CHAPTER V

ANALYSIS: CURRICULAR FRAMEWORK BASED ON GANDHIAN PRINCIPLES–I

Section A

Part I Analysis and Interpretation of the Test of Significance for the Mean Scores of the Independent Variables of the Subgroups – Government School Teachers and Private School Teachers

Part IIa Analysis and Interpretation of the Graphic Pattern Showing the Philosophy Preference of Government School Teachers

Part IIb Analysis and Interpretation of the Graphic Pattern Showing the Philosophy Preference of Private School Teachers

Section B

Part Ia Analysis and Interpretation of the Test of Significance for the Mean Scores of the Independent Variables of the ‘High’, ‘Average’ and ‘Low’ Academic Achievers

Part Ib Analysis and Interpretation of the Test of Significance for the Mean Scores of the Independent Variables of the ‘Rural’ and ‘Urban’ Samples

Part IIa Correlation Analysis of the Relationship Between the Academic Achievement and Independent Variables of the ‘Low’, ‘Average’ and ‘High’ Academic Achievers

Part IIb Correlation Analysis of the Relationship Between Variables of ‘Culture of Head’, ‘Culture of Hand’ and ‘Culture of Heart’ for the Whole Sample

Part IIc Correlation Analysis of the Relationship Between Academic Achievement and the Variables of ‘Culture of Head’, ‘Culture of Hand’ and ‘Culture of Heart’ for the Whole Sample
**Major Considerations in the Process of Analysis**

The present study attempts to assess the effect of the philosophical perceptions of the teachers as well as the anticipated impact of the Gandhian educational ideologies in restructuring the existing Secondary School Curriculum. The nature of the topic and the objectives formulated coupled with its scope of implications make it necessary on the part of the researcher analysing and interpreting the data under two major sections and each section under two parts.

**Section A**

**Part I**

Analysis of the data under Section A, Part I, is to assess the following specific objectives.

i) To assess whether there is significant difference in the mean scores regarding the philosophic perceptions held by the subgroups, Government School Teachers and Private School Teachers (GTS:PTS) with respect to the variables under 'Idealism'.

ii) To assess whether there is significant difference in the mean scores of the philosophic perceptions held by the subgroups (GTS:PTS) with respect to the variables under 'Naturalism'.

iii) To assess whether there is significant difference in the mean scores of the philosophic perceptions held by the subgroups (GTS:PTS) with respect to the variables under 'Pragmatism'.
iv) To assess whether there is significant difference in the mean scores of the philosophic perceptions held by the subgroups (GTS:PTS) with respect to the variables under 'Realism'.

Part IIa

To assess the extent of preference of the four major philosophical thoughts ('Idealism', 'Naturalism', 'Pragmatism' and 'Realism') held by the Government School Teachers.

Part IIb

To assess the extent of preference of the four major philosophical thoughts ('Idealism', 'Naturalism', 'Pragmatism' and 'Realism') held by the Private School Teachers.

Section B

Part I

This part is aimed at examining the following specific objectives.

Part Ia

To assess the test of significance of mean differences of the scores of the Gandhian educational ideologies with respect to the 'culture of head', 'culture of hand' and 'culture of heart' for the three achievement levels ('Low', 'Average' and 'High' academic achievers).

Part Ib

To assess the test of significance of mean differences of the scores of the Gandhian educational ideologies with respect to the 'culture of head', 'culture of hand' and 'culture of heart' for the Rural and Urban samples.
Part Ila

To determine the correlation between the variables of 'culture of head' and 'culture of hand' for the subgroups 'Low', 'Average' and 'High' academic achievers.

Part Ilib

To assess the extent of relationship between the variables related to the 'culture of head' and 'culture of heart' for the subgroups ('Low', 'Average' and 'High' academic achievers).

Part Ilc

To find out the extent of correlation between the variables of 'culture of hand' and 'culture of heart' for the subgroups ('Low', 'Average' and 'High' academic achievers).

Part Ild

To estimate the extent of relationship between the variables of 'culture of head', 'culture of hand' and 'culture of heart' for the whole sample.

Part Ile

To estimate the relationship between academic achievement and the variables of 'culture of head', 'culture of hand' and 'culture of heart' for the whole sample.

Section A

Part I

In this study, the Secondary School Curriculum is the dependent variable and the select variables related to 'Idealism', 'Naturalism',
'Pragmatism' and 'Realism' are the independent variables. The scores of the 'Philosophy Preference Assessment Scale' yielded the required data on those variables for analysis.

**Variables under study**

**A. Idealism**

1. Reality is spiritual and rational
2. The teacher should be a strong authority figure in the classroom.
3. Ideal teachers interpret knowledge.
4. Schools are obliged to teach moral truth.
5. Institutions exist to preserve and strengthen spiritual and moral values.
6. The curriculum should be based on unchanging spiritual values.
7. There are essential pieces of knowledge that everyone should know.
8. The object of learning and living is to develop the natural man.
9. Education should result in the formation of character of the children.
10. Knowledge is obtained through the activity of the mind.

**B. Naturalism**

1. Freedom is the essence of spontaneous and natural development of the children.
2. Reality is the matter which manifests in the form of nature.
3. Truth is not absolute or final but a product of environmental and life conditions.
4. School exists to preserve and transmit culture to the younger generation.

5. The curriculum should allow children to comprehend knowledge of the nature through their senses and scientific investigations.

6. Natural instincts are responsible for all our activities.

7. There is no need for religious and moral instruction since man is rational and his consciousness is the voice of reason.

8. Development of the personality is the final aim of education.

9. Mind is the function of the brain and there is nothing like spiritual force or divine inspiration.

10. Book of Nature is the best of all textbooks in the world.

C. **Pragmatism**

1. Schools exist for societal improvement.

2. The teaching should centre around the inquiry technique.

3. School programmes should focus on social problems and issues.

4. Teachers are seen as facilitators of education.

5. Education aims at providing life experiences.

6. The school is a laboratory for the experience of life.

7. Educational goals should stem from individual and community needs.

8. Intelligence is the chief means of survival.


10. Change is an ever-present process.
D. Realism

1. Demonstration and recitation are essential components of learning.
2. Curriculum should be based on the laws of natural science.
3. Institutions should seek avenues toward self-improvement through an orderly process.
4. Reality consists of objects.
5. Schools foster an orderly means for change.
6. Man ever remains imperfect.
7. There are essential skills everyone must learn.
8. A functioning member of society follows rules of conduct.
9. Schools should reflect the society they serve.
10. Mind perceives the reality of Nature.

The analysis and interpretation of the study fall in two parts. Part I includes analysis and interpretation of the test of significance for the mean scores of the independent variables of the subgroups under study. Part II is concerned with plotting of graphs, showing the philosophical perceptions of the subgroups regarding the four major philosophical thoughts.

Section A

Part I: Comparison of the Mean Scores of Subgroups of the Sample for Independent Variables under 'Idealism', 'Naturalism', 'Pragmatism' and 'Realism'

The sample consisted of 47 Government school teachers and 53 Private school teachers. The analysis involved comparison of these subgroups with respect to the mean scores of the independent variables in the following manner:
i) **Government school teachers (GTS) with private school teachers (PTS)**

The computed means and standard deviations of variables under each of the philosophic thoughts for the two subgroups are summarised in Table 8, Table 9, Table 10 and Table 11.

**TABLE 8**

*Mean and Standard Deviation of the Variables Belonging to Idealism of the Two Subgroups*

<table>
<thead>
<tr>
<th>Idealism</th>
<th>GTS</th>
<th>PTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Variables (10)</td>
<td>38.128 4.204</td>
<td>36.566 4.6113</td>
</tr>
<tr>
<td>Sample size</td>
<td>N = 47</td>
<td>N = 53</td>
</tr>
</tbody>
</table>

**TABLE 9**

*Mean and Standard Deviation of the Variables Belonging to Naturalism of the Two Subgroups*

<table>
<thead>
<tr>
<th>Naturalism</th>
<th>GTS</th>
<th>PTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Variables (10)</td>
<td>36.787 3.3703</td>
<td>35.208 5.041</td>
</tr>
<tr>
<td>Sample size</td>
<td>N = 47</td>
<td>N = 53</td>
</tr>
</tbody>
</table>
TABLE 10

Mean and Standard Deviation of the Variables Belonging to Pragmatism of the Two Subgroups

<table>
<thead>
<tr>
<th>Pragmatism</th>
<th>GTS</th>
<th>PTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Variables (10)</td>
<td>41.191</td>
<td>3.1867</td>
</tr>
<tr>
<td>Sample size</td>
<td>N = 47</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 11

Mean and Standard Deviation of the Variables Belonging to Realism of the Two Subgroups

<table>
<thead>
<tr>
<th>Realism</th>
<th>GTS</th>
<th>PTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Variables (10)</td>
<td>38.702</td>
<td>4.5285</td>
</tr>
<tr>
<td>Sample size</td>
<td>N = 47</td>
<td></td>
</tr>
</tbody>
</table>

Comparison of subgroups in respect of the variables belonging to the four philosophical thoughts

The comparison was done by testing the significance of mean difference for the variables belonging to the four major philosophies. The difference between the means was tested using the 'two-tailed test'. For
two-tailed tests, critical ratio exceeding 2.58 are treated as significant at 0.01 level, critical ratios exceeding 1.96 are treated as significant at 0.05 level.

