

# **CHAPTER-IV**

# **RESULT AND DISCUSSION**

# RESULT

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*In order to make result more influencive, convenient and well presentable it has been divided into two parts.*

## **Part 1**

*In this part obtained result for personality (CPQ) and academic achievement described as follow-*

- *Mean and SD for each experimental Group*
- *Summary of Analysis of Variance in 2X2 Factorial Designs*

## **Part 2**

*In This part obtained results have been described in the light of relevant hypothesis laid down.*

## **Part 1**

*In this part obtained result described as follow-*

- **Personality (For Each Personality Factor of CPQ)**
  - *Mean and SD for each experimental Group*
  - *Summary of Analysis of Variance in 2X2 Factorial Designs*
- **Academic achievement**
  - *Mean and SD for each experimental Group*
  - *Summary of Analysis of Variance in 2X2 Factorial Designs*

## Personality

Factor A (*Reserved vs. Outgoing*)

*Table 4.1*

*Mean and SD for All Experimental Groups on Measure of Personality Factor*

*A (CPQ)*

<i>Experimental Group</i>	<i>Mean</i>	<i>SD</i>
<b>A1</b>	<b>5.56</b>	<b>1.71</b>
<b>A2</b>	<b>4.93</b>	<b>1.65</b>
<b>B1</b>	<b>5.85</b>	<b>1.56</b>
<b>B2</b>	<b>4.64</b>	<b>1.63</b>
<b>A1B1</b>	<b>6.28</b>	<b>1.44</b>
<b>A1B2</b>	<b>4.84</b>	<b>1.66</b>
<b>A2B1</b>	<b>5.42</b>	<b>1.57</b>
<b>A2B2</b>	<b>4.44</b>	<b>1.59</b>

Where

**A1-Students of English medium      A1B1 - Boys Students of English medium**

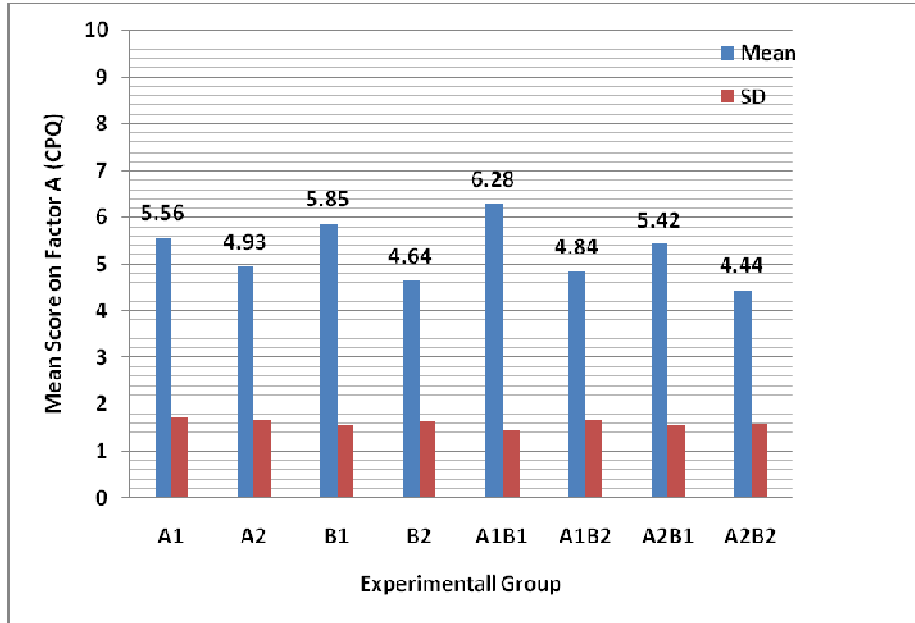
**A2-Students of Gujarati medium      A1B2 - Girls Students of English medium**

**B1 – Boys students                      A2B1- Boys Students of Gujarati medium**

**B2 – Girls students                      A2B2- Girls Students of Gujarati medium**

**Figure 4.1**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor A (CPQ)**



Above result table shows the mean score of each experimental group on measure of personality factor A (Reserved vs. Outgoing). It is evident from this table that among all experimental group A1B1 group scored higher whereas group A2B2 obtained lesser score on factor A as higher the score indicate the right polar characteristics on given dimension it revealed that boys belong to English medium possess outgoing personality disposition whereas girls belong to Gujarati medium decline towards reserved personality. It was also seen that girls are more reserved than boys in group of English medium students. When boys and girls as well as English and Gujarati medium students were compared it revealed that English medium students as well as boys are more decline towards outgoing personality as compared to Gujarati medium and girl students (Table 4.1 and respective figure).

**Table 4.2**

**Summary of Analysis of Variance for Personality Factor A (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>19.845</b>	<b>19.845</b>	8.08**
Gender (B)	1	<b>73.205</b>	<b>73.205</b>	29.81**
<b>Interaction Effect</b>				
A*B	1	<b>2.645</b>	<b>2.645</b>	1.07 <sup>NS</sup>

<b>Error</b>	196	<b>481.3</b>	<b>2.455612</b>
<b>Total</b>	199	<b>576.995</b>	<b>2.899472</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor A of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be significant for both variables (Medium and gender) as well as for their interaction also, which revealed that-

- Subjects of English and Gujarati Medium significantly differ on their personality traits namely reserved or outgoing.
- Boys and girls possess significantly different on their personality traits namely reserved or outgoing.
- Boys and girls are not significantly different on their personality traits namely reserved or outgoing according to their medium of instruction.

**Factor B (less Intelligent vs. more Intelligent)**

**Table 4.3**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**B (CPQ)**

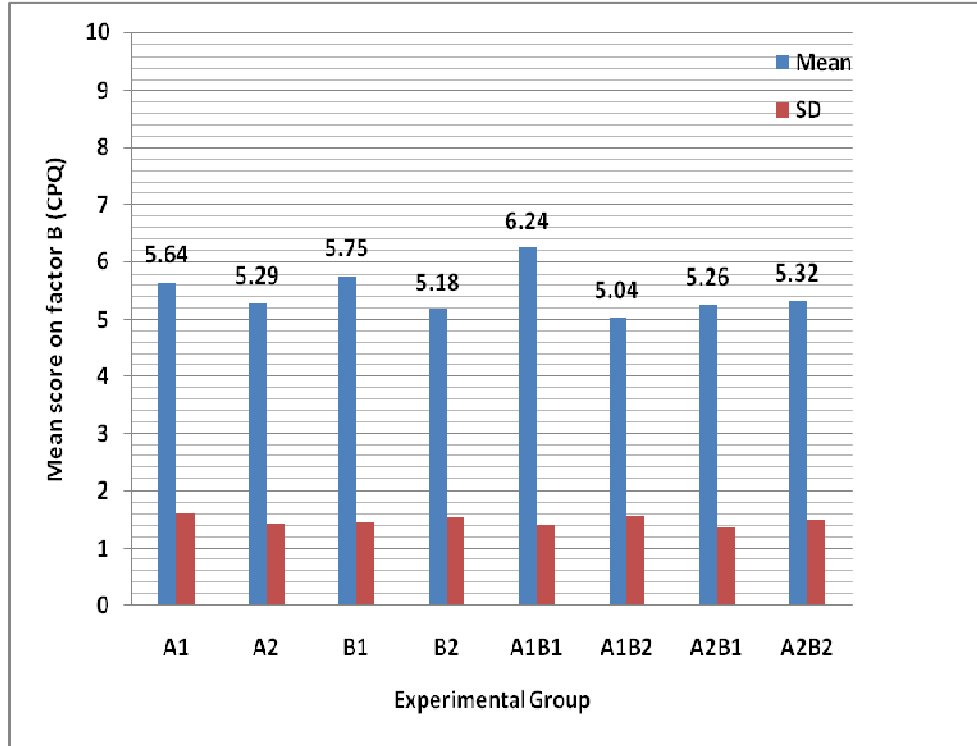
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.64</b>	<b>1.61</b>
<b>A2</b>	<b>5.29</b>	<b>1.43</b>
<b>B1</b>	<b>5.75</b>	<b>1.47</b>
<b>B2</b>	<b>5.18</b>	<b>1.54</b>
<b>A1B1</b>	<b>6.24</b>	<b>1.41</b>
<b>A1B2</b>	<b>5.04</b>	<b>1.58</b>
<b>A2B1</b>	<b>5.26</b>	<b>1.37</b>
<b>A2B2</b>	<b>5.32</b>	<b>1.50</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2 – Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.2**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor B (CPQ)**



Above result table shows the mean score of each experimental group on measure of personality factor B (less Intelligent vs. more Intelligent). It is evident from this table that among all experimental group A1B1group (Male Students of English medium) scored higher as higher the score indicate the right polar characteristics on given dimension it revealed that among all experimental groups boys belong to English medium are more intelligent . Except this group all groups are obtained around equal score on personality factor B (less Intelligent vs. more Intelligent).

**Table 4.4**

**Summary of Analysis of Variance for Personality Factor B (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>6.125</b>	<b>6.125</b>	<b>2.84<sup>NS</sup></b>
Gender (B)	1	<b>16.245</b>	<b>16.245</b>	<b>7.55<sup>**</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>19.845</b>	<b>19.845</b>	<b>9.22<sup>**</sup></b>
<b>Error</b>	196	<b>421.54</b>	<b>2.15</b>	
<b>Total</b>	199	<b>463.755</b>	<b>2.33</b>	

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor B (less Intelligent vs more Intelligent). of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be significant for both variables (Medium and gender) as well as for their interaction also, which revealed that-

- Students of English and Gujarati Medium are not significantly differ on their personality factor B (less Intelligent vs more Intelligent).
- Boys and girls are significantly different on their personality factor B (less Intelligent vs. more Intelligent).
- Boys and girls are significantly different on their personality factor B (less Intelligent vs. more Intelligent) according to their medium of instruction.



**Factor C (Emotionally less stable vs. Emotionally stable)**

**Table 4.5**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**C (CPQ)**

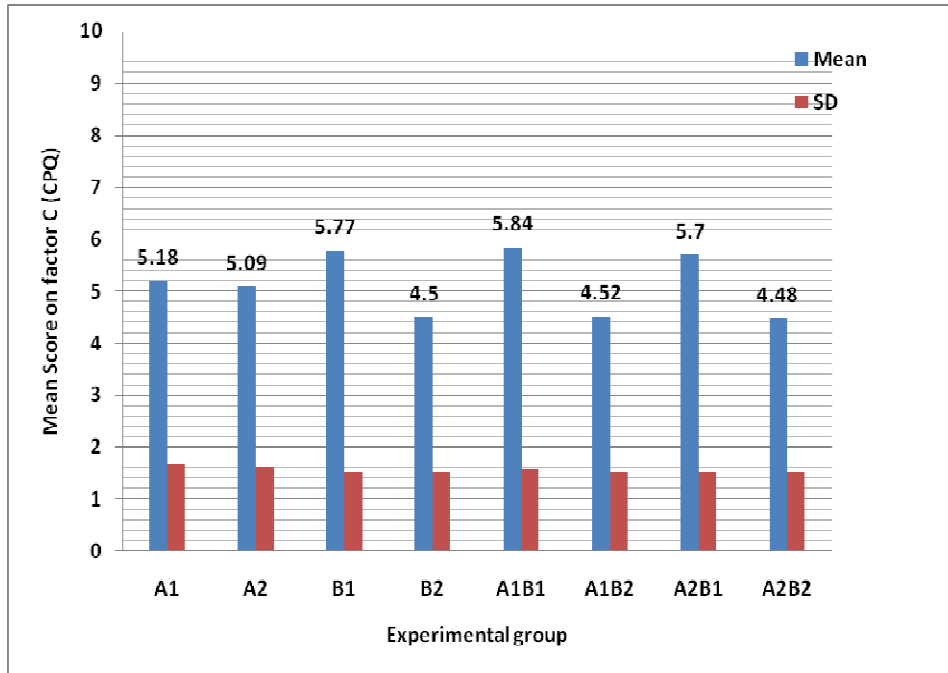
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.18</b>	<b>1.67</b>
<b>A2</b>	<b>5.09</b>	<b>1.63</b>
<b>B1</b>	<b>5.77</b>	<b>1.53</b>
<b>B2</b>	<b>4.50</b>	<b>1.52</b>
<b>A1B1</b>	<b>5.84</b>	<b>1.56</b>
<b>A1B2</b>	<b>4.52</b>	<b>1.53</b>
<b>A2B1</b>	<b>5.70</b>	<b>1.52</b>
<b>A2B2</b>	<b>4.48</b>	<b>1.53</b>

**Where**

<b>A1- Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.3**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor C (CPQ)**



Perusal of result table 4.5 and respective figure shows the mean score of each experimental group on measure of personality factor C (Emotionally less stable vs. Emotionally stable). It is evident from this table that among all experimental group B2 obtained lesser score on factor C as lower the score indicate the left polar characteristics on given dimension it revealed that girls possess less emotional stability as compared to boys and when medium is considered same gender difference is observed in English and Gujarati medium students.

