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Experimental

An Analytical Study Among Stress Dimension Between Rural and Urban Secondary School Students

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ABSTRACT

The purpose of the present study was to find out the stress dimension between rural and urban secondary school students. A comparative study was conducted on 400 secondary school students, classified as 200 rural (100 boys and 100 girls) students and rest of 200 urban (100 boys and 100 girls) students of four different districts of West Bengal. The objective of the study was to find out the different dimension of stress namely, pressure, physical stress, frustration and overall stress between rural and urban students. To measure the different dimension of stress was measured by stress scale which was developed by Lakshmi and Narin was administrated on a selected sample. Descriptive statistic along with ‘t’-test was used to analyze the result of the study. The level of significance was 0.05 levels. Result revealed that there was a significant difference between rural and urban secondary school students on different dimension stress.

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associated with stress, depression and suicide (Nolen-Hoeksema, 2004). A recent study found that youth with suicidal ideation were more likely to have had negative life experiences in the past few years than youth without suicidal ideation (Liu and Tein, 2005).

Objectives of the Study
1. To find out the different dimension of stress between rural and urban boys students.
2. To find out the different dimension of stress between rural and urban girls students.

Methodology
Selection of the Subjects
To conduct the study total number of subjects 400 (four hundreds) students were selected as a sample from the four different district of West Bengal namely Purba Medinipur, Paschim Medinipur, Uttar Dinajpur and Dakshin Dinajpur.

The study was conducted four hundred students (n = 400) out of which two hundred were boys groups students and they were sub-divided into one hundred rural boys (n = 100) and other one hundred urban boys (n= 100), selected from the schools of four different districts of West Bengal. Another two hundred were girls groups students. They were also divided into one hundred rural girls (n = 100) and other one hundred urban girls (n= 100) and they were selected from the schools of four different districts of West Bengal. Their age ranged from 13 to 15 years. The distribution of the Subjects was presented in Fig. 1.

Figure 1 : Distribution of the Subjects of the present study

Tools Used in the Study
For the present study the researcher the selected stress as one of the variables of the study, the researcher reviews variable stress inventory developed in India and abroad, finally the researcher has selected the stress scale for the subject developed by Lakshmi and Narin (2014), which was administrated for measuring the difference dimension of stress, such as pressure, physical stress, anxiety and frustration and overall stress.
Statistical Procedure

Descriptive statistical measure like mean, standard deviation was used in order to describe the nature of the sample taken, to determine the difference if any between rural and urban students, the independent ‘t’ test was calculated statically significance was tested as 0.05 levels of confidence, all the statistical analysis was the done with the help of SPSS version23 windows.

Results and discussion

Mean and standard deviation (Mean ± SD) as descriptive statistics of different dimensions of stress, namely pressure, physical stress, anxiety, frustration, and overall stress of two boys groups and two girls groups have been presented in Table-1.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Boys Groups</th>
<th>Girls Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural (Mean ± SD)</td>
<td>Urban (Mean ± SD)</td>
<td>Rural (Mean ± SD)</td>
</tr>
<tr>
<td>Pressure</td>
<td>6.95 ± 2.65</td>
<td>6.65 ± 2.61</td>
</tr>
<tr>
<td>Physical Stress</td>
<td>2.12 ± 1.19</td>
<td>2.09 ± 1.23</td>
</tr>
<tr>
<td>Anxiety</td>
<td>5.04 ± 2.26</td>
<td>4.83 ± 2.21</td>
</tr>
<tr>
<td>Frustration</td>
<td>3.83 ± 2.36</td>
<td>3.63 ± 2.12</td>
</tr>
<tr>
<td>Overall Stress</td>
<td>17.94 ± 4.33</td>
<td>17.20 ± 4.03</td>
</tr>
</tbody>
</table>

Since the mean values of different dimension of stress between rural and urban boys groups and girls groups respectively were not equal, it was necessary to conduct a t-test to find the significant difference if any between the means.

(i) Pressure

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Difference</th>
<th>t- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Boys</td>
<td>6.95</td>
<td>± 2.65</td>
<td>0.03</td>
<td>0.80</td>
</tr>
<tr>
<td>Urban Boys</td>
<td>6.65</td>
<td>± 2.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Girls</td>
<td>6.51</td>
<td>± 2.67</td>
<td>1.05</td>
<td>2.68*</td>
</tr>
<tr>
<td>Urban Girls</td>
<td>7.56</td>
<td>± 2.85</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level (table value 1.96, df-798)

It appears from table no.2 that the mean difference between Rural boys & Urban boys was 0.03 and the obtained t-value was .80 which was statistically not significant at 0.05 level.

It also appears from table no. 2 that the mean difference between Rural girls & Urban girls was 1.05 and the obtained t-value was 2.68 which was statistically not significant at 0.05 level since the table value 1.96 for the df 198 which was lower than the obtained value.
The mean values of the two boys groups and two girls groups on pressure have been also graphically represented in figure-2.

![Bar diagram showing mean value of pressure of two boys groups and two girls groups.](image)

**Figure 2:** Bar diagram showing mean value of pressure of two boys groups and two girls groups.

(ii) Physical Stress

**Table 3**

<table>
<thead>
<tr>
<th>Physical stress (score)</th>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Difference</th>
<th>t- value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural Boys</td>
<td>2.12</td>
<td>± 1.19</td>
<td>0.03</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>Urban Boys</td>
<td>2.09</td>
<td>± 1.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural Girls</td>
<td>2.17</td>
<td>± 1.24</td>
<td>0.26</td>
<td>1.52</td>
</tr>
<tr>
<td></td>
<td>Urban Girls</td>
<td>1.91</td>
<td>± 1.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level (table value 1.96, df-798)*

It appears from table no.3 that the mean difference between Rural boys & Urban boys was 0.03 and the obtained t-value was .17 which was statistically not significant at 0.05 level.

