Higher Secondary Students’ Attitude towards Technology

Dr. T. Enok Joel
Assistant Professor
Department of Educational Technology, Bharathiar University
Coimbatore, Tamilnadu

Abstract: The objective of the present study is to find out the Higher Secondary Students’ level of Attitude towards Technology. In the present study, Normative Survey method is adopted. Random sampling technique is used in the selection of the sample for 200 Higher Secondary Students, sample collected from Coimbatore District of Tamilnadu India. The tool used in this study was Test for Attitude towards Technology among School Students developed by Maxwell Benjamin, B (2012). The Higher Secondary School Students have high level of Attitude towards Technology.

Keywords: Higher Secondary Students’ Attitude towards Technology

Introduction

Education is a developmental process, which takes place in an individual as a result of ones’ own exposure and interaction with people and other stimuli in the environment. Due to this interaction the individual acquires a mastery of knowledge as well as right attitude, appreciation, skills, thoughts and processes, which enable to utilize the knowledge and prepare the person to live efficiently in the society and contribute to advance the society. Knowledge affects the living and as a consequence one’s education must be continuous to cope with the ever rising problems of ever changing society. Thus one of the primary goals of education is to enable each and every individual to be aware of the capabilities and to develop them to the maximum extent. Education is able to still in the child a sense of maturity and responsibility by bringing the desired changes according to the needs and demands of continuously changing society as an integral part. Speaking more frankly, education bestows immense benefits upon the child. A well educated person is known all over the region. That person is able to meet the conflicting challenges and tide over all the difficulties, which confront in day to day living. Besides this, education culturizes the individual and helps in satisfying the needs all over the globe. Thus education prepares the individual like a flower, which spreads widely its fragrance around the environment. Otherwise the individual will be like a flower without fragrance.

Electronic machine, operated under the control of instructions stored in its own memory that can accept data (input), manipulate data according to specified rules (process), produce results (output) and store the results for future use.

Statement of the Problem

The computer as productivity tool has great role in education. Computers include hardware and software, word processing functions, graphics, programmed instruction for problem solving, spreadsheets, databases, networking and telecommunications for today high technology developments as a reflective to education. The above discussion leads to the problem taken for this study can be stated as follows “Higher Secondary Students’ Attitude towards Technology”.

Objectives of this study

The present study has the following objectives:-
1. To find out the Higher Secondary Students’ level of Attitude towards Technology.
2. To find out whether there is any significant difference between Male and Female in their Attitude towards Technology.
3. To find out whether there is any significant difference between Arts and Science students in their Attitude towards Technology.
4. To find out whether there is any significant difference between rural and urban located students in their Attitude towards Technology.
5. To find out whether there is any significant difference in the Attitude towards Technology of Higher Secondary Students with respect to the type of Management of their Schools (Government/Aided/Private).
6. To find out whether there is any significant difference between Joint family and Nuclear family students with respect to their Attitude towards Technology.

**Hypotheses of this study**

Investigator of this study formulated the following null hypotheses on the basis of the objectives:

1. There is no significant difference between Male and Female students in their Attitude towards Technology.
2. There is no significant difference between Arts and Science students in their Attitude towards Technology.
3. There is no significant difference between rural and urban located students in their Attitude towards Technology.
4. There is no significant difference in the Attitude towards Technology of Higher Secondary Students with respect to the type of Management of their Schools (Government / Aided/Private).
5. There is no significant difference between Joint family and Nuclear family students with respect to their Attitude towards Technology.

**Method of Study**

In the present study, Normative Survey method is adopted.

**Sample of this Study**

Random sampling technique is used in the selection of the sample for 200 Higher Secondary Students, sample collected from Coimbatore District of Tamilnadu India.

**Tool used in this Study**

The tool used in this study was Test for Attitude towards Technology among School Students developed by Maxwell Benjamin, B (2012).