**Table 4.6**

**Summary of Analysis of Variance for Personality Factor C (CPQ) in 2X2**

**Factorial Designs**

Source	df	SS	MS	F
<b>Main Effect</b>				
Medium (A)	1	<b>0.405</b>	<b>0.405</b>	<b>0.17<sup>NS</sup></b>
Gender (B)	1	<b>80.64</b>	<b>80.64</b>	<b>34.34<sup>**</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>0.125</b>	<b>0.125</b>	<b>0.053<sup>NS</sup></b>

<b>Error</b>	196	<b>460.18</b>	<b>2.347</b>
<b>Total</b>	199	<b>541.355</b>	<b>2.72</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor C (Emotionally less stable vs. Emotionally stable) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f value was found to be insignificant for medium and for gender it was found to be significant. Further for interaction between medium and gender it was also found to be insignificant, which revealed that-

- Students of English and Gujarati Medium are parallel on their personality criteria namely emotionally stable.
- Boys and girls are significantly different on their emotionally stable criteria of personality (factor C).
- Boys and girls whether belongs to English and Gujarati medium are not significantly different on their emotionally stable criteria.

**Factor D (Phlegmatic Temperament vs. Excitability)**

**Table 4.7**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**D (CPQ)**

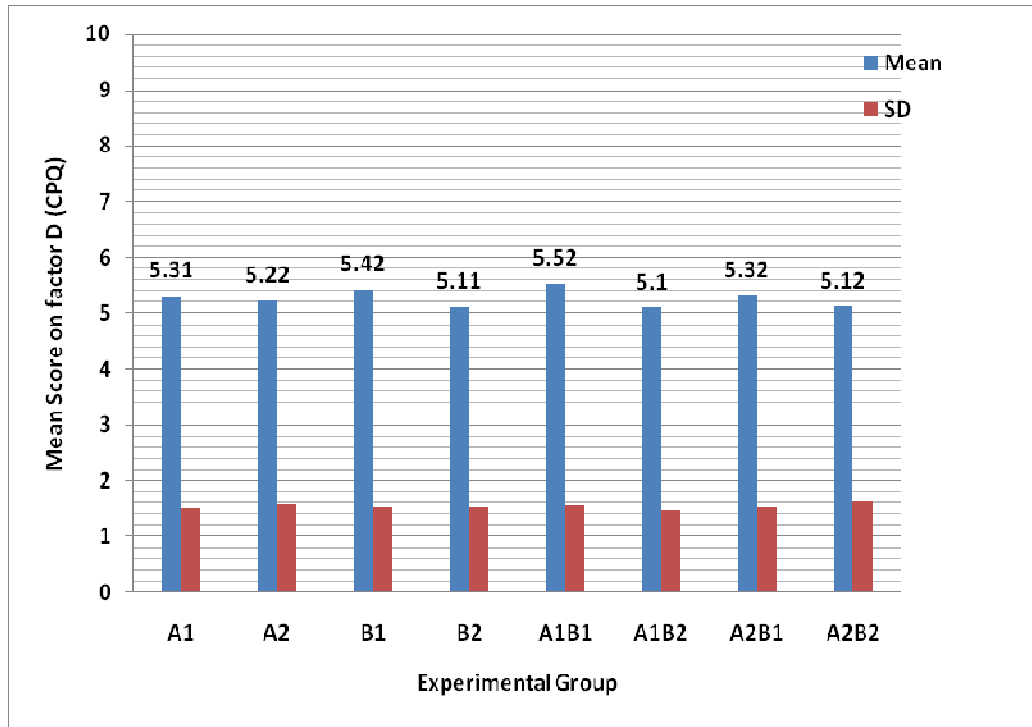
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.31</b>	<b>1.52</b>
<b>A2</b>	<b>5.22</b>	<b>1.57</b>
<b>B1</b>	<b>5.42</b>	<b>1.54</b>
<b>B2</b>	<b>5.11</b>	<b>1.54</b>
<b>A1B1</b>	<b>5.52</b>	<b>1.55</b>
<b>A1B2</b>	<b>5.10</b>	<b>1.46</b>
<b>A2B1</b>	<b>5.32</b>	<b>1.53</b>
<b>A2B2</b>	<b>5.12</b>	<b>1.62</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2 – Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.4**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor D (CPQ)**



Perusal of result table 4.5 and respective figure shows the mean score of each experimental group on measure of personality factor D (Phlegmatic Temperament vs. Excitability). It is evident from this table that all experimental group obtained around equal score on factor D which revealed that boys and girls belongs to whether English and Gujarati medium are parallel in their personality disposition namely phlegmatic and excitability.

**Table 4.8**

**Summary of Analysis of Variance for Personality Factor D (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>0.405</b>	<b>0.405</b>	<b>0.169<sup>NS</sup></b>
Gender (B)	1	<b>4.805</b>	<b>4.805</b>	<b>2.016<sup>NS</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>0.605</b>	<b>0.605</b>	<b>0.253<sup>NS</sup></b>

<b>Error</b>	196	<b>467.14</b>	<b>2.38</b>
<b>Total</b>	199	<b>472.9</b>	<b>2.37</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor D (Phlegmatic Temperament vs. Excitability) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be insignificant for both variables (Medium and gender) as well as for their interaction also, which revealed that-

- Students of English and Gujarati Medium are not significantly different on their personality f personality criteria like excitable, demanding, self-assertive, destructible and Phlegmatic.
- Boys and girls are parallel on their personality criteria like excitable, demanding, self-assertive and destructible.
- Boys and girls are not significantly different on their personality criteria like excitable, demanding, self-assertive and destructible according to their medium of instruction.

**Factor E (Submissiveness vs. Ascendance (Dominance))**

**Table 4.9**

**Mean and SD for All Experimental Groups on Measure of Personality Factor  
E (CPQ)**

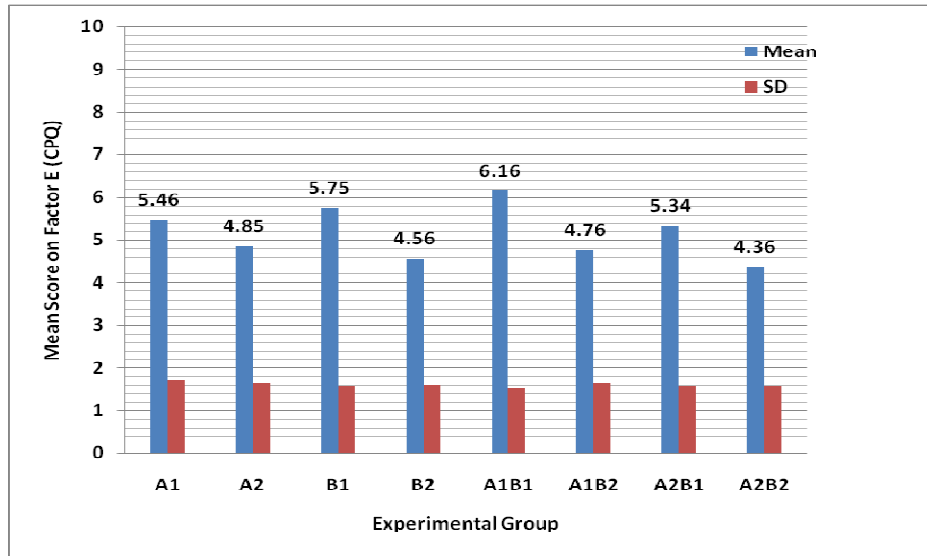
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.46</b>	<b>1.73</b>
<b>A2</b>	<b>4.85</b>	<b>1.65</b>
<b>B1</b>	<b>5.75</b>	<b>1.60</b>
<b>B2</b>	<b>4.56</b>	<b>1.62</b>
<b>A1B1</b>	<b>6.16</b>	<b>1.52</b>
<b>A1B2</b>	<b>4.76</b>	<b>1.65</b>
<b>A2B1</b>	<b>5.34</b>	<b>1.59</b>
<b>A2B2</b>	<b>4.36</b>	<b>1.57</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2- Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.5**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor E (CPQ)**



Result table 4.9 and respective figure elucidate the mean score of each experimental group on measure of personality factor E (Submissiveness vs. Dominance). It is evident from this table that among all experimental group A1B1 group scored higher whereas group A2B2 obtained lesser score on factor E as higher the score indicate the right polar characteristics on given dimension it revealed that boys belong to English medium possess dominant personality disposition whereas girls belong to Gujarati medium decline towards submissiveness trait of personality. When boys and girls belongs to only English medium were compared it was seen that girls are more submissive than boys. When boys and girls as well as English and Gujarati medium students were compared it revealed that English medium students as well as boys are more declines towards ascendance personality as compared to Gujarati medium and girl students.



**Table 4.10**

**Summary of Analysis of Variance for Personality Factor E (CPQ) in 2X2  
Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>18.605</b>	<b>18.605</b>	7.43**
Gender (B)	1	<b>70.805</b>	<b>70.805</b>	28.28**
<b>Interaction Effect</b>				
A*B	1	<b>2.205</b>	<b>2.205</b>	0.88 <sup>NS</sup>

<b>Error</b>	196	<b>490.58</b>	<b>2.502</b>
<b>Total</b>	199	<b>582.195</b>	<b>2.925</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor E (Submissiveness vs. Ascendance (Dominance) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be significant for both variables (Medium and gender) whereas for their interaction it was found to be insignificant, which revealed that-

- Subjects of English and Gujarati Medium significantly differ on their personality factor E (Submissiveness vs. Ascendance).
- Boys were found with dominant nature whereas girls possess submissiveness criteria within their personality.
- Boys and girls of English and Gujarati medium were not found to be significantly different on their personality factor E (Submissiveness vs. Ascendance).

**Factor F (Sober vs. Happy-go-lucky)**

**Table 4.11**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**F (CPQ)**

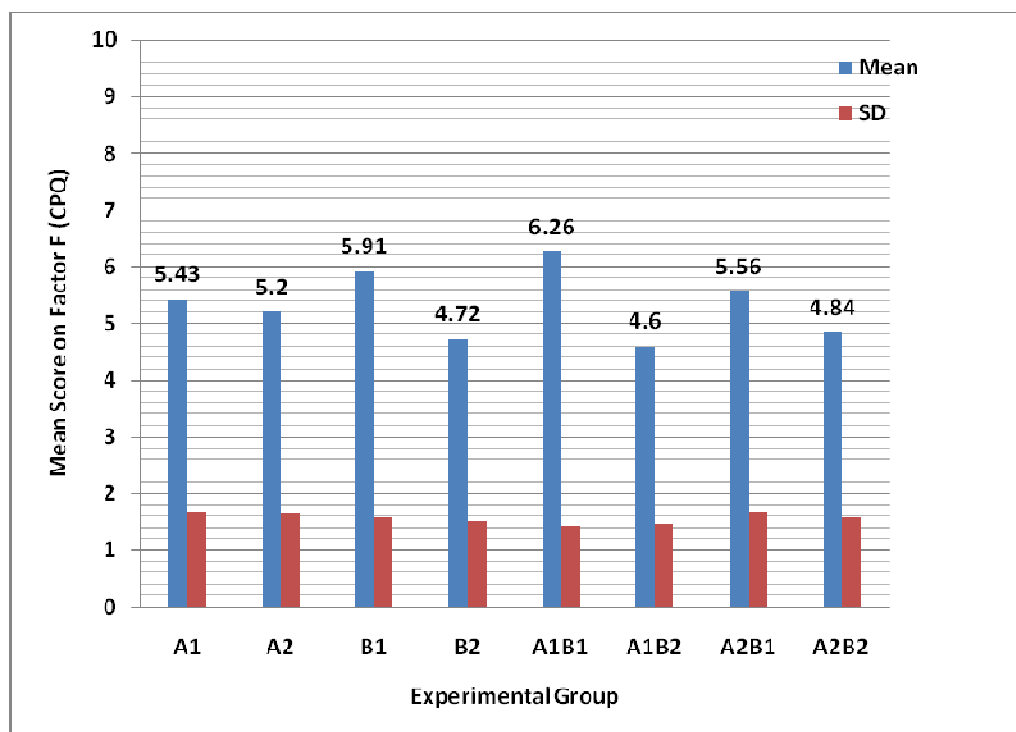
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.43</b>	<b>1.67</b>
<b>A2</b>	<b>5.20</b>	<b>1.65</b>
<b>B1</b>	<b>5.91</b>	<b>1.58</b>
<b>B2</b>	<b>4.72</b>	<b>1.52</b>
<b>A1B1</b>	<b>6.26</b>	<b>1.43</b>
<b>A1B2</b>	<b>4.60</b>	<b>1.47</b>
<b>A2B1</b>	<b>5.56</b>	<b>1.66</b>
<b>A2B2</b>	<b>4.84</b>	<b>1.58</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2- Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.6**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor F (CPQ)**



Above result table shows the mean score of each experimental group on measure of personality factor F (Sober vs. Happy-go-lucky). It is evident from this table that difference in personality disposition like Sober vs. Happy-go-lucky is existence in boys and girls whereas in English and Gujarati medium this difference is not seen. Girls are found with dependent confessing and anxious personality traits whereas boys are more incline towards happy go lucky nature. Among all experimental group A1B1group (Male Students of English medium) scored higher as higher the score indicate the right polar characteristics on given dimension it revealed that boys belong to English medium are more assertive, self-assured, and independent minded.

