jobs, essential features and other aspects of vocational choice, the students become empowered in their career arena. Even though initially the students preferred wrong choice of vocation, after the experiment they realized the fact that the choice of vocation must be done according to the aptitude, attitude and talent of their own, not by the choice of parents or anything.

From the findings of the qualitative analysis of case studies of three higher secondary students with three different problems, it is obvious that the individual counselling sessions were found effective for improving the behaviour of students. These three case studies substantiated the results of the study and revealed the significance of imparting guidance and counselling to students at higher secondary level. Even though the teachers are aware of the problems of students, they are not getting enough time to analyze and solve the problems systematically. So these students become more disturbed sometimes may results in severe maladjustment.

On the basis of the findings of the study, it can be emphatically stated that developed SAGCP is powerful for moulding the higher secondary students with
essential skills and competencies to enter into the globalized scenario with confidence. Keeping the above discussion in mind, the investigator pointed out the need for imparting the guidance and counseling programmes with a systematic way enable the students for nurturing appropriate life skills and cultivating a good personality and strengthening their capacities in the vocational choices. The three case studies also substantiated the results of the study and revealed the significance of imparting guidance and counselling to students at higher secondary level. The findings of the study are substantiated by the results of the study of Synthia, (2007), Anu (2010) Veronica (2011), Kristina (2011), and Lekshmi (2012).

Conclusion

Research data becomes momentous in the process of being analyzed and interpreted. The rationale for analysis of data is that explore the facts and elucidate the relationships between variables. The analyzed data then synthesized in such a way that the hypotheses whether may be accepted or rejected. The summary of findings, conclusions and implications of the study are given in the coming chapter.