It also appears from table no. 3 that the mean difference between Rural girls & Urban girls was 0.26 and the obtained t-value was 1.52 which was also statistically not significant at 0.05 level.
The mean values of the two boys groups and two girls groups on physical stress have been also graphically represented in figure-3.

![Bar diagram showing mean value of physical stress of two boys groups and two girls groups](image)

**Figure 3:** Bar diagram showing mean value of physical stress of two boys groups and two girls groups

(iii) Anxiety

<table>
<thead>
<tr>
<th>Anxiety (score)</th>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Difference</th>
<th>t- value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural Boys</td>
<td>5.04</td>
<td>± 2.26</td>
<td>0.21</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>Urban Boys</td>
<td>4.83</td>
<td>± 2.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural Girls</td>
<td>4.94</td>
<td>± 2.21</td>
<td>0.85</td>
<td>2.94*</td>
</tr>
<tr>
<td></td>
<td>Urban Girls</td>
<td>5.79</td>
<td>± 1.84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level (table value 1.96, df-798)

It appears from table no.4 that the mean difference between Rural boys & Urban boys was 0.21 and the obtained t-value was 0.66 which was statistically not significant at 0.05 level.

It also appears from table no. 4 that the mean difference between Rural girls & Urban girls was 0.85 and the obtained t-value was 2.94 which was statistically significant at 0.05 level since the table value 1.96 for the df 198 which lower than the obtained value.
The mean values of the two boys groups and two girls groups on anxiety have been also graphically represented in figure-3.

![Figure 4: Bar diagram showing the mean value of anxiety of two boys groups and two girls groups](image)

(iv) Frustration

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Difference</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Boys</td>
<td>3.83</td>
<td>± 2.36</td>
<td>0.20</td>
<td>0.62</td>
</tr>
<tr>
<td>Urban Boys</td>
<td>3.63</td>
<td>± 2.12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Girls</td>
<td>4.14</td>
<td>± 1.91</td>
<td>0.10</td>
<td>0.49</td>
</tr>
<tr>
<td>Urban Girls</td>
<td>4.02</td>
<td>± 1.52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level (table value 1.96, df-798)*

It appears from table no.5 that the mean difference between Rural boys & Urban boys was 0.20 and the obtained t-value was 0.62 which was statistically not significant at 0.05 level.

It also appears from table no. 5 that the mean difference between Rural girls & Urban girls was 0.10 and the obtained t-value was 0.49 which was statistically not significant at 0.05 level.
The mean values of the two boys groups and two girls groups on frustration have been also graphically represented in figure-5.

**Figure 5:** Bar diagram showing the mean value of frustration of two boys groups and two girls groups

(v) Overall Stress

**Table 6**

Mean difference and t-values of overall stress of two boys groups and two girls groups

<table>
<thead>
<tr>
<th>Overall Stress (score)</th>
<th>Groups</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Difference</th>
<th>t- value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Boys</td>
<td>17.94</td>
<td>± 4.33</td>
<td></td>
<td>0.74</td>
<td>1.25</td>
</tr>
<tr>
<td>Urban Boys</td>
<td>17.20</td>
<td>± 4.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural Girls</td>
<td>17.76</td>
<td>± 4.05</td>
<td></td>
<td>1.52</td>
<td>2.84*</td>
</tr>
<tr>
<td>Urban Girls</td>
<td>19.28</td>
<td>± 3.48</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level (table value 1.96, df-798)*

It appears from table no.6 that the mean difference between Rural boys & Urban boys was 0.74 and the obtained t-value was 1.25 which was statistically not significant at 0.05 level.

It also appears from table no. 6 that the mean difference between Rural girls & Urban girls was 1.52 and the obtained t-value was 2.84 which was statistically significant at 0.05 level since the table value 1.98 for the df 198 which was lower than the obtained value.
The mean values of the two boys groups and two girls groups on overall stress have been also graphically represented in figure-6.

![Bar diagram showing mean value of overall stress of two boys groups and two girls groups](image)

**Figure 6: Bar diagram showing mean value of overall stress of two boys groups and two girls groups**

**Discussion**

The result of the present study indicates that the significant difference between two girls groups on the dimension of pressure, anxiety, and overall stress has existed. The urban girls faced a high level of stress-related problems than the rural girls. It also clear that the level of stress of the rural girls was found to a low level of stress and urban girls was found to a moderate level of stress.

From the above discussion, the urban girls are facing more stress-related problems than the rural girls. This may be due to uncertain career-related problems (Akhtar, 2012). This may also be attributed to variations in cultural values and norms. Both groups have a different cultural ethos and economical difference which makes them distinct from each other. As a matter of fact, rural girls are showing a low level of stress than urban girls.

**Conclusion**

On the basic of analysis of data and interpretation of result the following conclusion were drawn.

1. Rural boys had higher score in pressure than Urban boys and Urban girls had higher score in pressure then Rural girls.
2. In the case of physical stress difference between two girls groups and boys groups was not significant.
3. Urban girls were significantly higher in anxiety score than Rural girls however difference between two boys groups was not significant.
4. In the case of frustration difference between two girls groups and boys groups was not significant.
5. Urban girls had face more overall stress than Rural girls and difference between two boys groups was not significant.

**References**