**Table 4.12**

**Summary of Analysis of Variance for Personality Factor F (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>2.645</b>	<b>2.645</b>	1.12 <sup>NS</sup>
Gender (B)	1	<b>70.805</b>	<b>70.805</b>	<b>29.99**</b>
<b>Interaction Effect</b>				
A*B	1	<b>11.045</b>	<b>11.045</b>	4.67*

<b>Error</b>	196	<b>462.66</b>	<b>2.36</b>
<b>Total</b>	199	<b>547.155</b>	<b>2.74</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor F (Sober vs. Happy-go-lucky) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f value was found to be insignificant for medium whereas for gender and its interaction with medium it was found to be significant, which revealed that-

- Subjects of English and Gujarati Medium are not significantly differ on their personality criteria like restrained, introspective, dependable , dour, pessimistic, cheerful, active, talkative, frank and expressive.
- Boys and girls are significantly different on their personality traits like sober or Happy-go-lucky.
- Subjects of English and Gujarati Medium are significantly differ on their personality factor F (Sober vs. Happy-go-lucky) according to their gender difference.

**Factor G (Expedient vs. Conscientious)**

**Table 4.13**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**G (CPQ)**

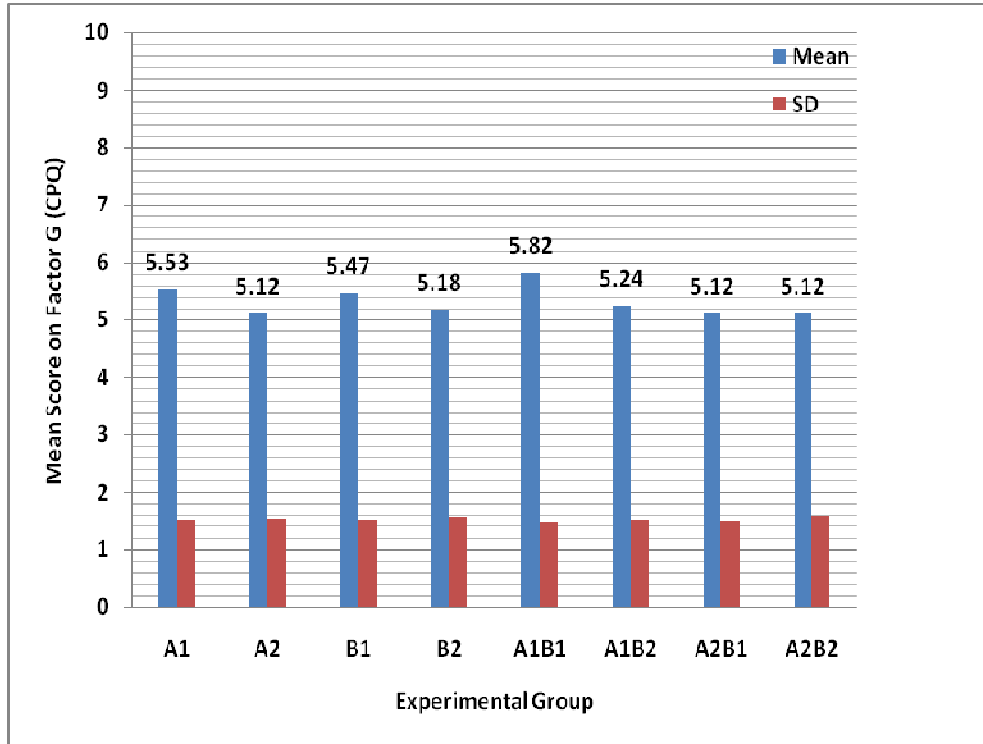
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.53</b>	<b>1.51</b>
<b>A2</b>	<b>5.12</b>	<b>1.53</b>
<b>B1</b>	<b>5.47</b>	<b>1.51</b>
<b>B2</b>	<b>5.18</b>	<b>1.55</b>
<b>A1B1</b>	<b>5.82</b>	<b>1.47</b>
<b>A1B2</b>	<b>5.24</b>	<b>1.51</b>
<b>A2B1</b>	<b>5.12</b>	<b>1.48</b>
<b>A2B2</b>	<b>5.12</b>	<b>1.60</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.7**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor G (CPQ)**



Perusal of result table 4.13 and respective figure shows the mean score of each experimental group on measure of personality factor G (Expedient vs. Conscientious). It is evident from this table that all experimental group obtained around equal score on factor G which revealed that boys and girls belongs to whether English and Gujarati medium are parallel in their personality disposition namely Expedient vs. conscientious.

**Table 4.14**

**Summary of Analysis of Variance for Personality Factor G (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>8.405</b>	<b>8.405</b>	3.66 <sup>NS</sup>
Gender (B)	1	<b>4.205</b>	<b>4.205</b>	<b>1.83<sup>NS</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>4.205</b>	<b>4.205</b>	<b>1.83<sup>NS</sup></b>

<b>Error</b>	196	<b>449.06</b>	<b>2.291</b>
<b>Total</b>	199	<b>465.875</b>	<b>2.341</b>

**\*\* Significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor G (Expedient vs. Conscientious) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be insignificant for both variables (Medium and gender) as well as for their interaction also, which revealed that-

- Subjects of English and Gujarati Medium are not significantly different on their personality factor G (Expedient vs. Conscientious).
- Boys and girls are parallel on their personality factor G (Expedient vs. Conscientious).
- Boys and girls of both groups (English and Gujarati) were not significantly different on their personality factor G (Expedient vs. Conscientious).

**Factor H (Shy Vs Venturesome)**

**Table 4.15**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**H (CPQ)**

<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.63</b>	<b>1.56</b>
<b>A2</b>	<b>5.22</b>	<b>1.65</b>
<b>B1</b>	<b>6.00</b>	<b>1.50</b>
<b>B2</b>	<b>4.85</b>	<b>1.53</b>
<b>A1B1</b>	<b>6.22</b>	<b>1.43</b>
<b>A1B2</b>	<b>5.04</b>	<b>1.47</b>
<b>A2B1</b>	<b>5.78</b>	<b>1.54</b>
<b>A2B2</b>	<b>4.66</b>	<b>1.57</b>

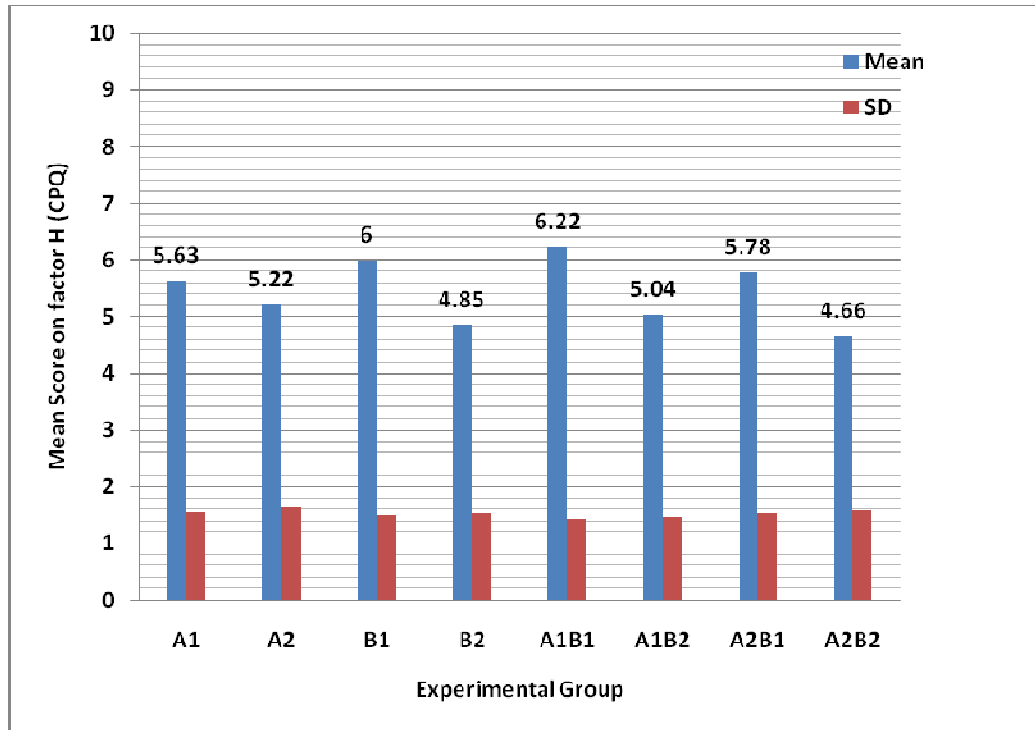
**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>



**Figure 4.8**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor H (CPQ)**



Above result table shows the mean score of each experimental group on measure of personality factor H (Shy Vs Venturesome). It is evident from this table that among all experimental groups A1B1 and B1 group scored higher and group A2B2 obtained lesser score on factor H. As higher the score indicate the right polar characteristics on given dimension it revealed that among all experimental groups boys belong to whether English or Gujarati medium possess more venturesome personality whereas girls belong to whether English or Gujarati medium are shy in their nature .

**Table 4.16**

**Summary of Analysis of Variance for Personality Factor H (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>8.405</b>	<b>8.405</b>	<b>3.70<sup>NS</sup></b>
Gender (B)	1	<b>66.125</b>	<b>66.125</b>	<b>29.17<sup>**</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>0.045</b>	<b>0.045</b>	<b>0.01<sup>NS</sup></b>

<b>Error</b>	196	<b>444.3</b>	<b>2.26</b>
<b>Total</b>	199	<b>518.8</b>	<b>2.60</b>

**\*\*Significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor H (Shy Vs Venturesome) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor H. The computed f value was found to be significant for gender whereas for medium of instruction as well as its interaction with gender it was found to be insignificant, which revealed that-

- Subjects of English and Gujarati Medium are not significantly different on their personality factor H (Shy Vs Venturesome).
- Boys and girls are not parallel on their personality factor H (Shy Vs Venturesome).
- Gender is not significantly interact with students' medium of instruction in order to determine their personality criteria like shy or venturesome .