The results of the test of significance of mean differences among the subgroups for the variables tested under the four major philosophical thoughts are presented in Table 12.

**TABLE 12**

Data and Results of the Tests of Significance of the Difference Between the Mean Scores of Government School Teachers (GTS) and Private School Teachers (PTS)

<table>
<thead>
<tr>
<th>Variables</th>
<th>GTS</th>
<th>PTS</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1$</td>
<td>$\sigma_1$</td>
<td>$M_2$</td>
</tr>
<tr>
<td>Idealism</td>
<td>38.128</td>
<td>4.2004</td>
<td>36.566</td>
</tr>
<tr>
<td>Naturalism</td>
<td>36.787</td>
<td>3.3703</td>
<td>35.208</td>
</tr>
<tr>
<td>Pragmatism</td>
<td>41.191</td>
<td>3.1867</td>
<td>37.925</td>
</tr>
<tr>
<td>Realism</td>
<td>38.702</td>
<td>4.5285</td>
<td>36.434</td>
</tr>
</tbody>
</table>

Sample size $N_1 = 47$ $N_2 = 53$

*Interpretation based on the level of significance of the mean scores of the variables of the two subgroups (GTS-PTS)*

In order to facilitate the interpretation of the comparison of the mean scores of the two subgroups (GTS-PTS), a summary of the tests of significance is presented in Table 13.
TABLE 13
Summary of the Tests of Significance for the
Two Subgroups (GTS-PTS)

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GTS-PTS</td>
</tr>
<tr>
<td>Idealism</td>
<td>1.7726\text{NS}</td>
</tr>
<tr>
<td>Naturalism</td>
<td>1.8594\text{NS}</td>
</tr>
<tr>
<td>Pragmatism</td>
<td>3.5949\text{**}</td>
</tr>
<tr>
<td>Realism</td>
<td>2.5304\text{*}</td>
</tr>
</tbody>
</table>

| Sample size | N = 47 | N = 53 |

Note: (i) NS - Not significant (ii) \text{*} Significant at 0.05 level (iii) HS - Significant at 0.01 level (iv) GTS - Government school teachers; PTS - Private school teachers

The table clearly indicates that out of the four major philosophical thoughts (Idealism, Naturalism, Pragmatism and Realism), pragmatism shows significant mean difference beyond 0.01 level (viz. 2.58), realism shows a significant mean difference beyond 0.05 level (viz. 1.96), the other philosophical thoughts, 'idealism' and 'naturalism' do not express any significance either at 0.01 level or at 0.05 level.

The high critical ratio obtained for variables related to 'pragmatism', while estimating mean differences of the two groups, Government School Teachers (GTS) and Private School Teachers (PTS) shows that the two groups are not identical with respect their perceptions to the variables related to 'pragmatism'. Although the two-tailed test is not intended to illuminate the direction of mean difference, it may be noted that the mean score of GTS is higher than that of PTS. Hence it can be considered that GTS claim more advantage over PTS with respect to the variables related to 'pragmatism'.
To be precise, it may be stated that Government School Teachers put more emphasis on a ‘curriculum’ which is pragmatic in nature than the Private School Teachers.

The critical ratio obtained while comparing Government School Teachers (GTS) and Private School Teachers (PTS) for the mean difference of the variables related to ‘realism’ is 2.5304. This value is far higher than the level set for significance at 0.05 level (viz. 1.96). This shows that the two groups are not similar with respect to their views on variables tested under ‘realism’. The table shows that the higher mean score is attached with Government School Teachers. Hence, it may be considered that GTS are superior to PTS in their perceptions on variables related to ‘realism’. In other words, it may be suggested that Government School Teachers demand a curriculum which is more ‘realistic’ in nature than the Private School Teachers.

The value of critical ratio estimated on comparing Government School Teachers (GTS) and Private School Teachers (PTS) for the mean difference of the variables related to ‘naturalism’ is 1.8594. This value does not show any significance. Hence, it is inferred that the two groups (GTS and PTS) are identical in their perceptions regarding variables related to ‘naturalism’. This observation makes it imperative that a hierarchical preference cannot be assorted to regarding the weightage to be given in including the variables of ‘naturalism’ in restructuring the curriculum as far as both the groups are concerned.

The estimated critical ratio on comparing Government School Teachers (GTS) and private school teachers (PTS) for the mean difference of the
variables related to ‘idealism’ is 1.7726. This value doesn’t show any significance either at 0.01 or at 0.05 level. Hence, it can be considered that the two groups (GTS and PTS) are similar with respect their views regarding the variables related to ‘idealism’. Such a finding make it apparent the two groups (GTS and PTS) recommend the inclusion of idealistic thoughts on restructuring the Secondary School Curriculum with an equal weightage.

Part II:  Philosophic Preference Assessment of the Major Philosophical Thoughts held by Teachers Based on Graphical Patterns

Pattern I – Government School Teachers (GTS)

Interpretation

The graphical representation obtained, while plotting of scores of variables related to ‘idealism’, ‘naturalism’, ‘pragmatism’ and ‘realism’ for Government School Teachers (GTS) almost resembles Pattern I as suggested by Jon Wiles and Joseph Bondi.

The ‘Pattern’ shows, three peaks attached to ‘idealism’, ‘pragmatism’ and ‘realism’ whereas ‘naturalism’ shows a descent. Such a grid indicates indecisiveness on crucial issues regarding the variables related to ‘idealism’. ‘Pragmatism’ and ‘realism’ suggesting the need for further clarification. But as the ‘peaks’ between ‘idealism’ and ‘pragmatism’ are not adjacent it can be inferred that the contradictions on crucial issues regarding the variables belonging to these two philosophical thoughts are much lesser than with the variables of ‘realism’. The findings above suggest that Government School Teachers advocate a curriculum which is more pragmatic in nature than ‘idealism’ and ‘realism’. Further, they favour accommodating idealistic and
realistic principles in the curriculum with relative importance. Thus, it may be noted that Government School Teachers hold, an eclectic view in restructuring the Secondary School Curriculum.

TABLE 14

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variables</th>
<th>Mean scores 'GTS'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pragmatism</td>
<td>41.191</td>
</tr>
<tr>
<td>2</td>
<td>Realism</td>
<td>38.702</td>
</tr>
<tr>
<td>3</td>
<td>Idealism</td>
<td>38.128</td>
</tr>
<tr>
<td>4</td>
<td>Naturalism</td>
<td>36.787</td>
</tr>
</tbody>
</table>

Table 14 shows in a descending order, the mean scores obtained by Government School Teachers (GTS) on assessing their preference of the variables related to 'idealism', 'naturalism', 'pragmatism' and 'realism'. The table indicates that the highest mean score is associated with 'pragmatism' (41.191) followed by 'realism' (38.702), 'idealism' (38.122) and 'naturalism' (36.787). Since the mean scores are different for the variables assessed, it can be inferred that Government School Teachers express a hierarchical preference of their perceptions of the four philosophical thoughts from 'naturalism' to 'pragmatism' in an ascending order.
TABLE 15

Pattern I

<table>
<thead>
<tr>
<th>Sample mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>20</td>
</tr>
</tbody>
</table>

Idealism | Naturalism | Pragmatism | Realism

Sample size, N = 47

Pattern II – Private School Teachers (PTS)

The graphical profile obtained while plotting of scores of variables related to 'idealism', 'naturalism', 'pragmatism' and 'realism' for Private School Teachers (PTS) resembles Pattern I as suggested by Wiles and Bondi.

The grid of variables in the profile shows three peaks for 'idealism', 'pragmatism' and 'realism'. The one descent in the profile stand for variables related to 'naturalism'. The nature of the profile suggests indecisiveness on crucial issues regarding the variables and denotes the need for further classification. The peaks for 'idealism' and 'pragmatism' are seen set apart with differing attitudes. Hence, it is considered that the contradictions on important issues regarding the variables of 'idealism' and 'pragmatism' are much lesser than with the variables belonging to 'realism'. The above observations indicate that Private School Teachers stand for a curriculum
based more on 'pragmatism' than on 'idealism' or 'realism'. Further, PTS recommend including 'idealistic' and 'realistic' principles in restructuring the Secondary School Curriculum. Thus, it is seen that Private School Teachers also hold an eclectic view of philosophic principles in restructuring the curriculum.