**Statistical techniques used**

The following statistical techniques are used to analyse the data collected from the sample

1. Descriptive analysis – Mean and standard Deviation
2. Differential analysis – ‘t’ test and ‘F’ test

**Descriptive analysis**

In order to find out the Attitude towards Technology of Higher Secondary School Students, the mean and S.D have been calculated.

**Table No. 1**

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Sub sample</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>99</td>
<td>73.01</td>
<td>16.113</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>101</td>
<td>70.42</td>
<td>14.498</td>
</tr>
<tr>
<td>Group</td>
<td>Arts</td>
<td>101</td>
<td>69.74</td>
<td>15.757</td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td>99</td>
<td>73.70</td>
<td>14.071</td>
</tr>
<tr>
<td>Locality</td>
<td>Rural</td>
<td>106</td>
<td>71.62</td>
<td>14.906</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>94</td>
<td>71.79</td>
<td>15.885</td>
</tr>
<tr>
<td></td>
<td>Govt.</td>
<td>57</td>
<td>69.75</td>
<td>16.558</td>
</tr>
<tr>
<td></td>
<td>Aided</td>
<td>79</td>
<td>73.14</td>
<td>15.580</td>
</tr>
<tr>
<td></td>
<td>Private</td>
<td>64</td>
<td>71.66</td>
<td>13.877</td>
</tr>
<tr>
<td>Type of Management</td>
<td>Joint</td>
<td>151</td>
<td>71.17</td>
<td>15.366</td>
</tr>
<tr>
<td></td>
<td>Nuclear</td>
<td>49</td>
<td>73.35</td>
<td>15.277</td>
</tr>
<tr>
<td>Type of Family</td>
<td>Entire</td>
<td>200</td>
<td>71.70</td>
<td>15.335</td>
</tr>
</tbody>
</table>

**Entire Sample**

IJIRMPS230114 Website: www.ijirmps.org Email: editor@ijirmps.org
It is evident from the above Table that the calculated mean score of entire sample indicates that the Higher Secondary School Students have high level of Attitude towards Technology.

**Gender**

The mean score of male and female Students’ Attitude towards Technology indicate that both male and female Students have high level of Attitude towards Technology. Further the mean scores indicate that male Students are having high level of Attitude towards Technology than female Students.

**Group**

The mean score of Arts and Science Students’ Attitude towards Technology indicate that both Arts and Science Students have high level of Attitude towards Technology. Further the mean scores indicate that Science Students are having high level of Attitude towards Technology than Arts Students.

**Locality**

The mean score of rural and urban school Students’ Attitude towards Technology indicate that both rural and urban school Students have high level of Attitude towards Technology. Further the mean scores indicate that Urban Students are having high level of Attitude towards Technology than Urban Students.

**Type of School**

The mean scores of Government, Private and aided school Students indicates that the Government, Private and Aided school Students have high level of Attitude towards Technology. Further the mean scores indicate that Aided school Students are having high level of Attitude towards Technology than Govt. and Private school Students.

**Family Type**

The mean score of nuclear and joint family Students’ Attitude towards Technology indicate that both nuclear and joint family Students have more level of Attitude towards Technology. Further the mean scores indicate that Nuclear family Students are having high level of Attitude towards Technology than Joint family Students.

**4.06. Differential Analysis**

**Null hypothesis**

There is no significant difference between Male and Female Students in their Attitude towards Technology.

In order to test the above Null hypothesis ‘t’ value is calculated.

**Table No. 2**

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Significance at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>99</td>
<td>73.01</td>
<td>16.113</td>
<td>1.19</td>
<td>Not significant</td>
</tr>
<tr>
<td>Female</td>
<td>101</td>
<td>70.42</td>
<td>14.498</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table, since the ‘t’ value is not significant at 0.05 level, the above Null hypothesis is accepted and it is concluded that there is no significant difference between Male and Female Students with respect to their Attitude towards Technology.

**Null hypothesis**

There is no significant difference between Arts and Science Students in their Attitude towards Technology.

In order to test the above Null hypothesis ‘t’ value is calculated.