**Factor I (Tough minded vs. Tender minded)**

**Table 4.17**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**I (CPQ)**

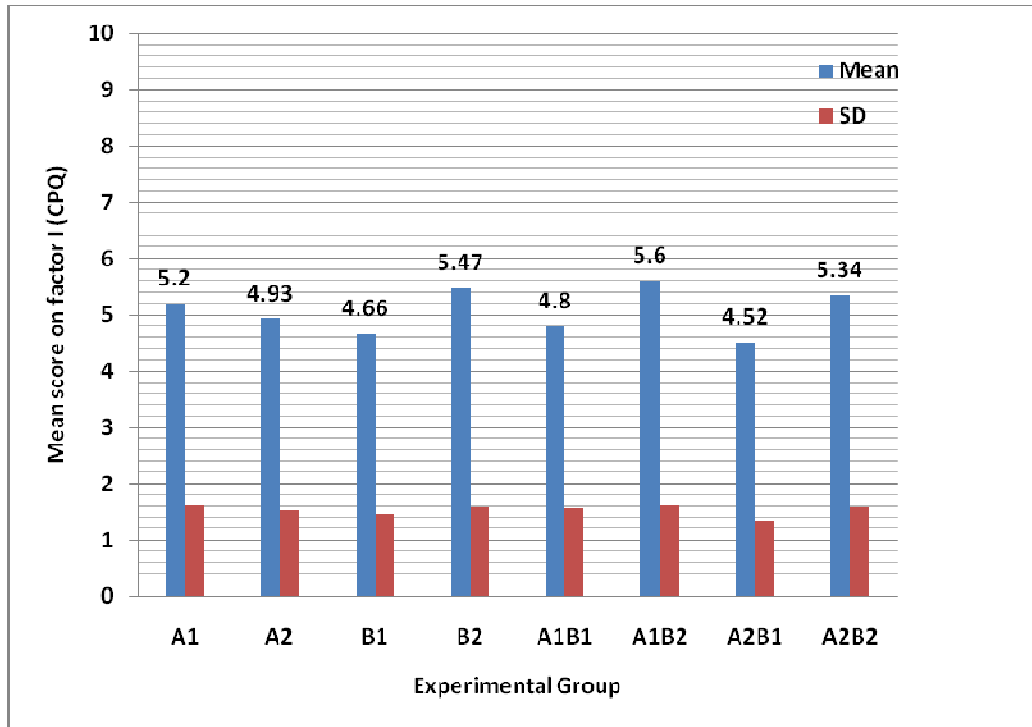
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.2</b>	<b>1.63</b>
<b>A2</b>	<b>4.93</b>	<b>1.53</b>
<b>B1</b>	<b>4.66</b>	<b>1.46</b>
<b>B2</b>	<b>5.47</b>	<b>1.59</b>
<b>A1B1</b>	<b>4.8</b>	<b>1.56</b>
<b>A1B2</b>	<b>5.6</b>	<b>1.60</b>
<b>A2B1</b>	<b>4.52</b>	<b>1.36</b>
<b>A2B2</b>	<b>5.34</b>	<b>1.59</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.9**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor I (CPQ)**



Above result table shows the mean score of each experimental group on measure of personality factor I (Tough minded vs. Tender minded). It is evident from this table that group A1, B2, A1B2 and A2B2 scored higher as compared to group A2, B1, A1B1 and A2B1 on their personality dimension namely Tough minded vs. Tender minded. As higher the score indicate the right polar characteristics on given dimension it revealed that English medium students are more tender minded as compared to Gujarati medium students as well as in group of English Medium if gender is considered girls found to be more tender minded as compared to boys.

**Table 4.18**

**Summary of Analysis of Variance for Personality Factor I (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>3.645</b>	<b>3.645</b>	<b>1.55<sup>NS</sup></b>
Gender (B)	1	<b>32.80</b>	<b>32.80</b>	<b>13.98<sup>**</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>0.005</b>	<b>0.005</b>	<b>0.0021<sup>NS</sup></b>

<b>Error</b>	196	<b>459.7</b>	<b>2.34</b>
<b>Total</b>	199	<b>496.15</b>	<b>2.49</b>

**\*\* Significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor I (Tough minded vs Tender minded) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them. The computed f values were found to be significant for gender and insignificant for medium as well as for medium interaction with gender, which revealed that-

- Subjects of English and Gujarati Medium are not significantly different on their personality criteria like tough or tender minded).
- Boys and girls are significantly different on their personality factor I (Tough minded vs. Tender minded).
- Gender difference on their personality factor I (Tough minded vs. Tender minded) is not significantly accompanied with their medium of instruction.

**Factor J (Zestful vs. Reflective)**

**Table 4.19**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**J (CPQ)**

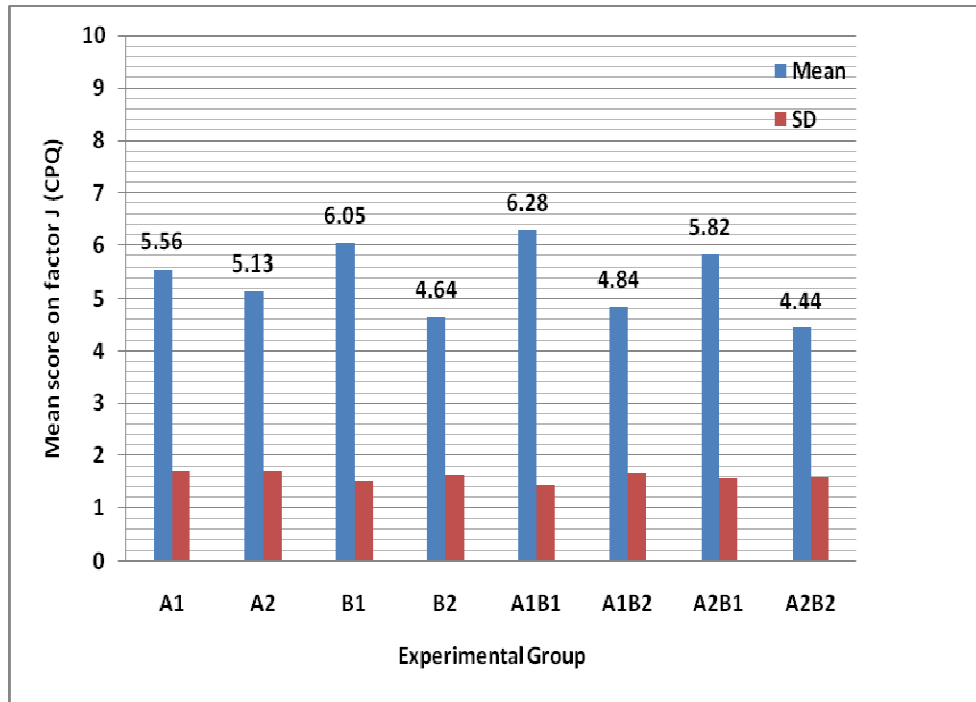
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.56</b>	<b>1.71</b>
<b>A2</b>	<b>5.13</b>	<b>1.72</b>
<b>B1</b>	<b>6.056</b>	<b>1.52</b>
<b>B2</b>	<b>4.64</b>	<b>1.63</b>
<b>A1B1</b>	<b>6.28</b>	<b>1.44</b>
<b>A1B2</b>	<b>4.84</b>	<b>1.66</b>
<b>A2B1</b>	<b>5.82</b>	<b>1.57</b>
<b>A2B2</b>	<b>4.44</b>	<b>1.59</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.10**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor J (CPQ)**



Above result table shows the mean score of each experimental group on measure of personality factor J (Zestful vs. Reflective). It is evident from this table that group B2 and A2B2 scored lesser their personality dimension namely Zestful vs. Reflective. As less score indicate the left polar characteristics on given dimension it revealed that girls are more sentimental, group dependent and attention seeking whereas boys are found to be more individualistic, guarded, wrapped up in self. When medium is considered in group of English and Gujarati medium same difference between girls and boys was observed.

**Table 4.20**

**Summary of Analysis of Variance for Personality Factor J (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>9.245</b>	<b>9.245</b>	<b>3.75<sup>NS</sup></b>
Gender (B)	1	<b>99.405</b>	<b>99.405</b>	<b>40.38<sup>**</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>0.045</b>	<b>0.045</b>	<b>0.018<sup>NS</sup></b>

<b>Error</b>	196	<b>482.5</b>	<b>2.46</b>
<b>Total</b>	199	<b>591.195</b>	<b>2.970</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor J (Zestful vs. Reflective). Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be significant for gender and insignificant for medium as well as for medium interaction with gender, which revealed that-

- Subjects of English and Gujarati Medium are parallel on their personality J (Zestful vs. Reflective).
- Boys and girls are significantly different on their personality factor J (Zestful vs. Reflective).
- Gender difference on their personality criteria like zestful or reflective is not significantly accompanied with their medium of instruction.



**Factor N (forthright vs. shrewd)**

**Table 4.21**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**N (CPQ)**

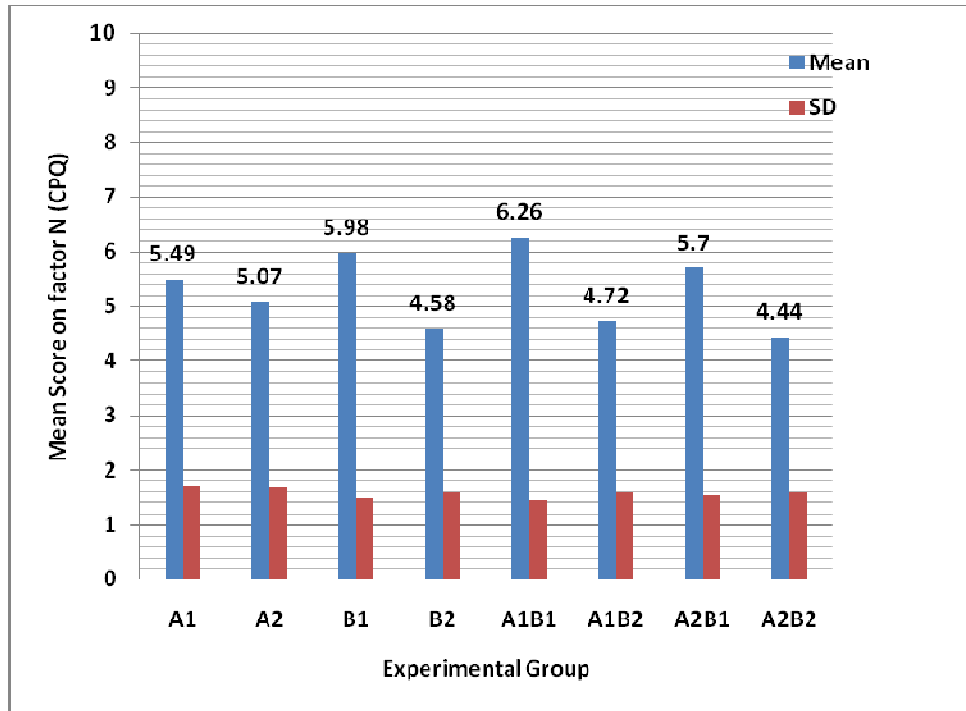
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.49</b>	<b>1.69</b>
<b>A2</b>	<b>5.07</b>	<b>1.68</b>
<b>B1</b>	<b>5.98</b>	<b>1.50</b>
<b>B2</b>	<b>4.58</b>	<b>1.59</b>
<b>A1B1</b>	<b>6.26</b>	<b>1.43</b>
<b>A1B2</b>	<b>4.72</b>	<b>1.59</b>
<b>A2B1</b>	<b>5.70</b>	<b>1.54</b>
<b>A2B2</b>	<b>4.44</b>	<b>1.59</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.11**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor N (CPQ)**



Above result table shows the mean score of each experimental group on measure of personality factor N (forthright vs. shrewd). It is evident from this table that among all experimental group A1B1 and B1 group scored higher and A2B2 as well as B2 group obtained lesser score on personality factor N (forthright vs. shrewd). As high score indicating right polar and less score indicate the left polar characteristics on given dimension it revealed that girls whether belongs to English or Gujarati medium are more unsophisticated, sentimental, and simple in their nature whereas boys are more decline towards polished, socially aware, shrewd, hard headed, analytical, intellectual and unsentimental criteria.