### TABLE 16

Mean Scores of Variables Related to 'Idealism', 'Naturalism', 'Pragmatism' and 'Realism' for Private School Teachers (PTS)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variables</th>
<th>Mean scores 'PTS'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pragmatism</td>
<td>37.925</td>
</tr>
<tr>
<td>2</td>
<td>Idealism</td>
<td>36.566</td>
</tr>
<tr>
<td>3</td>
<td>Realism</td>
<td>36.434</td>
</tr>
<tr>
<td>4</td>
<td>Naturalism</td>
<td>35.208</td>
</tr>
</tbody>
</table>

Table 16 shows in a descending order, the mean scores secured by Private School Teachers (PTS) while assessing their level of preferences of the variables related to 'idealism', 'naturalism', 'pragmatism' and 'realism'. From the table, it is evident that the highest mean score is attached with 'pragmatism' (37.925), followed by 'idealism' (36.566), 'realism' (36.434) and 'naturalism' (35.208). Since the mean scores vary from one another for variables of the four philosophical thoughts, it can be noted that Private School Teachers (PTS) show a hierarchical perceptions of the variables assessed, from 'naturalism' to 'pragmatism' in an ascending order.
TABLE 17
Pattern II

Sample size, N = 53

Section B
Part I

This part of analysis is concerned with assessing the tenability of the second hypothesis, viz. to find out the extent to which the students of the three achievement levels, 'high', 'average' and 'low' perceive the Gandhian educational parameters related to the 'culture of the head', 'culture of the hand' and 'culture of the heart'. In this study, 'Academic Achievement' of the sample is taken as the dependent variable and the 'Gandhian Educational Parameters' are the independent variables.
Variables under study

A. Variables related to the ‘Culture of the Head’

1. Knowledge greatly helps the culture of the heart.
2. Knowledge is necessary to assess the conduct of other fellow-beings.
3. Knowledge helps to discriminate between selfish and unselfish actions.
4. Knowledge helps a man carry out self-analysis to reform himself.
5. Knowledge alone can lead to humility, without which it is impossible for any one to realise God.
6. Knowledge is essential to appreciate or even understand what is truly moral.
7. Knowledge helps one to distinguish between right and wrong.
8. Education enables students to reform social evils.
9. The intellect plays a large part in the field of non-violence.
10. Keen intelligence and wide-awakened conscience are the bases of ahimsa.

B. Variables related to the ‘Culture of the Hand’

1. Development of the head, heart and hand could be achieved best by an education through craft.
2. The whole of general education should come through the craft.
3. Craft education makes one physically fit.
4. Craft education promotes intellectual development through day to day experiences.
5. Craft education promotes the study of other subjects like mathematics, sciences and literature.
6. India needs her youth to be workers of good character.
7. Education through a handicraft promotes the highest development of the mind and soul.

8. Teaching through handwork all other subjects in an integrated manner is highly economical.

9. Education through craft will promote a healthy relationship between the city and the village.

10. Education through productive manual work is the best education for citizenship and education for self-sufficiency.

C. Variables related to the 'Culture of the Heart'

1. The supreme need of the modern world is the maintenance of personal values.

2. Simplicity and love are the hallmarks of social service.

3. Education should be directed towards cultivating the non-violent spirit.

4. It is in and through love that persons grow.

5. Realisation of God is possible only through love of others.

6. Morality is the essence of all religions.

7. Character development is more important than the 'culture of the mind'.

8. Purity of heart is a must to learn from teachers and books.

9. Modern education turns our eyes away from the spirit.

10. The end of all knowledge must be the formation of character.

The questionnaire, 'Gandhian Educational Parameters Preference Assessment' and scores of the second terminal examination of the sample yielded necessary data for analysis.
The analysis and interpretation of data were done at two levels under Section B. Part Ia, is concerned with identification of the ‘high’, ‘average’ and ‘low’ academic achievers and an analysis and interpretation of the test of significance for the mean scores of the independent variables of the subgroups under study.

Part Ib is concerned with the analysis and interpretation of the test of significance for the mean scores of the independent variables of the ‘rural’ and ‘urban’ samples.

Part Ila is intended to estimate the extent of relationship between the academic achievement and independent variables of the ‘low’, ‘average’ and ‘high’ academic achievers.

Part IIb is aimed at assessing the correlation between variables of ‘culture of head’, ‘culture of hand’ and ‘culture of heart’ for the whole sample.

Part IIc is concerned with estimating the extent of relationship between academic achievement and the variables of ‘culture of head’, ‘culture of hand’ and ‘culture of heart’ for the whole sample.

**Part Ia. Identification of the ‘High’, ‘Average’ and ‘Low’ Academic Achievers**

The sample selected was divided into three discrepant achievement levels computing mean and standard deviation of the scores of the second terminal examination. The distribution of the sample into three subgroups was in accordance with the following criteria:

(i) those getting scores at or above \((M+\sigma)\) were classified as ‘high achievers’;
(ii) those getting scores at or below \((M - \sigma)\) were classified as 'low achievers';

(iii) the remaining subjects in the sample were classified as 'average achievers'.

The total mean thus calculated for the entire sample \((N = 671)\) was 314 and the standard deviation was 150. The distribution of the sample into 'high', 'average' and 'low' academic achievers is as shown in Table 18.

**TABLE 18**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Academic achievement/levels</th>
<th>Sample size, N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High achievers</td>
<td>111</td>
</tr>
<tr>
<td>2</td>
<td>Average achievers</td>
<td>458</td>
</tr>
<tr>
<td>3</td>
<td>Low achievers</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td><strong>Total N</strong></td>
<td><strong>671</strong></td>
</tr>
</tbody>
</table>

**Comparison of the mean scores of sample belonging to the different academic achievements ('High', 'Average' and 'Low') for the independent variables**

The analysis involved comparison of the 'high', 'average' and 'low' academic achievers with respect to the mean scores of the variables related to the 'culture of the head', 'culture of the hand' and 'culture of the heart'. The analysis was done in the following manner:

(i) High Academic Achievers (HAA) with Average Academic Achievers (AAA);
(ii) Average Academic Achievers (AAA) with Low Academic Achievers (LAA);

(iii) High Academic Achievers (HAA) with Low Academic Achievers (LAA).

The computed means and standard deviations of the variables (head, hand and heart) for 'high', 'average' and 'low' achievers are summarised in Table 19, Table 20 and Table 21.

**TABLE 19**

Mean and Standard Deviation of the Variables Related to the 'Culture of the Head' of 'High', 'Average' and 'Low' Academic Achievers

<table>
<thead>
<tr>
<th>Variables</th>
<th>High (HAA)</th>
<th>Average (AAA)</th>
<th>Low (LAA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Culture of the head</td>
<td>24.4865</td>
<td>3.4664</td>
<td>25.7795</td>
</tr>
<tr>
<td>(10)</td>
<td>N = 111</td>
<td></td>
<td>N = 458</td>
</tr>
</tbody>
</table>

**TABLE 20**

Mean and Standard Deviation of the Variables Related to the 'Culture of Hand' of 'High', 'Average' and 'Low' Academic Achievers

<table>
<thead>
<tr>
<th>Variables</th>
<th>High (HAA)</th>
<th>Average (AAA)</th>
<th>Low (LAA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Culture of hand</td>
<td>23.973</td>
<td>3.5424</td>
<td>24.6179</td>
</tr>
<tr>
<td>(10)</td>
<td>N = 111</td>
<td></td>
<td>N = 458</td>
</tr>
<tr>
<td>Sample size</td>
<td>N = 111</td>
<td>N = 458</td>
<td>N = 102</td>
</tr>
</tbody>
</table>
TABLE 21

Mean and Standard Deviation of the Variables of 'Culture of Heart' of 'High', 'Average' and 'Low' Academic Achievers

<table>
<thead>
<tr>
<th>Variables</th>
<th>High (HAA)</th>
<th></th>
<th>Average (AAA)</th>
<th></th>
<th>Low (LAA)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Culture of heart (10)</td>
<td>26.6757</td>
<td>2.1103</td>
<td>25.7751</td>
<td>2.9744</td>
<td>25.8725</td>
<td>3.0314</td>
</tr>
<tr>
<td>Sample size</td>
<td>N = 111</td>
<td></td>
<td>N = 458</td>
<td></td>
<td>N = 102</td>
<td></td>
</tr>
</tbody>
</table>

Comparison of 'High' and 'Average' academic achievers in respect of the variables related to the 'Culture of Head'

The comparison of 'High Academic Achievers' (HAA.) and 'Average Academic Achievers' (AAA) was done by testing significance of mean difference for the 10 variables related to the 'culture of head'. The difference between the means was tested using the 'two-tailed' test. For 'two-tailed' tests, critical ratios exceeding 2.58 are treated as significant at 0.01 level, critical ratios exceeding 1.96 are treated as significant at 0.05 level.