**Table No. 3**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Significance at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts</td>
<td>101</td>
<td>69.74</td>
<td>15.757</td>
<td>1.835</td>
<td>Not significant</td>
</tr>
<tr>
<td>Science</td>
<td>99</td>
<td>73.70</td>
<td>14.704</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table, since the ‘t’ value is not significant at 0.05 level, the above Null hypothesis is accepted and it is concluded that there is no significant difference between Arts and Science Students with respect to their Attitude towards Technology.
Null hypothesis
There is no significant difference between rural and urban located Students in their Attitude towards Technology.

In order to test the above Null hypothesis ‘t’ value is calculated.

<table>
<thead>
<tr>
<th>Locality</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Significance at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>106</td>
<td>71.62</td>
<td>14.906</td>
<td>0.075</td>
<td>Not significant</td>
</tr>
<tr>
<td>Urban</td>
<td>94</td>
<td>71.79</td>
<td>15.885</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table, since the ‘t’ value is not significant at 0.05 level, the above Null hypothesis is accepted and it is concluded that there is no significant difference between rural and urban Students with respect to their Attitude towards Technology.

Null hypothesis
There is no significant difference in the Attitude towards Technology of Higher Secondary School Students with respect to the type of Management of their Schools (Government/Aided/Private).

In order to test the above Hypothesis ‘F’ value is calculated.

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>379.533</td>
<td>2</td>
<td>189.766</td>
<td>0.805</td>
<td>Not significant</td>
</tr>
<tr>
<td>Within Groups</td>
<td>46418.467</td>
<td>197</td>
<td>235.627</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46798.000</td>
<td>199</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table, since the ‘F’ value is not significant at 0.05 level, Hence the null hypothesis is accepted and it is concluded that there is no significant difference in the Attitude towards Technology of Higher Secondary School Students with respect to the type of Management of their Schools (Government/Aided/Private).

Null hypothesis
There is no significant difference between Joint family and Nuclear family Students with respect to their Attitude towards Technology.

In order to test the above Null hypothesis ‘t’ value is calculated.

<table>
<thead>
<tr>
<th>Type of family</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Significance at 0.05 level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint</td>
<td>151</td>
<td>71.17</td>
<td>15.366</td>
<td>0.867</td>
<td>Not significant</td>
</tr>
<tr>
<td>Nuclear</td>
<td>49</td>
<td>73.35</td>
<td>15.277</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the above table, since the ‘t’ value is not significant at 0.05 level, the Null hypothesis is accepted and it is concluded that there is no significant difference between Joint family and Nuclear family Students with respect to their Attitude towards Technology.

Important Findings
Following are the important findings arrived by the investigator based on the data collected and analyzed.

➢ The Higher Secondary School Students have high level of Attitude towards Technology.
➢ There is no significant difference between Male and Female Students with respect to their Attitude towards Technology.
➢ There is no significant difference between Arts and Science Students with respect to their Attitude towards Technology.
➢ There is no significant difference between rural and urban Students with respect to their Attitude towards Technology.
➢ There is no significant difference in the Attitude towards Technology of Higher Secondary School Students with respect to the type of Management of their Schools (Government/Aided/Private).
➢ There is no significant difference between Joint family and Nuclear family Students with respect to their Attitude towards Technology.

Recommendations

The present study gives a clear-cut view about the present position of Higher Secondary School Students’ Attitude towards Technology. Based on the important findings stated earlier the following recommendations are suggested.

- This study shows favourable level of Attitude towards Technology. This should be sustained.
- Since usage of Technology become a compulsory one in this contemporary era, attention should given in setting a positive attitude towards technology among the students, for this scientific events should be regularly organised for the students.
- Training on Innovative methods in teaching should be conducted to the Teachers of Higher Secondary schools.

Conclusion

The present study gives a clear-cut view about the present position of Higher Secondary School Students’ Attitude towards Technology. Irrespective of management of schools, scientific exhibitions, fares etc should be frequently conducted for the students. Teachers should intimate the usage of technology for every day life to set appositive attitude towards technology for the students.

References