**Table 4.22**

**Summary of Analysis of Variance for Personality Factor N (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>8.82</b>	<b>8.82</b>	<b>3.721<sup>NS</sup></b>
Gender (B)	1	<b>98</b>	<b>98</b>	<b>41.35<sup>**</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>0.98</b>	<b>0.98</b>	<b>0.41<sup>NS</sup></b>

<b>Error</b>	196	<b>464.52</b>	<b>2.37</b>
<b>Total</b>	199	<b>572.32</b>	<b>2.87598</b>

**\*\*Significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor N (forthright vs. shrewd). Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor N. The computed f values were found to be significant for gender and insignificant for medium as well as for medium interaction with gender, which revealed that-

- Subjects of English and Gujarati Medium are parallel on their personality criteria like unsophisticated, sentimental, polished, socially aware, shrewd, hard headed, analytical and intellectual.
- Boys and girls are significantly differ on their personality factor N (forthright vs. shrewd)
- Gender difference on their personality criteria namely unsophisticated, sentimental, polished, socially aware, shrewd. ,hard headed ,analytical and intellectual are not significantly accompanied with their medium of instruction.

**Factor O (Placid vs. Apprehensive)**

**Table 4.23**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**O (CPQ)**

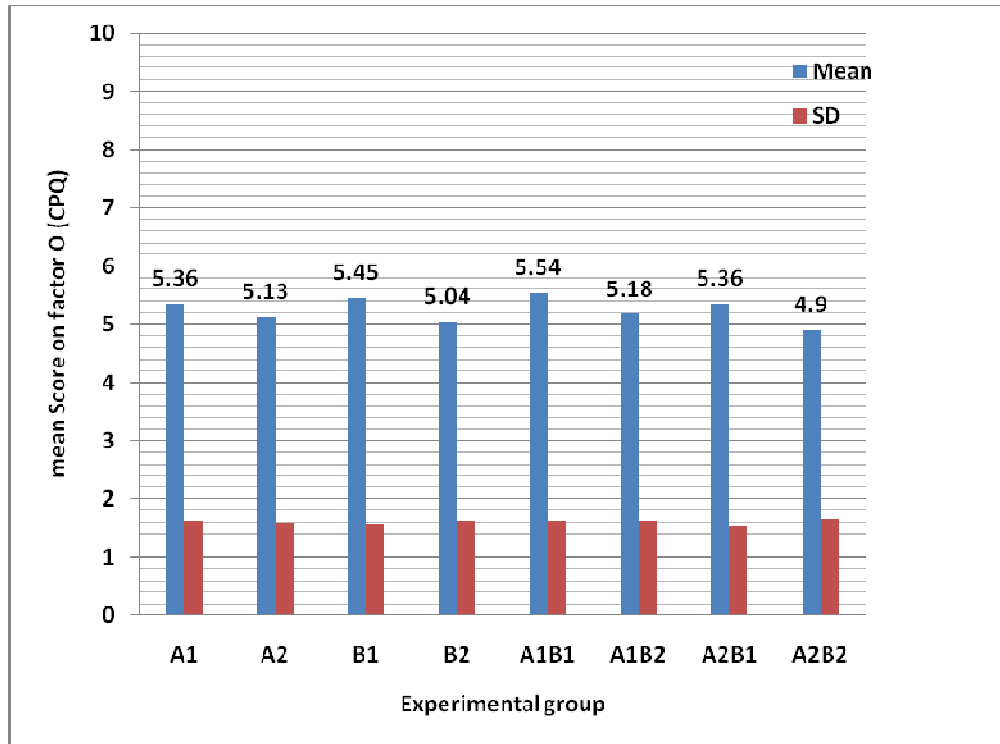
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.36</b>	<b>1.64</b>
<b>A2</b>	<b>5.13</b>	<b>1.59</b>
<b>B1</b>	<b>5.45</b>	<b>1.57</b>
<b>B2</b>	<b>5.04</b>	<b>1.64</b>
<b>A1B1</b>	<b>5.54</b>	<b>1.63</b>
<b>A1B2</b>	<b>5.18</b>	<b>1.64</b>
<b>A2B1</b>	<b>5.36</b>	<b>1.52</b>
<b>A2B2</b>	<b>4.90</b>	<b>1.64</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.12**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor O (CPQ)**



Perusal of result table 4.23 and respective figure shows the mean score of each experimental group on measure of personality factor O (Placid vs. Apprehensive). It is evident from this table that except group A2B2 all experimental groups obtained around equal score on factor O (Placid vs. Apprehensive). as per computed f values no significant difference were observed It can be revealed that boys and girls belong to whether English or Gujarati medium are parallel on their personality disposition namely matured, anxious, confident and adjustable, moody and worrier.

**Table 4.24**

**Summary of Analysis of Variance for Personality Factor O (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>2.645</b>	<b>2.645</b>	<b>1.020<sup>NS</sup></b>
Gender (B)	1	<b>8.405</b>	<b>8.405</b>	<b>3.244<sup>NS</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>0.125</b>	<b>0.125</b>	<b>0.048<sup>NS</sup></b>

<b>Error</b>	196	<b>507.82</b>	<b>2.590</b>
<b>Total</b>	199	<b>518.995</b>	<b>2.60</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor O (Placid vs. Apprehensive) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be insignificant for both variables (Medium and gender) as well as for their interaction also, which revealed that-

- Students belong to English and Gujarati Medium are parallel on their personality factor O (Placid vs. Apprehensive)
- Boys and girls are not significantly different on their personality factor O (Placid vs. Apprehensive).
- Gender was not significantly interacting with medium of instruction in order to influence students' personality factor O (Placid vs. Apprehensive).

**Factor Q3 (Uncontrolled vs. controlled)**

**Table 4.25**

**Mean and SD for All Experimental Groups on Measure of Personality Factor**

**Q3 (CPQ)**

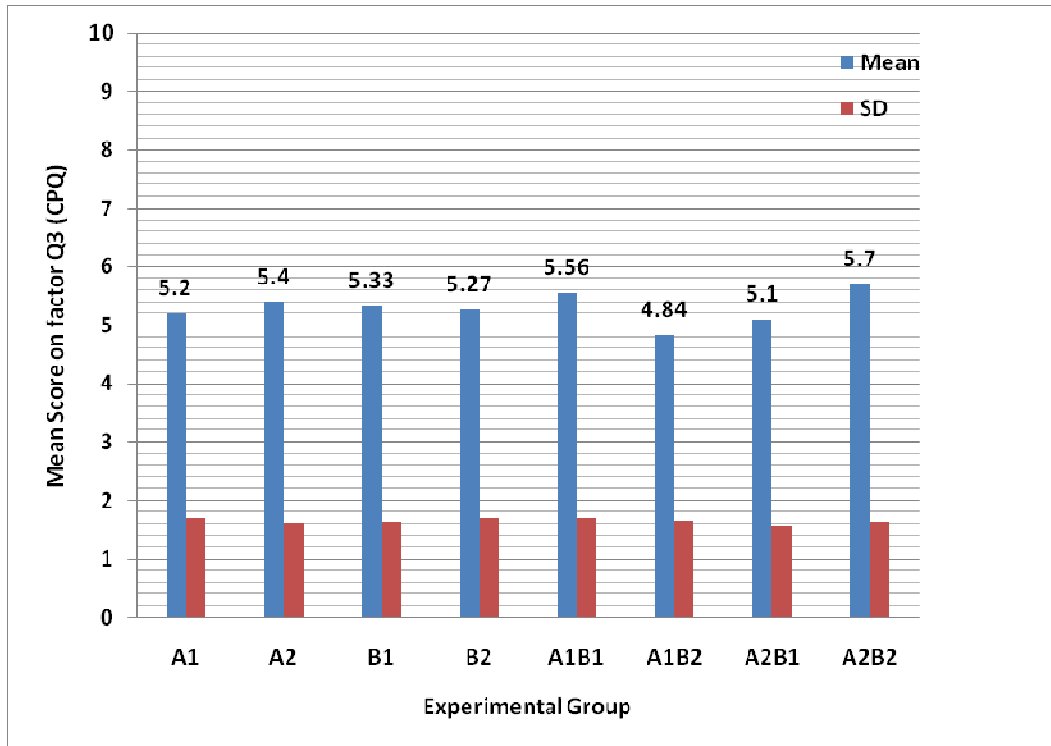
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.20</b>	<b>1.71</b>
<b>A2</b>	<b>5.40</b>	<b>1.63</b>
<b>B1</b>	<b>5.33</b>	<b>1.64</b>
<b>B2</b>	<b>5.27</b>	<b>1.70</b>
<b>A1B1</b>	<b>5.56</b>	<b>1.69</b>
<b>A1B2</b>	<b>4.84</b>	<b>1.66</b>
<b>A2B1</b>	<b>5.10</b>	<b>1.57</b>
<b>A2B2</b>	<b>5.70</b>	<b>1.64</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.13**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor Q3 (CPQ)**



Above result table shows the mean score of each experimental group on measure of personality factor Q3 (Uncontrolled vs. controlled). It is evident from this table that among all experimental group A1B2 group scored lesser on their measure of personality disposition namely (Uncontrolled vs. controlled). Except this group all groups are obtained around equal score which revealed that in group of English medium girls feel more maladjusted than boys whereas this difference was not observed in Gujarati medium students.



**Table 4.26**

**Summary of Analysis of Variance for Personality Factor Q3 (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	2	2	0.742 <sup>NS</sup>
Gender (B)	1	0.18	0.18	0.066 <sup>NS</sup>
<b>Interaction Effect</b>				
A*B	1	21.78	21.78	8.084 <sup>**</sup>

<b>Error</b>	196	528.04	2.694
<b>Total</b>	199	552	2.773

**\*\* Significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality factor Q3 (Uncontrolled vs. controlled) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be insignificant for both variables (Medium and gender) whereas for their interaction it was found to be significant, which revealed that-

- English and Gujarati Medium students are not significantly differ on their personality criteria like emotionally mature , general behavior, socially aware and careful.
- Boys and girls are parallel on their personality criteria like emotionally mature, general behavior, socially aware and careful.
- Boys and girls significantly differ on their personality factor Q3 (Uncontrolled vs. controlled) according to their medium of instruction.

**Factor Q4 (Relaxed Vs Tense)**

**Table 4.27**

**Mean and SD for All Experimental Groups on Measure of Personality Factor  
Q4 (CPQ)**

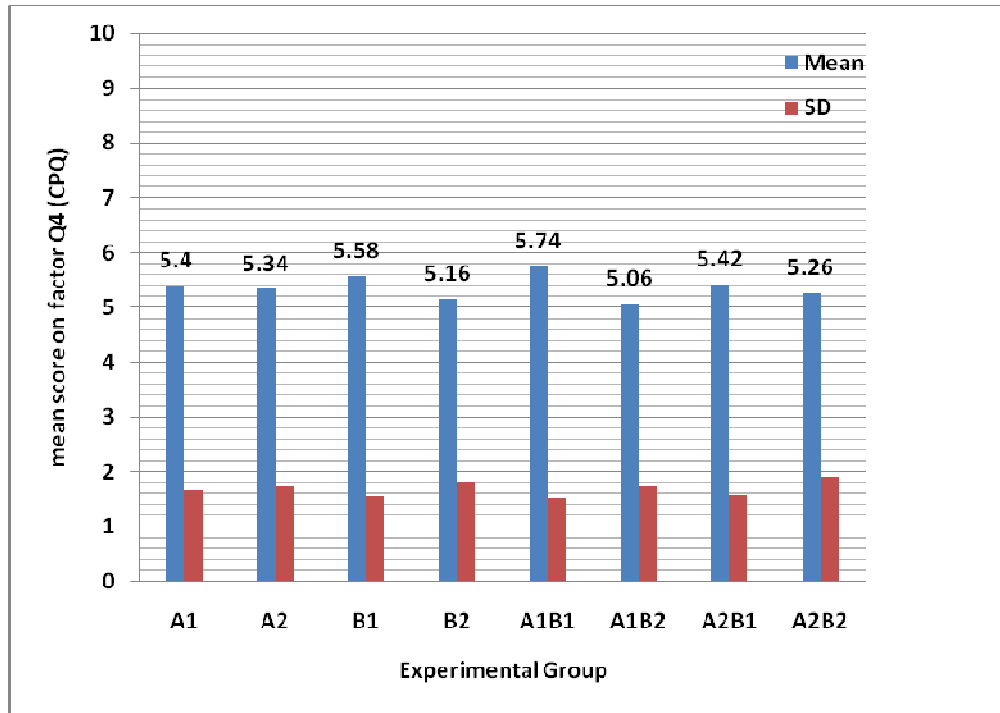
<b>Experimental Group</b>	<b>Mean</b>	<b>SD</b>
<b>A1</b>	<b>5.4</b>	<b>1.66</b>
<b>A2</b>	<b>5.34</b>	<b>1.74</b>
<b>B1</b>	<b>5.58</b>	<b>1.55</b>
<b>B2</b>	<b>5.16</b>	<b>1.81</b>
<b>A1B1</b>	<b>5.74</b>	<b>1.52</b>
<b>A1B2</b>	<b>5.06</b>	<b>1.73</b>
<b>A2B1</b>	<b>5.42</b>	<b>1.57</b>
<b>A2B2</b>	<b>5.26</b>	<b>1.90</b>

**Where**

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.14**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Personality Factor Q4 (CPQ)**



Result table 4.27 and respective figure elucidate the mean score of each experimental group on measure of personality factor Q4 (Relaxed Vs Tense). It is evident from this table that among all experimental groups obtained around equal score on their measure of personality factor Q4 which revealed that personality disposition like relaxed, satisfied, tensed, excitable, restless, and impatient do not influenced by children's gender and medium of instruction factor.