The results of the test of significance of mean differences for HAA and AAA groups for the variables of 'culture of head' are presented in Table 22.
### TABLE 22

Data and Result of the Tests of Significance for Mean Difference of Scores of Variables Related to 'Culture of Head' of 'High' and 'Average' Academic Achievers

<table>
<thead>
<tr>
<th>Culture of head</th>
<th>HAA</th>
<th>AAA</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1$</td>
<td>$\sigma_1$</td>
<td>$M_2$</td>
</tr>
<tr>
<td>10 variables</td>
<td>24.4865</td>
<td>3.4664</td>
<td>25.7795</td>
</tr>
<tr>
<td>Sample size</td>
<td>N = 111</td>
<td></td>
<td>N = 458</td>
</tr>
</tbody>
</table>

Note: CR significant at 0.01 level.

It can be noted from the Table 22 that the two subgroups (HAA–AAA) when compared show significant mean difference beyond 0.01 level. Therefore, HAA and AAA are not identical with respect to the variables tested under ‘culture of head’. Although the two-tailed test is not intended to throw light on the direction of means difference, it may be noted that the mean score of Average Achievers is higher than the mean score of the High Achievers. Since the higher mean score is attached with AAA and the sign of critical ratio is negative, it can be concluded that AAA claim more advantage over HAA with respect to the variable of ‘culture of head’. Stated otherwise, the Gandhian ideals with respect to the ‘culture of head’ when implemented in the Secondary School Curriculum, would ensure more effect on the intellectual development of Average Academic Achievers.
Table 23 reveals that the mean difference between the two subgroups ('High' and 'Low' Academic Achievers, HAA-LAA) is significant beyond 0.01 level. Hence it is to be inferred that the two groups are not identical with respect to the variables related to the 'culture of head'. The higher mean score is seen attached with the LAA. Further, the sign of the critical ratio is negative. Therefore, it is to be argued that Low Academic Achievers (LAA) would be more benefited in their intellectual development than the High Academic Achievers (HAA) on restructuring the Secondary School Curriculum incorporating the Gandhian ideals of 'culture of head'.
Comparison of 'Average' and 'Low' academic achievers in respect of the variables related to the 'Culture of Head'

TABLE 24

Data and Result of the Tests of Significance for Mean Difference of Scores of Variables Related to 'Culture of Head' of 'Average' and 'Low' Academic Achievers

<table>
<thead>
<tr>
<th>Culture of head</th>
<th>HAA</th>
<th>LAA</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1$</td>
<td>$\sigma_1$</td>
<td>$M_2$</td>
</tr>
<tr>
<td>10 variables</td>
<td>25.7795</td>
<td>2.9101</td>
<td>26.6078</td>
</tr>
</tbody>
</table>

Sample size

Sample size

N = 458

Note: CR significant at 0.05 level.

The critical ratio obtained on comparing the Average Academic Achievers (AAA) with Low Academic Achievers (LAA) with respect to the variables tested under the 'culture of head' shows significance at 0.05 level. The sign of the critical ratio is negative. The result so obtained indicates that the two subgroups are not identical with respect to the variables under test. Further, it is seen that the high mean scores is associated with the Low Academic Achievers. Hence, it is evident that LAA claim superiority over AAA with respect to variables of 'culture of head'. A curriculum envisaged with the Gandhian ideal of 'culture of head' would be far more benefited by the Low Academic Achievers.
Comparison of ‘High’ and ‘Average’ academic achievers in respect of the variables related to the ‘Culture of Hand’

**TABLE 25**

Data and Result of the Tests of Significance for Mean Difference of Scores of Variables Related to ‘Culture of Hand’ of ‘High’ and ‘Average’ Academic Achievers

<table>
<thead>
<tr>
<th>Culture of hand</th>
<th>HAA $M_1$</th>
<th>$\sigma_1$</th>
<th>AAA $M_2$</th>
<th>$\sigma_2$</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 variables</td>
<td>23.973</td>
<td>3.5424</td>
<td>24.6179</td>
<td>3.3324</td>
<td>-1.74045</td>
</tr>
</tbody>
</table>

Sample size  
N = 111  
N = 458

Note: CR not significant.

Table 16 shows that the test of significance for mean difference between the two levels of academic achievers is not significant either at 0.01 level or at 0.05 levels. But the critical ratio obtained is close to 0.05 level of significance and sign is negative. Such a result shows that the ‘high’ and ‘average’ academic achievers are almost identical with respect to the variables selected for study. The higher mean score seen attached with ‘average’ academic achievers proves that AAA claims advantage over HAA. Since the two groups are almost identical and the mean score is not significant, it is to be noted that the variables selected for study under ‘culture of hand’ will have equal influence on the academic achievement of the two groups. A curriculum designed with such a perspective would be equally beneficial to both the ‘high’ and ‘average’ academic achievers.
Comparison of ‘High’ and ‘Low’ academic achievers in respect of the variables related to the ‘Culture of Hand’

### TABLE 26

Data and Result of the Tests of Significance for Mean Difference of Scores of Variables Related to ‘Culture of Hand’ of ‘High’ and ‘Low’ Academic Achievers

<table>
<thead>
<tr>
<th>Culture of hand</th>
<th>HAA</th>
<th>LAA</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1$</td>
<td>$\sigma_1$</td>
<td>$M_2$</td>
</tr>
<tr>
<td>10 variables</td>
<td>23.973</td>
<td>3.5424</td>
<td>24.5</td>
</tr>
</tbody>
</table>

Sample size

$N = 111$  
$N = 102$

Note: CR not significant.

The critical ratio obtained while comparing the mean scores of ‘high’ and ‘low’ academic achievers for the variables tested under ‘culture of hand’ shows no significance. Hence it is clear that the two groups are similar with respect to the variables tested. It also means that the variables selected under ‘culture of hand’ will have almost equal impact on the academic achievement of the two groups. Since the higher mean score is seen attached with the ‘low’ academic achievers it is to be concluded that LAA would claim more advantage over HAA with respect to the variables related to ‘culture of hand’. In other words, the test of significance indicates that ‘skill development’ on the part of the ‘low’ achievers will positively contribute towards their academic achievement.
Comparison of ‘Average’ and ‘Low’ academic achievers in respect of the variables related to the ‘Culture of Hand’

TABLE 27

Data and Result of the Tests of Significance for Mean Difference of Scores of Variables Related to ‘Culture of Hand’ of ‘Average’ and ‘Low’ Academic Achievers

<table>
<thead>
<tr>
<th>Culture of hand</th>
<th>AAA</th>
<th>LAA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1$</td>
<td>$\sigma_1$</td>
</tr>
<tr>
<td>10 variables</td>
<td>24.6179</td>
<td>3.3324</td>
</tr>
</tbody>
</table>

Sample size

| Sample size | N = 458 | N = 102 |

Note: CR not significant.

Table 27 shows that the critical ratio obtained on comparing the ‘average’ and ‘low’ academic achievers for the mean difference with respect to the ‘culture of hand’ is not significant either at 0.01 or at 0.05 levels. Therefore, it is to be considered that the two groups are identical regarding the variables selected for study. The result also reveals that ‘skill development’ on the part of the two groups will surely supplement their academic achievement. The higher mean score seen attached with the ‘average’ academic achievers suggests that AAA will benefit more from the Gandhian ideal of ‘culture of hand’ than the LAA.
a(vii) Comparison of 'High' and 'Average' academic achievers in respect of the variables related to the 'Culture of Heart'

TABLE 28

Data and Result of the Tests of Significance for Mean Difference of Scores of Variables Related to 'Culture of Heart' of 'High' and 'Average' Academic Achievers

<table>
<thead>
<tr>
<th>Culture of heart</th>
<th>HAA</th>
<th>AAA</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1$</td>
<td>$M_2$</td>
<td>CR</td>
</tr>
<tr>
<td></td>
<td>$\sigma_1$</td>
<td>$\sigma_2$</td>
<td></td>
</tr>
<tr>
<td>10 variables</td>
<td>26.6757</td>
<td>25.7751</td>
<td>3.6941**</td>
</tr>
<tr>
<td>Sample size</td>
<td>N = 111</td>
<td>N = 458</td>
<td></td>
</tr>
</tbody>
</table>

Note: CR significant at 0.01 level.

The critical ratio obtained while comparing the mean differences of the two groups, 'high' and 'average' academic achievers shows significance beyond 0.01 level. The sign of the critical ratio is positive. Such a result indicates that the two groups are not identical with respect to the variables tested under 'culture of heart'. 'High' academic achievers have superiority over 'average' academic achievers with respect to the variables under study. Hence, it is imperative that the Gandhian educational ideal of the 'culture of heart' is more advantageous to 'high' achievers than 'average' academic achievers.
Comparision of 'High' and 'Low' academic achievers in respect of the variables related to the 'Culture of Heart'

TABLE 29

Data and Result of the Tests of Significance of Difference Between Mean Variables of Scores Related to 'Culture of Heart' of 'High' and 'Low' Academic Achievers

<table>
<thead>
<tr>
<th>Culture of heart</th>
<th>HAA</th>
<th>LAA</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1$</td>
<td>$\sigma_1$</td>
<td>$M_2$</td>
</tr>
<tr>
<td>10 variables</td>
<td>26.6757</td>
<td>2.1103</td>
<td>25.8725</td>
</tr>
</tbody>
</table>

Note: CR significant at 0.05 level.