**Table 4.28**

**Summary of Analysis of Variance for Personality Factor Q4 (CPQ) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>0.18</b>	<b>0.18</b>	<b>0.063<sup>NS</sup></b>
Gender (B)	1	<b>8.82</b>	<b>8.82</b>	<b>3.09<sup>NS</sup></b>
<b>Interaction Effect</b>				
A*B	1	<b>3.38</b>	<b>3.38</b>	<b>1.18<sup>NS</sup></b>

<b>Error</b>	196	<b>558.24</b>	<b>2.848</b>
<b>Total</b>	199	<b>570.62</b>	<b>2.867</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of personality Factor Q4 (Relaxed Vs Tense) of the subjects. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' personality factor A. The computed f values were found to be significant for both variables (Medium and gender) as well as for their interaction also, which revealed that-

- Students of English and Gujarati Medium are not significantly different on their personality disposition like relaxed or tense.
- Boys and girls are parallel on their personality criteria namely relaxed, satisfied, excitable, restless, and impatient.
- Boys and girls in group of English and Gujarati medium were not significantly different on their personality Factor Q4 (Relaxed Vs Tense).

## Academic Achievement

*Table 4.29*

*Mean and SD for All Experimental Groups on Measure of Academic Achievement (GCAT)*

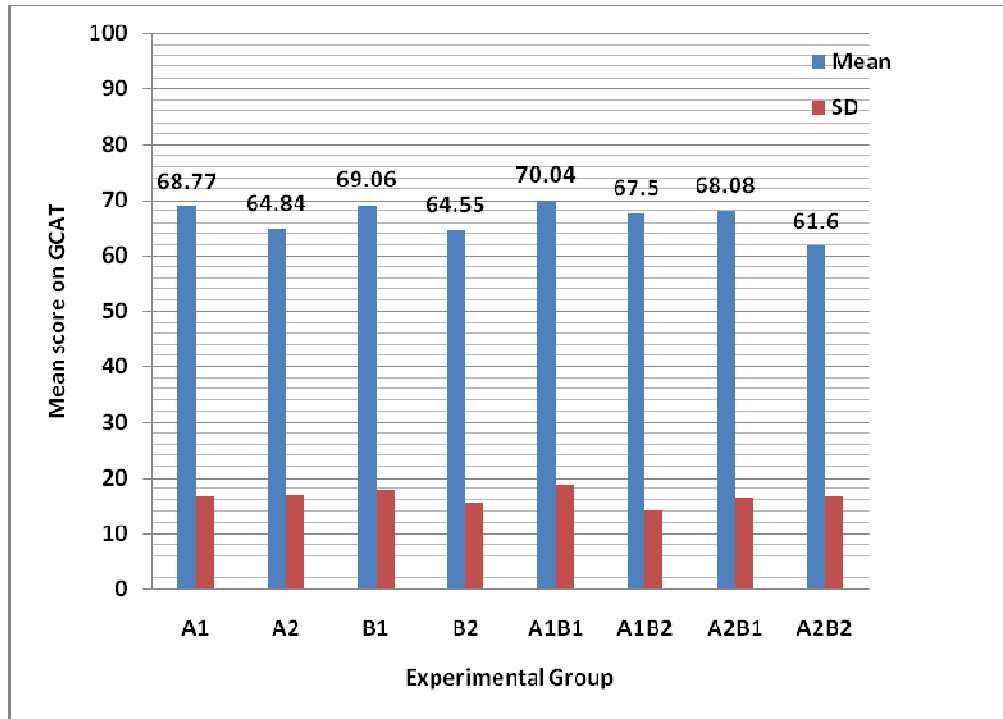
<i>Experimental Group</i>	<i>Mean</i>	<i>SD</i>
<b>A1</b>	<b>68.77</b>	<b>16.59</b>
<b>A2</b>	<b>64.84</b>	<b>16.84</b>
<b>B1</b>	<b>69.06</b>	<b>17.70</b>
<b>B2</b>	<b>64.55</b>	<b>15.59</b>
<b>A1B1</b>	<b>70.04</b>	<b>18.89</b>
<b>A1B2</b>	<b>67.50</b>	<b>14.00</b>
<b>A2B1</b>	<b>68.08</b>	<b>16.56</b>
<b>A2B2</b>	<b>61.60</b>	<b>16.65</b>

Where

<b>A1 – Students of English medium</b>	<b>A1B1 - Boys Students of English medium</b>
<b>A2-Students of Gujarati medium</b>	<b>A1B2 - Girls Students of English medium</b>
<b>B1 – Boys students</b>	<b>A2B1- Boys Students of Gujarati medium</b>
<b>B2 – Girls students</b>	<b>A2B2- Girls Students of Gujarati medium</b>

**Figure 4.15**

**Bar Diagram Showing Mean Difference for All Experimental Groups on Measure of Academic Achievement (GCAT)**



Above result table shows the mean score of each experimental group on measure of academic achievement (GCAT). It is evident from this table that among all experimental group A2B2 scored lesser whereas A1B1 group obtained higher score on their academic achievement measure which revealed that boys belong to English medium are higher in their level their academic achievement whereas girls belongs to Gujarati medium are poorer in their academic achievement. Except these both groups all experimental groups obtained around equal score on measure of academic achievement (GCAT).

**Table 4.30**

**Summary of Analysis of Variance for Academic Achievement (GCAT) in 2X2**

**Factorial Designs**

<b>Source</b>	<b>df</b>	<b>SS</b>	<b>MS</b>	<b>F</b>
<b>Main Effect</b>				
Medium (A)	1	<b>1215.245</b>	<b>1215.245</b>	<b>4.479</b>
Gender (B)	1	<b>764.405</b>	<b>764.405</b>	<b>2.817</b>
<b>Interaction Effect</b>				
A*B	1	<b>330.245</b>	<b>330.245</b>	<b>1.217</b>

<b>Error</b>	196	<b>53176.5</b>	<b>271.3087</b>
<b>Total</b>	199	<b>55486.4</b>	<b>278.8261</b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

A glance at above result table illustrates the f values for Medium of instruction and gender on measure of academic achievement of the students. Table shows the main effect for both variables as well as effect of the interaction between them on subjects' academic achievement. The computed f values were found to be insignificant for both variables (Medium and gender) as well as for their interaction also, which revealed that-

- Students of English and Gujarati medium are not significantly different on their academic achievement.
- Boys and girls are not parallel on their level of academic achievement.
- Boys and girls of both group (English and Gujarati Medium) are parallel on their academic achievement.

## ***PART-2***

***In This part obtained results have been described in the light of relevant hypothesis laid down.***

### ***Personality***

- ***Personality and Medium of Instruction***
- ***Personality and Gender***
- ***Personality and Interaction Effect***

### ***Academic Achievement***

- ***Academic Achievement and Medium of Instruction***
- ***Academic Achievement and Gender***
- ***Academic Achievement and Interaction Effect***

### ***Personality***

Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to the environment.

### **Personality and Medium of Instruction**

#### ***Hypothesis a)***

**There will be no significant effect of medium of instruction on students' personality traits namely-**

- ✓ Factor A : (Reserved vs. Outgoing)
- ✓ Factor B (less Intelligent vs more Intelligent.)



- ✓ Factor C (Emotionally less stable vs Emotionally stable)
- ✓ Factor D (Phlegmatic Temperament vs Excitability)
- ✓ Factor E (Submissiveness vs Ascendance (Dominance))
- ✓ Factor F (Sober vs Happy-go-lucky)
- ✓ Factor G (Expedient vs Conscientious)
- ✓ Factor H (Shy Vs Venturesome)
- ✓ Factor I (Tough minded vs Tender minded)
- ✓ Factor J (Zestful vs Reflective)
- ✓ Factor N (forthright vs shrewd)
- ✓ Factor O (Placid vs Apprehensive)
- ✓ Factor Q<sub>3</sub> (Uncontrolled vs controlled)
- ✓ Factor Q<sub>4</sub> (Relaxed Vs Tense)

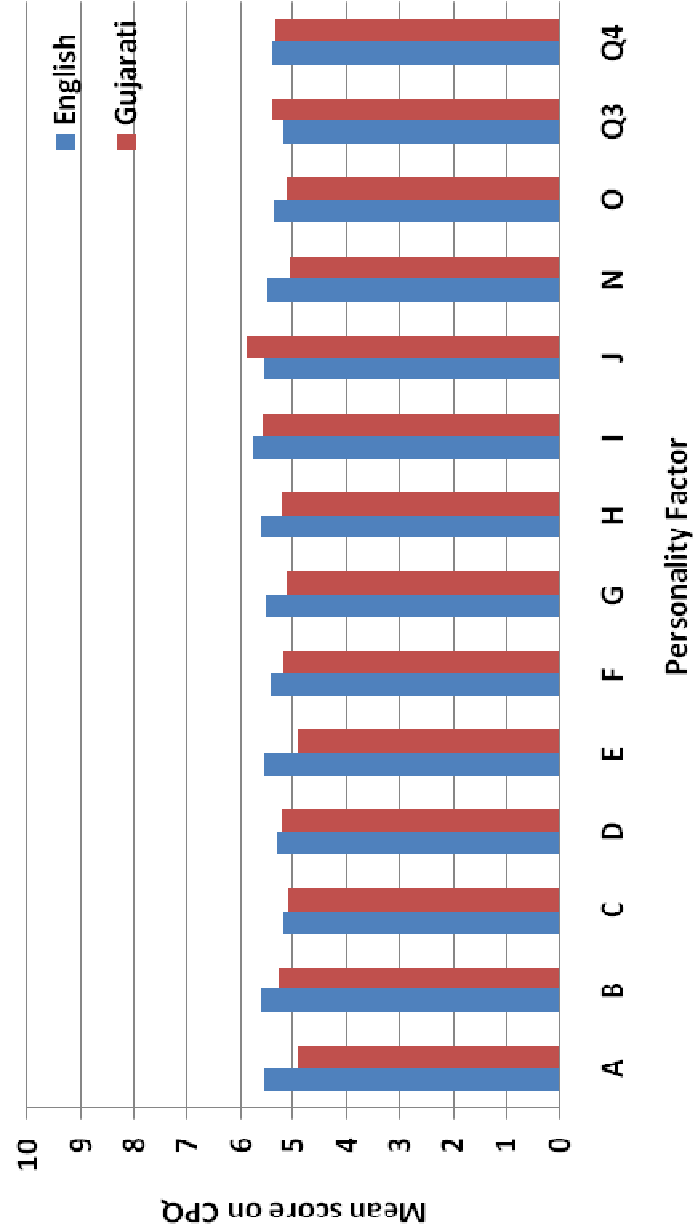
**Table 4.31**

**F value for Medium Of Instruction on Measure of Personality (CPQ)**

<i>Personality (CPQ)</i>	<i>English</i>	<i>Gujarati</i>	<b>F value</b>
<i>Factor A</i>	5.56	4.93	8.08**
<i>Factor B</i>	5.64	5.29	2.85 <sup>NS</sup>
<i>Factor C</i>	5.18	5.09	0.17 <sup>NS</sup>
<i>Factor D</i>	5.31	5.22	0.17 <sup>NS</sup>
<i>Factor E</i>	5.46	4.85	7.43**
<i>Factor F</i>	5.43	5.2	1.12 <sup>NS</sup>
<i>Factor G</i>	5.53	5.12	3.66 <sup>NS</sup>
<i>Factor H</i>	5.63	5.22	3.7 <sup>NS</sup>
<i>Factor I</i>	5.78	5.61	1.55 <sup>NS</sup>
<i>Factor J</i>	5.56	5.89	3.75 <sup>NS</sup>
<i>Factor N</i>	5.49	5.07	3.72 <sup>NS</sup>
<i>Factor O</i>	5.36	5.13	1.02 <sup>NS</sup>
<i>Factor Q3</i>	5.2	5.4	0.74 <sup>NS</sup>
<i>Factor Q4</i>	5.4	5.34	0.06 <sup>NS</sup>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

**Figure 4.16**  
**Mean Difference For Medium on measure of Personality (CPQ)**



The Above result table elucidate the mean score on personality (CPQ) for students who adopted English and Gujarati language as a medium of instruction in their academic sphere. Result indicate that English medium students obtained significantly higher score on personality factor A [Reserved vs. Outgoing] and on E (Submissiveness vs. Ascendance (Dominance) which revealed that students of English medium possess various traits like out-going, good-natured, easy - going, warm hearted, participating, dominating, readily forms active groups, generous, less afraid of criticism, assertive, self-assured, independent within their personality whereas students belongs to Gujarati medium are found with Reserved, Submissiveness dependent, confessing and anxious personality traits.

As other than factor A and E both groups (English and Gujarati) were found to be insignificant on all factors measured by children personality questionnaire it revealed that language as a medium is not significant to determine ones' personality characteristics like Intelligence, Emotional stability, Phlegmatic Temperament, excitability, Soberness, Happy - go - lucky, Expedient, Conscientious, Shyness, Venturesome, Tough mindedness, Tender mindedness, Zestful, Reflective, forthright, shrewd, Placid, Apprehensiveness, Relaxed and Tense.

***On the basis of obtained result except for factor A (Reserved vs. Outgoing) and E (Submissiveness vs Ascendance (Dominance) null hypothesis regarding medium effect on children's personality has been accepted for all personality factors (CPQ).***

## PERSONALITY AND GENDER

### *Hypothesis (b)*

**Girls and boys will be not significantly differ on their personality traits**

**namely-**

- ✓ Factor A : (Reserved vs. Outgoing)
- ✓ Factor B (less Intelligent vs. more Intelligent.)
- ✓ Factor C (Emotionally less stable vs. Emotionally stable)
- ✓ Factor D (Phlegmatic Temperament vs. Excitability)
- ✓ Factor E (Submissiveness vs. Ascendance (Dominance))
- ✓ Factor F (Sober vs. Happy-go-lucky)
- ✓ Factor G (Expedient vs. Conscientious)
- ✓ Factor H (Shy Vs Venturesome)
- ✓ Factor I (Tough minded vs. Tender minded)
- ✓ Factor J (Zestful vs. Reflective)
- ✓ Factor N (forthright vs. shrewd)
- ✓ Factor O (Placid vs. Apprehensive)
- ✓ Factor Q<sub>3</sub> (Uncontrolled vs. controlled)
- ✓ Factor Q<sub>4</sub> (Relaxed vs. Tense)

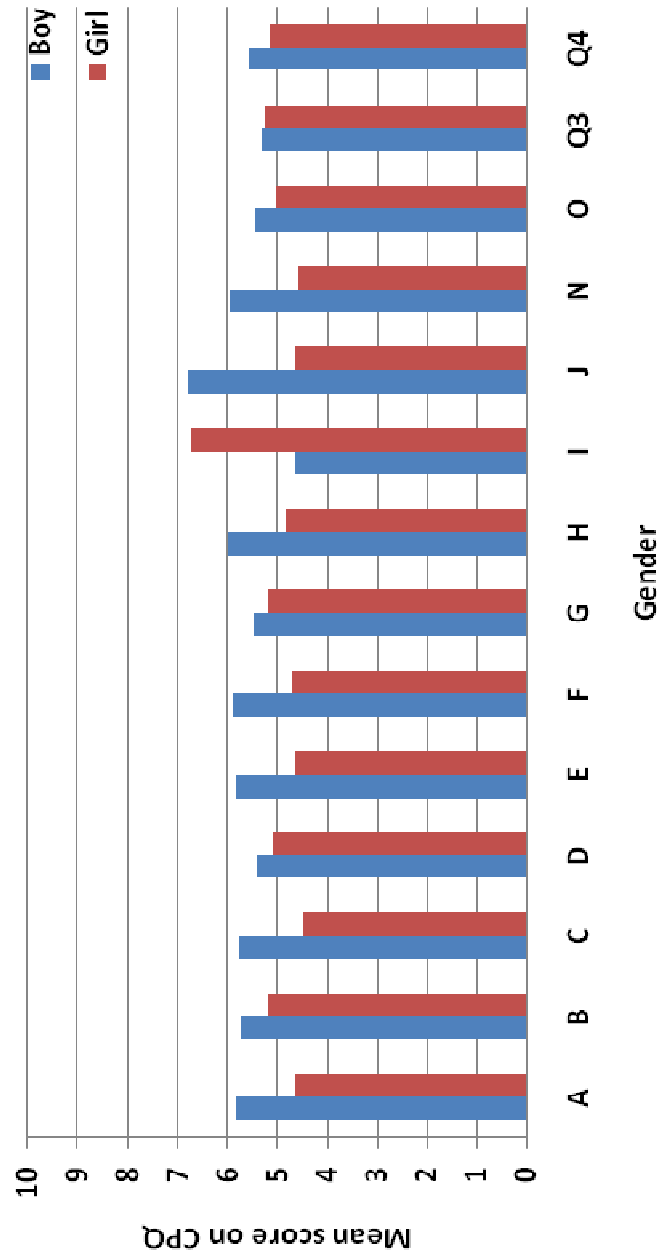
**Table 4.32**

**F value for Gender on Measure of Personality (CPQ)**

<b>Personality (CPQ)</b>	<b>Boy</b>	<b>Girl</b>	<b>F value</b>
<i>Factor A</i>	<b>5.85</b>	<b>4.64</b>	<b>29.81**</b>
<i>Factor B</i>	<b>5.75</b>	<b>5.18</b>	<b>7.55**</b>
<i>Factor C</i>	<b>5.77</b>	<b>4.5</b>	<b>34.35**</b>
<i>Factor D</i>	<b>5.42</b>	<b>5.11</b>	<b>2.02<sup>NS</sup></b>
<i>Factor E</i>	<b>5.75</b>	<b>4.56</b>	<b>28.2**</b>
<i>Factor F</i>	<b>5.91</b>	<b>4.42</b>	<b>30.0**</b>
<i>Factor G</i>	<b>5.47</b>	<b>5.18</b>	<b>1.83<sup>NS</sup></b>
<i>Factor H</i>	<b>6.00</b>	<b>4.85</b>	<b>29.17**</b>
<i>Factor I</i>	<b>4.66</b>	<b>6.73</b>	<b>13.98**</b>
<i>Factor J</i>	<b>6.81</b>	<b>4.64</b>	<b>40.38**</b>
<i>Factor N</i>	<b>5.98</b>	<b>4.58</b>	<b>41.35**</b>
<i>Factor O</i>	<b>5.45</b>	<b>5.04</b>	<b>3.24<sup>NS</sup></b>
<i>Factor Q3</i>	<b>5.33</b>	<b>5.27</b>	<b>0.06<sup>NS</sup></b>
<i>Factor Q4</i>	<b>5.58</b>	<b>5.16</b>	<b>3.09<sup>NS</sup></b>

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

Figure 4.17  
 Mean Difference For Gender On Measure of Personality (CPQ)



Above result Table shows that computed f values for gender are significant on personality factors A, B, C, D, F, H, I, J, N, and insignificant on personality factors E, G, O, Q3 and Q4. As higher score on measure of personality (CPQ) indicate right polar characteristic and low score indicating left polar characteristic of given personality dimension the obtained result revealed-

On factor A [Reserved vs. Outgoing] f value was found to be significant higher in favour of boys respondents. This indicates that boys are much outgoing, warm-hearted, easy going and participating than their counterpart, where as girls are more reserved in their nature.

Regarding factor B [Less intelligence vs. More intelligent] the obtained F value is significant at 0.01 levels that envisages that boys are more intelligent and higher in scholastic mental capacity than their girls counterpart.

The F value on the factor C [Emotionally Less Stable vs. Emotionally stable] is significantly higher in boys than girls.

Gender is not found significant on the score of factor D [Phlegmatic vs. Excitable]. It can be concluded that gender is not then determined variable for variance in the personality disposition like deliberate, impatient, overactive, and stodgy.

The F value of personality factor E [Submissiveness vs. Ascendance (Dominance)] is significant for Gender. It is clear from the result that boys adolescents are more assertive, aggressive, Independent and Dominant where as girls are more obedient and submissive.

The mean score of boys are significantly higher than the girls on the factor F [Sober vs. Happy Go lucky]. It revealed that boys are more impulsive and Happy go lucky where as girls are more serious, sober and prudent.



The main effect of Gender has not been found significant on personality factor G [Expedient vs. Conscientious] in an adolescent sample. It can be concluded on the basis of the result that male and female do not vary in the personality characteristic i.e. Super ego strength, Conscientious, Evades rules.

The mean value of boys on factor H [Shy vs. Venturesome] was significantly higher than their female counterparts. boys has been found more venturesome, socially bold, uninhibited and spontaneous while female has been found more shy and restrained.

Scores on the factor I [Tough Minded Vs Tender minded] have been found significantly higher in the girls than boys it revealed that girls are more sensitive, tender minded, over protected and tender minded where as boys are more tough minded and realistic.

As F ratio regarding personality factor J [Zestful vs. Reflective] found to be significant it revealed that boys are more decline towards individualistic, guarded, wrapped up in self, and evaluates coldly personality disposition whereas girls are more sentimental, liking group dependent and attention seeking.

The boys have been found significantly higher on personality factor N [forthright vs. shrewd] than girls. Boys are found more polished, socially aware, shrewd, hard-headed, analytical, intellectual and unsentimental where as females are found more unsophisticated, sentimental, and simple.

F ratio for Gender on personality factor O (Placid Vs Apprehensive] was not found significant at the 0.01 level. It revealed that boys and girls are equal in their personality traits like worrying, troubled, depressive than their female counterparts.

F ratio has not been found significant for Gender on personality factor Q3 [Uncontrolled conflict Vs Controlled] which revealed that both boys and girls are equal in their personality disposition like controlled, self-disciplined, socially aware, careful and socially precise.

F value for Gender on factor Q4 [Relaxed Vs Tense] also has not been found significant it indicates that both Gender are parallel on personality characteristics i.e. Relaxed, Tense, Frustrated, Driven etc.