Table 29 clearly shows that the critical ratio obtained on comparing 'high' and 'low' academic achievers for their mean scores of the variables under 'culture of heart' is significant beyond 0.05 level. The higher mean score is seen attached with HAA and the sign of the critical ratio is positive. Hence it is to be generalised that the two groups are not identical with respect to the variables tested. 'High' academic achievers claim advantage over 'low' academic achievers. It means that the variables related to the 'culture of heart' will have more influence on the academic achievement of 'high' achievers than the 'low' achievers.
a(ix)  Comparison of ‘Average’ and ‘Low’ academic achievers in respect of the variables related to the 'Culture of Heart'

**TABLE 30**
Data and Result of the Tests of Significance of Difference Between Mean Variables of Scores Related to 'Culture of Heart' of 'Average' and 'Low' Academic Achievers

<table>
<thead>
<tr>
<th>Culture of heart</th>
<th>AAA</th>
<th>LAA</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M_1$</td>
<td>$\sigma_1$</td>
<td>$M_2$</td>
</tr>
<tr>
<td>10 variables</td>
<td>25.7751</td>
<td>2.9744</td>
<td>25.8725</td>
</tr>
</tbody>
</table>

Sample size, $N = 458$ | $N = 102$

Note: CR not significant.

It can be noted from Table 30 that the subgroups (AAA–LAA) when compared show no significant mean difference. The result indicates that the two groups are almost identical with respect to the variables selected for study under ‘culture of heart’. It also implies that both ‘low’ and ‘average’ academic achievers will be benefited equally from a curriculum that has been restructured on the Gandhian ideal of ‘culture of heart’. Such a restructured curriculum would promote the emotional development of the two groups which would in turn contribute towards their academic achievement.
Interpretation based on the levels of significance of the mean scores of the independent variables related to the 'Culture of Head', 'Culture of Hand' and 'Culture of Heart' of the three achievement levels

In order to facilitate the interpretation of the comparison of the mean scores of the three Academic Achievement Levels (high, average and low), a summary of the tests of significance is presented in Table 31.

**TABLE 31**

Summary of the Tests of Significance for the Three Academic Achievement Levels

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>HAA-AAA CR</th>
<th>HAA-LAA CR</th>
<th>AAA-LAA CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture of Head (10)</td>
<td>-3.632**</td>
<td>-4.5958**</td>
<td>-2.3589*</td>
</tr>
<tr>
<td>Culture of Hand (10)</td>
<td>-1.7405NS</td>
<td>-0.9989NS</td>
<td>0.2708NS</td>
</tr>
<tr>
<td>Culture of Heart (10)</td>
<td>3.6941**</td>
<td>2.2259*</td>
<td>-0.2945NS</td>
</tr>
</tbody>
</table>

NS = Not significant  
* = Significant at 0.05 level  
** = Significant at 0.01 level

Table 31 gives a summary of the test of significance for the three achievement levels (HAA, AAA, LAA) when they are compared for the mean differences of the mean scores of the independent variables related to the 'culture of head', 'culture of hand' and 'culture of heart'. The table indicates that HAA show significant mean differences beyond 0.01 level when compared with AAA for the variables related to the 'culture of head' and 'culture of heart'. The significant critical ratios so obtained suggest that HAA are superior to AAA with respect to the variables selected for study under...
'culture of head' and 'culture of heart'. It implies that HAA derive more benefit from the Gandhian educational ideals related to intellectual and emotional developments, as they would find a place in the Secondary School Curriculum.

The critical ratio obtained while comparing the two groups (HAA–AAA) for the mean scores of the variables related to the 'culture of hand' is not significant either at 0.01 or at 0.05 levels. This indicates that the two groups are identical. Such a similarity points to the fact that variables related to the 'culture of hand' when implemented will have equal influence on both the groups.

When the HAA and LAA are compared for the mean differences with respect to the mean scores of the variables of 'culture of head', 'culture of hand' and 'culture of heart', the critical ratios obtained are significant at 0.01 level in the case of variables related to the 'culture of head' and at 0.05 level in the case of variables related to the 'culture of heart'. The critical ratios indicate that HAA are superior to LAA with respect to the culture of head and heart, while both the groups are similar with respect to the variables related to the 'culture of hand'. Therefore, it is to be concluded that the Gandhian ideal of 'skill development' have equal impact on the academic achievement of 'high' and 'low' achievers.

'Average' and 'low' academic achievers (AAA–LAA) while compared for the mean differences of mean scores of variables related to the 'culture of head', 'culture of hand' and 'culture of heart' showed significant difference at 0.05 level only with respect to the 'culture of head'. This shows that AAA are more influenced by the variables selected for study. Critical ratios obtained for
the mean differences of variables related to the culture of 'hand' and 'heart' are not significant. This indicates that the Gandhian educational ideals related to skill and emotional developments on implementation will have similar impact on the academic achievement of the two groups.

b(t) **Comparison of 'Rural' and 'Urban' academic achievers in respect of the variables related to the 'Culture of Head'**

**TABLE 32**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Rural</th>
<th></th>
<th>Urban</th>
<th></th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean ($M_1$)</td>
<td>SD ($\sigma_1$)</td>
<td>Mean ($M_2$)</td>
<td>SD ($\sigma_2$)</td>
<td></td>
</tr>
<tr>
<td>Culture of head (10)</td>
<td>26.85</td>
<td>2.83</td>
<td>25.15</td>
<td>3.79</td>
<td>6.19**</td>
</tr>
<tr>
<td>Sample size</td>
<td>$N_1 = 414$</td>
<td></td>
<td>$N_2 = 257$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: CR significant at 0.01 level.

Comparison of the 'Rural' and 'Urban' Academic Achievers for their mean difference of mean scores related to the variables with respect to the 'culture of head' yielded a critical ratio significant beyond 0.01 level. The high critical ratio suggests that the 'Rural' sample claims superiority over 'Urban' sample with respect to the variables selected for study.' Hence the two groups are not identical. From the result, it is to be considered that the Gandhian ideal of intellectual development will have profound influence on the rural sample.
b(ii) Comparison of ‘Rural’ and ‘Urban’ academic achievers in respect of the variables related to the ‘Culture of Hand’

TABLE 33

Data and Results of the Tests of Significance of the Difference Between the Mean Variables of ‘Culture of Hand’ of ‘Rural’ and ‘Urban’ Academic Achievers

<table>
<thead>
<tr>
<th>Variables</th>
<th>Rural</th>
<th>Urban</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (M₁)</td>
<td>SD (σ₁)</td>
<td>Mean (M₂)</td>
</tr>
<tr>
<td>Culture of hand (10)</td>
<td>25.19</td>
<td>3.38</td>
<td>24.44</td>
</tr>
</tbody>
</table>

Sample size
N₁ = 414  N₂ = 257

Note: CR significant at 0.05 level.

Table 33 shows that the critical ratio obtained while comparing the ‘Rural’ and ‘Urban’ samples for mean differences of the variables related to the ‘culture of hand’ is significant beyond 0.05 level. The magnitude of the critical ratio and the higher mean score attached with the ‘Rural’ sample indicate that the ‘Rural’ sample claims more advantage over the ‘Urban’ sample with respect to the variables tested under ‘culture of hand’. In other words, the two samples are not identical. It also implies that the Gandhian ideal of skill development will have more effect on the academic achievement of the ‘Rural’ sample than on the ‘Urban’ sample.


b(iii) Comparison of 'Rural' and 'Urban' academic achievers in respect of the variables related to the 'Culture of Heart'

TABLE 34

Data and Results of the Tests of Significance of the Difference Between the Mean Variables of 'Culture of Heart' of 'Rural' and 'Urban' Academic Achievers

<table>
<thead>
<tr>
<th>Variables</th>
<th>Rural</th>
<th>Urban</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture of heart (10)</td>
<td>26.19</td>
<td>26.70</td>
<td>-1.93</td>
</tr>
<tr>
<td></td>
<td>2.91</td>
<td>3.55</td>
<td></td>
</tr>
<tr>
<td>Sample size</td>
<td>N₁ = 414</td>
<td>N₂ = 257</td>
<td></td>
</tr>
</tbody>
</table>

Note: CR not significant.

The critical ratio obtained while on comparing the two groups ('Rural' and 'Urban') for the mean difference of scores related to the variables selected under the 'culture of heart' is not significant either at 0.01 or at 0.05 levels. Hence, it is to be considered that the two groups are identical with respect to the variables of 'culture of heart'. It implies that both the groups have almost equal advantage of the variables selected for study. Hence it is concluded that the Gandhian ideal of character development ('culture of heart') on implementation would have similar impact in contributing towards the academic achievement of both rural and urban samples.
Interpretation based on the levels of significances of the mean scores of the independent variables related to the 'Culture of Head', 'Culture of Hand' and 'Culture of Heart' of the two groups.

### TABLE 35

**Summary of the Tests of Significance for the 'Rural' and 'Urban' Academic Achievers**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture of Head (10)</td>
<td>6.19**</td>
<td></td>
</tr>
<tr>
<td>Culture of Hand (10)</td>
<td>2.40*</td>
<td></td>
</tr>
<tr>
<td>Culture of Heart (10)</td>
<td></td>
<td>-1.93</td>
</tr>
</tbody>
</table>

Sample size

<table>
<thead>
<tr>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>(N_1 = 414)</td>
<td>(N_2 = 257)</td>
</tr>
</tbody>
</table>

Note:  
(i) * Significant at 0.05 level  
(ii) ** Significant at 0.01 level

Table 35 gives a summary of the test of significance for the two samples ('Rural' and 'Urban') when they are compared for the mean differences of the mean scores of the variables related to the 'culture of head', 'culture of hand' and 'culture of heart'.

The critical ratios obtained while comparing the two groups for mean differences of 'culture of head' and 'culture of hand' show significance at 0.01 level and at 0.05 level respectively. The results show that the two groups are not identical with respect to the variables selected for study under 'culture of head' and 'culture of hand'. The higher mean scores seen attached with the 'rural' sample and the positive sign associated with the critical ratios suggest that 'rural' sample claims superiority over 'urban' sample with respect to the
variables related to the culture of 'head' and 'hand'. The results throws light on the fact that the Gandhian ideals of intellectual development (culture of head) and skill development (culture of hand) will have more effect on the academic achievement on the 'Rural' sample than on the 'Urban' sample.

The critical ratio obtained for 'culture of heart' when the 'Rural' and 'Urban' samples are compared is not significant either at 0.01 or at 0.05 levels. Also the sign attached with the critical ratio is negative. Hence, it is to be concluded that the variables related to the 'culture of heart' have similar impact on the two groups. Stated otherwise, the Gandhian ideal of character development (culture of heart) influence both the groups in an equated manner in promoting their academic achievement.

Part II: Correlation Analysis

This part of analysis was to determine the extent to which the Gandhian educational ideals related to the 'culture of head', 'culture of hand' and 'culture of heart' correlate with each other in the case of academic achievement of 'Low', 'Average' and 'High' achievers. Also the coefficient of correlation was worked out for each of the Gandhian educational ideals of 'culture of head', 'culture of hand' and 'culture of heart' for the whole sample. Further, attempt has been made to correlate the academic achievement of the whole sample with the independent variables of 'culture of head', 'culture of hand' and 'culture of heart'.

The r's obtained for the variables of the three domains (independent variables, viz. 'culture of head', 'culture of hand' and 'culture of heart') for the 'Low' academic achievers are shown in Table 36.
TABLE 36
Low Achievers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation</th>
<th>SEr</th>
<th>Confidence interval</th>
<th>% Overlap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Head-Hand</td>
<td>Head-Heart</td>
<td>Hand-Heart</td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>26.6078</td>
<td>3.2695</td>
<td>0.5325**</td>
<td></td>
<td>0.0709</td>
<td>0.3935</td>
</tr>
<tr>
<td>Hand</td>
<td>24.5000</td>
<td>4.1058</td>
<td>0.6293**</td>
<td></td>
<td>0.0598</td>
<td>0.5121</td>
</tr>
<tr>
<td>Heart</td>
<td>25.8725</td>
<td>30.0314</td>
<td>0.5322**</td>
<td></td>
<td>0.0709</td>
<td>0.3931</td>
</tr>
</tbody>
</table>

Note: r at or above 0.098 significant at 0.01 level.

IIa Correlation table showing relationship between variables of 'Culture of Head' and 'Culture of Heart' for the Low Achievers

a(i) Relationship between the variables of 'Culture of Head' and 'Culture of Hand' for the Low Academic Achievers

It can be noted from Table 36 that the coefficient of correlation obtained while estimating the relationship between the variables of 'culture of head' and 'culture of hand' for the low achievers is 0.5325. This is far higher than the level set for significance at 0.01 level (viz. 0.098). Hence the obtained correlation is highly significant. The confidence interval is from 0.3935 to 0.6715.

Interpretation

a) There is very close and considerable relationship between the variables of 'culture of head' and 'culture of hand'.

b) The obtained 'r' is positive showing that any increase in intellectual development (culture of head) will be followed by a corresponding increase in skill development (culture of hand) and vice-versa.
c) The population value of \('r'\) (real value) estimated at 0.05 level will be between 0.3935 to 0.6715 for the 'Low' achievers. The different confidence interval shows that the population value of \('r'\) for the respective group will be between at the estimated limits at ninety-five per cent level of probability. In other words, the statement is true for ninety-five experimenters out of hundred.

d) As suggested by Garrett, the relationship may be verbally interpreted in such a way that the correlation obtained is 'marked' or 'substantial'.\(^{250}\) The relationship indicates that there is considerable dependence of variables one another.

e) For the Low academic achievers, the overlap between variable of 'culture of head' and 'culture of hand' is nearly 28.3556 (shared variance expressed as percentage). This shows that variables related to 'culture of head' account for nearly 28.3556 per cent of variance of 'culture of hand'.

The above findings confirm that variables related to intellectual development have significant influence on the skill development of Low academic achievers.

a(ii) Relationship between the variables of 'Culture of Head' and 'Culture of Heart' for the Low Academic Achievers

The coefficient of correlation obtained while estimating the relationship between the variables of 'culture of head' and 'culture of heart' for the Low academic achievers is 0.6293. The value of \('r'\) is beyond 0.01 level of significance (viz. 0.098). Therefore, it is to be considered that the correlation

\(^{250}\) Garrett, \textit{op. cit.}, p. 135.
is highly significant. The 0.05 level confidence interval is from 0.5121 to 0.7465.

**Interpretation**

a) There is very close and considerable relationship between the variables related to ‘culture of head’ and ‘culture of heart’.

b) The positive sign of ‘r’ indicates that any increase in ‘intellectual development’ will be followed by a corresponding increase in ‘character development’ (culture of heart) and vice-versa.

c) The population value of ‘r’ (real value) estimated at 0.05 level is between 0.5121 and 0.7465. The different confidence interval suggests that the population value of ‘r’ for the respective group will be between at the estimated limits at ninety-five per cent level of probability. Hence, the statement is true for ninety-five experimenters out of hundred.

d) The correlation obtained is ‘marked’ or ‘substantial’. Such a ‘marked’ relationship indicates that there is considerable dependence of variables one another.

e) For the sample, the degree of overlap is 39.6018. This shows that variables related to ‘culture of head’ account for nearly 39.6018 per cent variance of ‘culture of heart’.

The findings suggest that variables related to the Gandhian ideal of intellectual development have significant impact on ‘character development’ (culture of heart) of low achievers.
a(iii) **Relationship between the variables of ‘Culture of Hand’ and ‘Culture of Heart’ for the Low Academic Achievers**

Table 36 shows the coefficient of correlation obtained on comparing the relationship between the variables of ‘culture of hand’ and ‘culture of heart’ is significant beyond 0.01 level ($r = 0.5322$). Hence, the obtained correlation is highly significant. The 0.05 level confidence interval is from 0.3931 to 0.6713.

**Interpretation**

a) There is very close and considerable relationship between the variables of ‘culture of hand’ and ‘culture of heart’.

b) The obtained ‘$r$’ is positive showing that any increase in ‘skill’ development (culture of hand) will be followed by a corresponding increase in ‘character’ development (culture of heart) and vice-versa.

c) The real value of ‘$r$’ estimated at 0.05 level is between 0.3931 and 0.6713 for the sample. The confidence interval shows that the population value of ‘$r$’ for the respective group will be between the estimated limits at ninety-five per cent level of probability.

d) The correlation obtained is ‘marked’ or ‘substantial’. The higher magnitude of correlation indicates that there is considerable dependence of variables one another.

e) For low achievers the overlap between variables of ‘culture of hand’ and ‘culture of heart’ is 28.3237. This shows that variables of ‘culture of hand’ account for nearly 28.3237 per cent of variance of ‘culture of heart’.
The findings make it apparent that variables related to the (culture of hand) 'skill' development have considerable influence on 'character' development (culture of heart) of Low Academic Achievers.