***To conclude differences on personality disposition up to some extent can be attributed on gender difference as except on factors E, J, O, Q3 and Q4 f values for gender were found to be significant on all factors comprised under CPQ. Therefore the null hypothesis in reference of gender effect on***

***Personality has been accepted for –***

- ✓ ***Factor D (Phlegmatic Temperament vs. Excitability)***
- ✓ ***Factor G (Expedient vs. Conscientious)***
- ✓ ***Factor O (Placid vs. Apprehensive)***
- ✓ ***Factor Q<sub>3</sub> (Uncontrolled vs. controlled)***
- ✓ ***Factor Q<sub>4</sub> (Relaxed Vs Tense)***

***And rejected for –***

- ✓ ***Factor A : (Reserved vs. Outgoing)***
- ✓ ***Factor B (less Intelligent vs. more Intelligent.)***
- ✓ ***Factor C (Emotionally less stable vs. Emotionally stable)***
- ✓ ***Factor E (Submissiveness vs. Ascendance (Dominance)***
- ✓ ***Factor F (Sober vs. Happy-go-lucky)***

- ✓ **Factor H (Shy Vs Venturesome)**
- ✓ **Factor I (Tough minded vs. Tender minded)**
- ✓ **Factor J (Zestful vs. Reflective)**
- ✓ **Factor N (forthright vs. shrewd)**

## **PERSONALITY AND INTERACTION EFFECT**

### ***Hypothesis (c)***

**Girls and boys will be not significantly differ according to their medium of instruction on their personality traits namely-**

- ✓ Factor A : (Reserved vs. Outgoing)
- ✓ Factor B (less Intelligent vs. more Intelligent.)
- ✓ Factor C (Emotionally less stable vs. Emotionally stable)
- ✓ Factor D (Phlegmatic Temperament vs. Excitability)
- ✓ Factor E (Submissiveness vs. Ascendance (Dominance))
- ✓ Factor F (Sober vs. Happy-go-lucky)
- ✓ Factor G (Expedient vs. Conscientious)
- ✓ Factor H (Shy Vs Venturesome)
- ✓ Factor I (Tough minded vs. Tender minded)
- ✓ Factor J (Zestful vs. Reflective)
- ✓ Factor N (forthright vs. shrewd)
- ✓ Factor O (Placid vs. Apprehensive)
- ✓ Factor Q3 (Uncontrolled vs. controlled)
- ✓ Factor Q4 (Relaxed vs. Tense)

**Table 4.33**

***F value for interaction effect between independent variable on Measure of Personality (CPQ)***

<b><i>Personality (CPQ)</i></b>	<b><i>F value</i></b>
<i>Factor A</i>	<b><i>1.07<sup>NS</sup></i></b>
<i>Factor B</i>	<b><i>9.22<sup>**</sup></i></b>
<i>Factor C</i>	<b><i>0.05<sup>NS</sup></i></b>
<i>Factor D</i>	<b><i>0.25<sup>NS</sup></i></b>
<i>Factor E</i>	<b><i>1.07<sup>NS</sup></i></b>
<i>Factor F</i>	<b><i>4.67<sup>*</sup></i></b>
<i>Factor G</i>	<b><i>1.83<sup>NS</sup></i></b>
<i>Factor H</i>	<b><i>0.01<sup>NS</sup></i></b>
<i>Factor I</i>	<b><i>0.002<sup>NS</sup></i></b>
<i>Factor J</i>	<b><i>0.01<sup>NS</sup></i></b>
<i>Factor N</i>	<b><i>0.41<sup>NS</sup></i></b>
<i>Factor O</i>	<b><i>0.048<sup>NS</sup></i></b>
<i>Factor Q3</i>	<b><i>0.08<sup>NS</sup></i></b>
<i>Factor Q4</i>	<b><i>0.18<sup>NS</sup></i></b>

***\*\* significant at .01 level , \* significant at .05 level and NS Not significant***

Above result table 4.33 elucidate the F values for interaction between medium and gender on children's personality (CPQ). It is evident from this table that f values for interaction between medium and gender is significant on Factor B (less Intelligent vs. more Intelligent) and on Factor F (Sober vs. Happy-go-lucky) which revealed that boys and girls difference on personality dispositions namely

brightness, abstract thinker, fast learner, intelligent, restrained, introspective, sober and dependable dour, pessimistic. Cheerful, active, talkative, frank and expressive accompanied with their language which they used as a medium of instruction in their academics area.

Further except on Factor B and F, f values for interaction between medium and gender were found to be insignificant on all personality factor measured by Children Personality Questionnaire which revealed that difference on personality traits namely Reserved ,Outgoing, Emotionally stable Phlegmatic, Excitability Submissiveness ,Dominance, Expedient, Conscientious, Shy, Venturesome, Toughness, Tenderness, Zestful, Reflective, forthright, shrewd, Placid, Apprehensive, controlled, Relaxed and Tense boys and girls students are constant in both groups namely English and Gujarati medium.

Overall on the basis of present finding above stated null hypothesis regarding interaction effect of medium and gender on personality has been rejected for –

- ✓ Factor B (less Intelligent vs. more Intelligent)
- ✓ Factor F (Sober vs. Happy-go-lucky)

and accepted on following personality factors measured by CPQ.

- ✓ Factor A (Reserved vs. Outgoing)
- ✓ Factor C (Emotionally less stable vs. Emotionally stable)
- ✓ Factor D (Phlegmatic Temperament vs. Excitability)
- ✓ Factor E (Submissiveness vs. Ascendance (Dominance))
- ✓ Factor G (Expedient vs. Conscientious)
- ✓ Factor H (Shy Vs Venturesome)
- ✓ Factor I (Tough minded vs. Tender minded)
- ✓ Factor J (Zestful vs. Reflective)

- ✓ **Factor N (forthright vs. shrewd)**
- ✓ **Factor O (Placid vs. Apprehensive)**
- ✓ **Factor Q3 (Uncontrolled vs. controlled)**
- ✓ **Factor Q4 (Relaxed vs. Tense)**

### **Academic Achievement**

Academic achievement encompasses student ability and performance; it is multidimensional; it is intricately related to human growth and cognitive, emotional, social, and physical development; it reflects the whole child; it is not related to a single instance, but occurs across time and levels, through a student's life in public school and on into post secondary years and working life

## ACADEMIC ACHIEVEMENT AND MEDIUM OF INSTRUCTION

### *Hypothesis (d)*

There will be no significant effect of medium of instruction on students' level of academic achievement.

*Table 4.34*

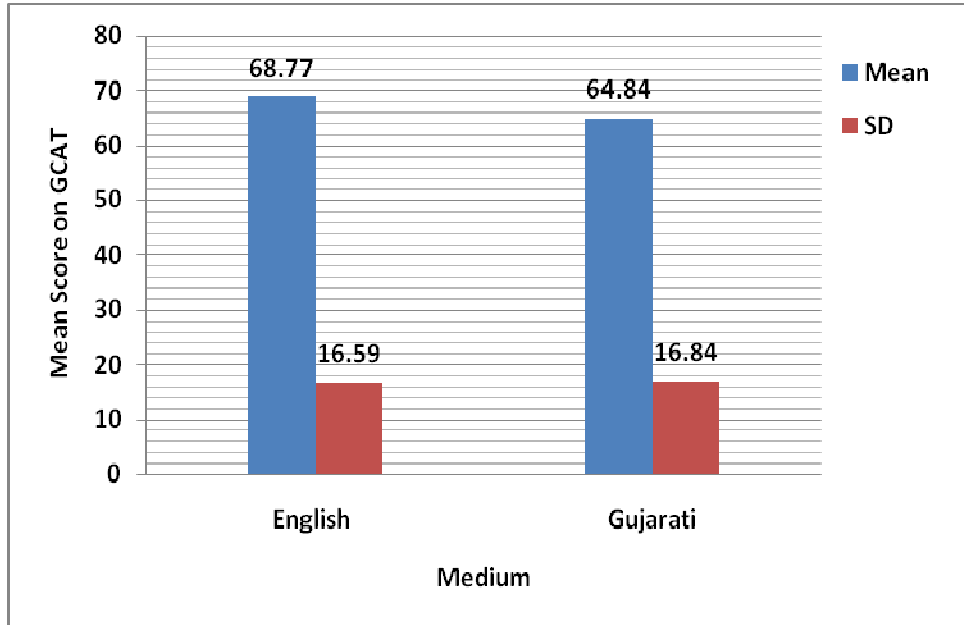
*Mean, SD and f value for Medium on Measure of personality Academic Achievement (GCAT)*

<i>Medium</i>	<i>Score on CPQ</i>	<i>F value</i>
<i>English</i>		
<i>Mean</i>	<i>68.77</i>	
<i>SD</i>	<i>16.59</i>	
<i>Gujarati</i>		<i>4.47*</i>
<i>Mean</i>	<i>64.84</i>	
<i>SD</i>	<i>16.84</i>	

***\*\* significant at .01 level , \* significant at .05 level and NS Not significant***

**Figure 4.18**

**Bar Diagram Showing the mean Difference For Medium on Measure of Academic achievement GCAT)**



Above result table 4.3 and respective figure shows the mean score of students of English and Gujarati medium on their measure of academic achievement (GCAT). It can be seen from the obtained result that students those belong to English medium obtained higher score on their academic achievement as compared to Gujarati medium students. As Computed f value for language as medium of instruction was also found to be significant it revealed that English medium students are significantly higher in their academic achievement as compared to Gujarati medium students.

*As the present finding revealed that English and Gujarati medium students are significantly differ on their level of academic achievement (GCAT). The considered null hypothesis in this regard has been proven wrong and hence rejected here.*



## ACADEMIC ACHIEVEMENT AND GENDER

### *Hypothesis (e)*

Girls and boys will not be significantly differ on their level of academic achievement.

**Table 4.35**

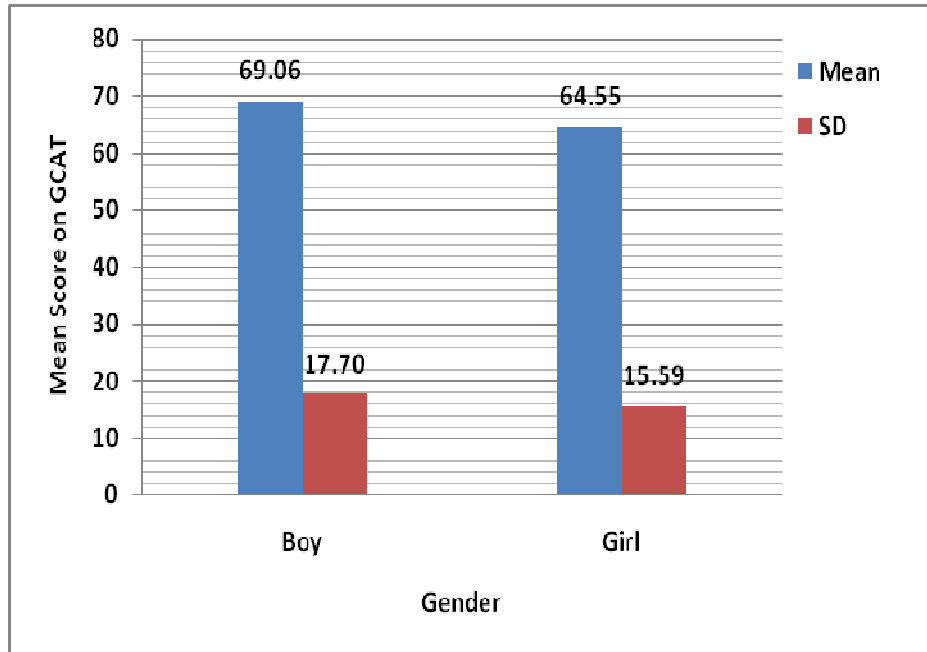
**Mean, SD and f value for Gender on Measure of Academic Achievement (GCAT)**

<b>Gender</b>	<b>Score on CPQ</b>	<b>F value</b>
<i>Boys</i>		
<i>Mean</i>	69.06	
<i>SD</i>	17.70	
<b>Girls</b>		2.81 <sup>NS</sup>
<i>Mean</i>	64.55	
<i>SD</i>	15.59	

**\*\* significant at .01 level , \* significant at .05 level and NS Not significant**

**Figure 4.19**

**Bar Diagram Showing the mean Difference For Gender on Measure of Academic achievement (GCAT)**



Above result table and respective figure shows the mean score of boys and girls subjects on measure of their academic achievement (GCAT). The obtained result indicates that male and female students are around equal in their academic achievement. Computed f value which is found to be insignificant, further support the above conclusion which was made on the basis of difference in mean score for both groups. . On the basis of obtained result it can be revealed that boys and girls are not significantly differ on their achievements in academic spheres. The present result further indicate that biological factor i.e. gender is less prominent for ones' level of academic achievement.

*As gender was found to be insignificant on children's academic achievement the considered null hypothesis in this regard has been proven true hence accepted here.*

## **ACADEMIC ACHIEVEMENT AND INTERACTION EFFECT**

### ***Hypothesis (f)***

**Girls and boys will be not significantly differ according to their medium of instruction on their level of academic achievement**

***Table 4.36***

***F value for interaction effect between independent variable on Measure of Academic Achievement (GCAT)***

<b><i>Interaction</i></b>	<b><i>F value</i></b>
<i>Medium * Gender</i>	1.21 <sup>NS</sup>

***\*\* Significant at .01 level, \* significant at .05 level and NS Not significant***

As depicted in above result table f value for interaction effect of medium and gender on children's' academic achievement, was found to be insignificant it revealed that difference between girls and boys on their level of academic achievement is not accompanied with their language which they use as a medium of instruction in schools. To conclude children's academic achievement are not associated with interaction of gender and medium of instruction.

***In summary on the basis of obtained result it can be concluded that difference between English and Gujarati medium students in their level of academic achievement do not depends upon gender difference thus the considered null hypothesis regarding interaction effect of medium and gender on children's academic achievement was proven true hence accepted here.***