Correlation table showing relationship between the variables of 'Culture of Head', 'Culture of Hand' and 'Culture of Heart' of Average Academic Achievers

**TABLE 37**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation</th>
<th>SEr</th>
<th>Confidence interval</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Head-Hand</td>
<td>Head-Heart</td>
<td>Hand-Heart</td>
<td>Lower limit</td>
</tr>
<tr>
<td>Head</td>
<td>25.7795</td>
<td>2.9101</td>
<td>0.3783**</td>
<td>0.0400</td>
<td>0.2999</td>
<td>0.4567</td>
</tr>
<tr>
<td>Hand</td>
<td>24.6179</td>
<td>3.3324</td>
<td>0.3083**</td>
<td>0.0423</td>
<td>0.2254</td>
<td>0.3912</td>
</tr>
<tr>
<td>Heart</td>
<td>25.7751</td>
<td>2.9744</td>
<td>0.2647**</td>
<td>0.0435</td>
<td>0.1794</td>
<td>0.3500</td>
</tr>
</tbody>
</table>

Note: \( r \) at or above 0.098 significant at 0.01 level.

a(iv) **Relationship between the variables of 'Culture of Head' and 'Culture of Hand' for Average Academic Achievers**

The coefficient of correlation obtained on comparing the two sets of variables is 0.3783. This is beyond the level set for significance at 0.01 level (viz. 0.098). Hence the correlation is highly significant. The 0.05 confidence interval is from 0.2999 to 0.4567.

**Interpretation**

a) There is very close and considerable relationship between the variables of 'culture of head' and 'culture of hand'.
b) The obtained ‘r’ is positive showing that any increase in ‘intellectual’ development (culture of head) will be followed by a corresponding increase in ‘skill’ development (culture of hand) and vice-versa.

c) The population value of ‘r’ real (value) estimated at 0.05 level is between 0.2999 and 0.4567. The different confidence interval shows that the population value of ‘r’ for the respective group will be between the estimated limits at ninety-five per cent level of probability.

d) The correlation may be verbally interpreted as ‘marked’ or ‘substantial’. Such a correlation pin points the considerable dependence of variables one another.

e) For the sample, the shared variance is 14.311. This shows that variables related to ‘culture of head’ account for nearly 14.311 per cent of variance of ‘culture of hand’.

The findings cited above indicate that variables related to ‘intellectual’ development (culture of head) have significant effect on ‘skill’ development (culture of hand) of the average academic achievers.

a(v) Relationship between the variables of ‘Culture of Head’ and ‘Culture of Heart’ for Average Academic Achievers

Table 37 shows that the coefficient of correlation calculated on comparing the two sets of variables related to the ‘culture of head’ and ‘culture of heart’ for the Average Academic Achievers is 0.3083. This is far higher than the level set for significance at 0.01 level. Hence the obtained correlation is highly significant. The 0.05 confidence interval is from 0.2254 to 0.3912.
**Interpretation**

a) There is very close and considerable relationship between the variables of 'culture of hand' and 'culture of heart' in the case of Average Achievers.

b) The obtained 'r' is positive showing that any increase in intellectual development will be followed by a corresponding increase in 'character' development.

c) The population value of 'r' (real value) estimated at 0.05 level is between 0.2254 and 0.3912. The confidence interval shows that the population value of 'r' for the respective group will be between the estimated limits at ninety-five per cent level of probability. In other words, the statement is true for ninety-five experimenters out of hundred.

d) The estimated correlation is 'marked' or 'substantial'. This shows that there is considerable dependence of variables one another.

e) For the sample, the overlap among the two sets of variables is shown to be 9.5049. This indicates that variables related to 'culture of head' account for generally 9.5049 per cent of variance of 'culture of heart'.

The findings cited above indicate that variables related to 'growth of intelligence' (culture of head) have considerable influence on the 'character' formation (culture of heart) of the Average Academic Achievers.
a(vi) Relationship between the variables of ‘Culture of Hand’ and ‘Culture of Heart’ for Average Academic Achievers

It can be noted from Table 37 that the coefficient of correlation estimated on comparing the relationship between the variables related to ‘culture of hand’ and ‘culture of heart’ is 0.2647. Hence the obtained correlation is highly significant. The 0.05 confidence interval is from 0.1794 to 0.3500.

Interpretation

a) There is very close and considerable relationship between the variables of ‘culture of hand’ and ‘culture of heart’ for the sample.

b) The obtained ‘r’ is positive indicating that any increase in ‘skill’ development (culture of hand) will be followed by a corresponding increase in ‘character’ development (culture of heart) and vice-versa.

c) The population value of ‘r’ estimated at 0.05 level is between 0.1794 and 0.3500. The confidence interval shows that the population value of ‘r’ for the respective group will be between the estimated limits at ninety-five per cent level of probability.

d) The correlation may be verbally interpreted as ‘marked’ or ‘substantial’. The magnitude of ‘r’ indicates that there is significant dependence of variables one another.

e) For the sample the overlap between the variables of ‘culture of hand’ and ‘culture of heart’ is 7.0066. This shows that variables related to ‘culture of hand’ account for nearly 7.0066 per cent of variance of ‘culture of heart’.
The above findings make it evident that variables related to 'skill' development will have considerable influence on the 'character' development of the Average Academic Achievers.

Relationship between the variables of 'Culture of Head', 'Culture of Hand' and 'Culture of Heart' of High Academic Achievers

TABLE 38

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation</th>
<th>SEr</th>
<th>Confidence interval</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Head-Hand</td>
<td>Head-Heart</td>
<td>Hand-Heart</td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>24.4865</td>
<td>3.4664</td>
<td>0.1132**</td>
<td>0.0937</td>
<td>-0.0704 0.2969</td>
<td>1.2814</td>
</tr>
<tr>
<td>Hand</td>
<td>23.9730</td>
<td>3.5424</td>
<td>0.0140 NS</td>
<td>0.0949</td>
<td>-0.1719 0.2000</td>
<td>0.0196</td>
</tr>
<tr>
<td>Heart</td>
<td>26.6757</td>
<td>2.1103</td>
<td>0.1216**</td>
<td>0.0935</td>
<td>-0.0617 0.3048</td>
<td>1.4787</td>
</tr>
</tbody>
</table>

Note: ** The value of 'r' significant at 0.01 level.
NS - The value of 'r' not significant.

a(vii) Relationship between the variables of 'Culture of Head' and 'Culture of Hand' for High Academic Achievers

It is seen from Table 38 that the coefficient of correlation obtained while estimating the relationship between the variables of 'culture of head' and 'culture of hand' for the High achievers is 0.1132. This is far higher than the limit set for significance at 0.01 level (viz. 0.098). Hence the obtained correlation is highly significant. The 0.05 confidence interval is from -0.0704 to 0.2969.
Interpretation

a) There is very close and considerable relationship between the variables of 'culture of head' and 'culture of hand'.

b) The estimated 'r' is positive showing that any increase in 'intellectual' development (culture of head) will be followed by a corresponding increase in 'skill' development (culture of hand) and vice-versa.

c) The population value of 'r' computed at 0.05 level is in between -0.0704 and 0.2969 for the subgroup. The confidence interval shows that the population value of 'r' for the respective group will be between at the estimated limits at ninety-five per cent level of probability.

d) The correlation obtained is 'marked' or 'substantial'. Such a high correlation indicates that there is considerable dependence of variables one another.

e) For the sample, the overlap between the variables of 'culture of head' and 'culture of hand' is nearly 1.2814. This shows that variables related to 'culture of head' account for nearly 1.2814 per cent of variance of 'culture of hand'.

The above findings suggest that variables related to 'intellectual' development (culture of head) have remarkable influence on 'skill' development (culture of hand) of the High Academic Achievers.

a(viii) Relationship between the variables of ‘Culture of Head’ and ‘Culture of Heart’ for High Academic Achievers

The coefficient of correlation obtained while comparing the relationship between the variables of ‘culture of head’ and ‘culture of hand’ for the High achievers is 0.0140. This value is not all significant either at 0.05 level
(viz. 0.0757) or at 0.01 level (viz. 0.098). The 0.05 confidence interval is from
-0.1719 to 0.2000.

**Interpretation**

a) There is no relationship between the variables of ‘culture of head’ and
‘culture of heart’ for the High Academic Achievers.

b) The obtained ‘r’ is positive but not significant. This shows that
variables related to the ‘culture of head’ have only slight influence on
the variables related to the ‘culture of heart’ and vice-versa. Hence
there is no guarantee that any increase in ‘intellectual’ development will
be followed by a corresponding increase in ‘skill’ development of the
sample.

c) The population value of ‘r’ (real value) will be between -0.1719 and
0.2000 for the subgroup. The different confidence interval shows that
the value of ‘r’ for the respective group will be within the estimated
limits at ninety-five per cent level of probability.

d) The correlation may be stated as ‘negligible’ or ‘indifferent’. The
relationship indicates no dependence of variables one another.

e) For the sample, the shared variance (overlap between variables of
‘culture of head’ and ‘culture of heart’) is only 0.0196. This shows that
the variables of ‘culture of head’ account for nearly 0.0196 per cent of
variance of variables related ‘culture of heart’.

The above observations make clear that variables of ‘intellectual’
development have no notable influence on the ‘character development’ of
High Academic Achievers.
a(ix) Correlation between the variables of ‘Culture of Hand’ and ‘Culture of Heart’ for High Academic Achievers

Table 38 shows the coefficient of correlation estimated on comparing the extent relationship of the variables of ‘culture of hand’ and ‘culture of heart’ of ‘High’ achievers is 0.1216. This is far higher than the limit set for significance at 0.01 level (viz. 0.008). Hence the obtained correlation is highly significant. The 0.05 confidence interval is from –0.0617 to 0.3048.

Interpretation

a) There is very close and considerable relationship between the variables of ‘culture of hand’ and ‘culture of heart’.

b) The estimated ‘r’ is positive showing that any increase in ‘skill’ development (culture of hand) will be followed by a corresponding increase in ‘character’ development of the sample and vice-versa.

c) The population value of ‘r’ (real value) estimated at 0.05 level is in between –0.0617 and 0.3048. The confidence interval shows that the real value of ‘r’ for the respective group will be between the estimated limits of ninety-five per cent level of probability.

d) The correlation may be stated as ‘marked’ or ‘substantial’. The relationship indicates that there is considerable dependence of variables one another.

e) For ‘High’ achievers, the overlap between variables of ‘culture of hand’ and ‘culture of heart’ is 1.4787. This shows that the variables related to ‘culture of hand’ account for nearly 1.4787 per cent of variance of ‘culture of heart’. 
The above findings make it apparent that variables related to 'skill' development (culture of hand) have considerable impact on 'character development' (culture of heart) in the case of High Academic Achievers.

Ilb. Relationship between the variables of 'Culture of Head', 'Culture of Hand' and 'Culture of Heart' for the whole sample

TABLE 39

Relationship Between Variables of 'Culture of Head', 'Culture of Hand' and 'Culture of Heart' for the Whole Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Correlation</th>
<th>SEr</th>
<th>Confidence interval</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Head-Hand</td>
<td></td>
<td>Head-Heart</td>
<td></td>
</tr>
<tr>
<td>Head</td>
<td>25.6915</td>
<td>3.1251</td>
<td>0.3592**</td>
<td></td>
<td>0.036</td>
<td>0.2933 to 0.4251</td>
</tr>
<tr>
<td>Hand</td>
<td>24.4933</td>
<td>3.5034</td>
<td>0.2917**</td>
<td></td>
<td>0.0353</td>
<td>0.2225 to 0.3609</td>
</tr>
<tr>
<td>Heart</td>
<td>25.9388</td>
<td>2.8777</td>
<td>0.2850**</td>
<td>0.0355</td>
<td>0.2155 to 0.3545</td>
<td>8.1225</td>
</tr>
</tbody>
</table>

Note: The value of 'r' is significant at 0.01 level. N = 671

Table 39 shows the coefficient of correlations estimated for variables related to the 'culture of head', 'culture of hand' and 'culture of heart', when they were correlated with each other for the whole sample. All the correlations obtained are significant beyond the limit set for significance at 0.01 level (viz. 0.098). The value of 'r' estimated for variables of each set shows that there exists significant relationship between the sets of variables being compared with (viz. culture of 'head'-hand – r = 0.3592; culture of 'head'-heart – r = 0.2917 and culture of 'hand'-heart – r = 0.2850). The confidence intervals computed for the sets compared are, 0.2933 to 0.4251.
for 'head'-'hand'; 0.2225 to 0.3609 for 'head'-'heart' and 0.2155 to 0.3545 for 'hand'-'heart'.

**Interpretation**

a) There exist very close and considerable relationship between the variables related to 'culture of head', 'culture of hand' and 'culture of heart' for the whole sample.

b) The estimated values of 'r' for the three sets of variables compared with 'head'-'hand'; 'head'-'heart' and 'hand'-'heart' are positive showing that any increase in one 'domain' will be followed by a corresponding increase in the other domain.

c) All the correlations may be expressed as 'marked' or 'substantial'. The high relationship among the sets of variables correlated indicates that there exists considerable dependence of the growth of the three domains. In other words, it may be suggested that 'culture of head' will promote 'culture of hand' and 'culture of heart'. Similarly, the development of 'culture of hand' will promote developments in the other two domains.

d) For the whole sample, the shared variances (per cent of overlap) between the three sets of variables are seen as 12.9025 for 'head'-'hand'; 8.5089 for 'head'-'heart' and 8.1225 for 'hand'-'heart'. These varying shared variances indicate that overlap of one set of variables with other differ in all the cases compared. The values of 'r' show a descending order in their magnitude indicating that the dependence of variables of one domain will vary with the variables related to two other 'domains'. Hence, equal dependence of the variables one another cannot be expected. They depend on one another in a relative manner and with varying magnitude.
Ilc. Relationship between the independent variables of 'Culture of Head', 'Culture of Hand' and 'Culture of Heart' with academic achievement of the whole sample

**TABLE 40**

Relationship Between Variables of 'Culture of Head', 'Culture of Hand' and 'Culture of Heart' for the Whole Sample

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Independent variables</th>
<th>'r'</th>
<th>SEr</th>
<th>Confidence interval at 0.05 level</th>
<th>Percentage of overlap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower limit</td>
<td>Upper limit</td>
</tr>
<tr>
<td>1</td>
<td>Culture of head</td>
<td>-0.1940**</td>
<td>0.0372</td>
<td>-0.2668</td>
<td>-0.1212</td>
</tr>
<tr>
<td>2</td>
<td>Culture of hand</td>
<td>-0.0842*</td>
<td>0.0383</td>
<td>-0.1593</td>
<td>-0.0091</td>
</tr>
<tr>
<td>3</td>
<td>Culture of heart</td>
<td>0.1307**</td>
<td>0.0379</td>
<td>0.0563</td>
<td>0.2051</td>
</tr>
</tbody>
</table>

Note: * The value of 'r' significant at 0.05 level.
** The value of 'r' significant at 0.01 level.
N = 671

It is seen from Table 40 that the coefficient of correlations computed, for variables related to the 'culture of head', 'culture of hand' and 'culture of heart', when they are correlated with the Academic Achievement of the whole sample are significant at 0.05 level or at 0.01 level (viz. 0.0757 at 0.05 level and 0.098 at 0.01 level). The value of 'r' estimated for variables of each 'domain' with the Academic Achievement, shows that there is considerable relationship between them (viz. 'culture of head' and Academic Achievement, r = -0.1940; 'culture of hand' and Academic Achievement, r = -0.0842 and 'culture of heart' and Academic Achievement, r = 0.1307). Taking the absolute values all the correlations obtained are significant. The confidence intervals estimated for the three sets are from -0.2668 to -0.1212 for 'culture of head' and Academic Achievement, from -0.1593 to -0.0091 for 'culture of
hand' and Academic Achievement and from 0.0563 to 0.2051 for 'culture of heart' and Academic Achievement.

**Interpretation**

a) There exist very close and considerable relationship between the variables related to 'culture of head', 'culture of hand' and 'culture of heart' for the whole sample.

b) Considering the absolute values of 'r' obtained for the three sets of variables when correlated with Academic Achievement, it can be noted that the variables of each 'domain' have significant influence on the Academic Achievement of the whole sample.

c) The significant relationships shown between Academic Achievement and variables of the three 'domains' indicate that there exist considerable dependence of the three 'domains'—'culture of head', 'culture of hand' and 'culture of heart'—have considerable influence on the Academic Achievement of the whole sample.

d) For the whole sample, the overlap (shared variance) of variables of 'culture of head' with Academic Achievement is 3.7636. This shows that variables of 'culture of head' account for nearly 3.7636 per cent of variance of the Academic Achievement.

e) The overlap of variables of 'culture of hand' with Academic Achievement estimated is 0.7089, showing that variables of this 'domain' account for nearly 0.7089 per cent of variance with Academic Achievement.

f) The shared variance calculated for variables of 'culture of heart' and Academic Achievement is 1.7082. This indicates that variables of 'culture of heart' account for nearly 1.7082 per cent of variance of Academic Achievement of the whole sample.
The above observations indicate that Academic Achievement of the whole sample will be promoted through the Gandhian ideals of ‘culture of head’, ‘culture of hand’ and ‘culture of heart’. The estimated values of ‘r’ are significant beyond 0.01 level for variables of ‘culture of head’ and ‘culture of heart’ with Academic Achievement. This shows that both intellectual and character developments have more effect than the ‘skill’ development on Academic Achievement. But the influence of Gandhian ideal of ‘skill’ development in promoting Academic Achievement cannot be ignored, as the correlation obtained is significant beyond 0.05 level. In precise, it may be suggested that the Gandhian ideals of ‘culture of head’, ‘culture of hand’ and ‘culture of heart’ have profound effect on the Academic Achievement of the secondary school students.