# ATTITUDES OF SECONDARY SCHOOL STUDENTS TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY IN WARANGAL –TS

[1] K.Uma maheshwari, [2]Prof. D. Balaramulu,

[1]*Research Scholar, Department of Education- Osmania University-Hyderabad-T.S*
[2]*Professor,Department of Education- Osmania University-Hyderabad-T.S*

## ABSTRACT

*In this study, aimed at finding out the* attitudes of secondary school students towards information and communication technology in warangal, *the investigator found t*he Boys & Girls students differ significantly in respect of behaviour at 0.05 & 0.01 levels further they differ significantly in respect of feeling and enjoyment at 0.05 & 0.01 levels. The do not, however, differ significantly in respect of anxiety and importance at 0.05 & 0.01 levels. The Government School students do not differ significantly from Private school students in respect of the areas of anxiety, behaviour , importance, enjoyment at 0.05 & 0.01 levels. Further they differ significantly in respect of feelings at 0.05 & 0.01levels.The English medium students do not differ significantly from Telugu medium students in respect of the areas of anxiety, behaviour, importance, feelings at 0.05 & 0.01 levels. Further they differ significantly in respect of enjoyment at 0.05 level only. The self developed **standardized tool,** The researcher identified 5 areas about attitude scale i.e., anxiety, behaviour feelings, importance, enjoyment The above mentioned areas of attitudes in view, a pool of both towards ICT negative and Positive items were prepared . Items providing five point Scale for each item were followed by 5 point scale. There were 14 positive and 15 negative items. The findings indicate that the performance of mean differences of Boys and girls (3.31),Private and Government (1.28),English  Medium and Telugu Medium (2.27).

## 1. Introduction

The "Information and communication Technology (ICT) in School" was launched in December 2004 by the Dept. of Education. Government of India to provide opportunities to secondary stage students to develop ICT skills and also for ICT aided learning process. The scheme is a major catalyst to bridge the digital divide amongst students of various socio-economic and other geographical barriers.

In the beginning of the 21st century witnessed very exciting changes in the field of ICT. All concerned with education must realize that in the fast changing  rapidly as a consequence of ICT and will continue to change .ICT are electronic and or computerized devices associated human interactive materials that enable the use to employ them for a wide range of teaching and learning processes to personal use.

The new technologies are the instruments to change and innovation .The educational value of ICT was confirmed by variety of experiments. Students who use ICT achieve better results in communication, cooperation, and solving problems .ICT support the improvement of student's mental and creative activities. Using new technologies contributed to positive attitudes of students towards ICT.

**Attitude:** An attitude is a hypothetical construct that represents an individual's degree of like or dislike for an item. Attitudes are positive or negative views of a person, place, thing or

Event this is often is referred to as the attitude object. People can also be conflicted or ambivalent attitudes toward an object, meaning that they simultaneously possess both positive and negative attitudes toward the item in question.

### 1.1 Significance of the Study

The IT icon and Wipro Technologies CEO Azim Premji said "ICT is a effective tool that can strengthen our efforts universalizing the school education during conference for E-9 countries at Bangalore. The global economy is increasingly dependent on ICT and it is to be popularized in schools effectively to bridge the digital

divide between rich and poor, rural and urban population. ICT can enhance quality of education and competency level of the students and teachers.

**1.2 objectives of the study**
- ➢ To study whether there is any significant difference between Boys and Girls in the mean attitude scores on selected subgroups of ICT.
- ➢ To study whether there is any significant difference Between English and Telugu media students in the mean attitude scores on selected subgroups of ICT.
- ➢ To study whether there is any significant difference between Government and Private school students in the mean attitude scores on selected subgroups of ICT.

**1.3 Hypotheses of study:**
- ➢ There is no significant difference in the mean attitude Score of Boys and Girls of Secondary school towards ICT.
- ➢ There is no significant difference in the mean attitude score of English and Telugu media secondary school students towards ICT.
- ➢ There is no significant difference in the mean attitude score     private and Government secondary school students towards ICT.

**2. REVIEW OF LITERATURE**
**2.1 STUDIES TAKEN UP AT NATIONAL LEVEL:**
       Dr.Neelam Dhamija and Dr.Sushanta Kumar Panda (Haryana and Pathankot) studied Attitudes of Post Graduate students towards Internet.

       The sample of 200 Post Graduate students of Kurukshetra     University was undertaken. The survey method and random sampling technique was adopted. Variables like Gender, Rural, Urban, Arts, Science, Commerce groups. Mean, frequencies and t-ratio were used for the purpose of interpretation.
Main Findings of the study were:
- i.      i.There is no significant difference between the attitude of male and female Post graduate students towards the internet.
- ii.       There is no significant difference between the attitude of rural and urban Post graduate students towards the internet.
- iii.      There is no significant difference between the attitude of arts and science Post graduate students towards the internet.
- iv.      There is no significant difference between the attitude of science and commerce Post graduate students towards the internet.
- v.      There is no significant difference between the attitude of arts and commerce Post graduate students towards the internet.

**3. Research methodology:**
- ▪ The researcher identified 5 areas about attitude scale i.e., anxiety behavior feelings, importance, enjoyment The above mentioned areas of attitudes in view, a pool of both towards ICT negative and Positive items were prepared. Items providing five point Scale(Likert Scale) for each item were developed.

**3.1 Population – sample – sampling procedure:**
       The students who were studying class VIII during 2008-09 in the Secondary schools of Warangal town constitute the population. Because of the limited time, funds and permissions for taking data, it was decided to adapt sample survey for the present study. The list of Population members not available. Hence the exact size of the sample could not be decided. The random sampling technique could not be adopted. The clusters (Schools) were selected on the random basis. 15 students were selected from each school. However researcher could get 123 students from 8 different schools. The sample of 123 students analyzed based on different groups like Gender, medium of Instruction and Management of schools in which they were studying.

**3.2 Tools used:**
For this study the investigator herself developed a standardized tool Attitudes of secondary school students towards information and communication technology
- a. Computer Networks
- b. Windows O.S
- c. Desktop
- d. My computer
- e. Shutting down your computer
- f. Cell phone
- g. Internet & its applications

The reliability of the test was calculated by using Top 27% and Bottom 27% Technique as suggested by Garrette H.E Statistics in Psychology and education[9]. 1 mark awarded for each correct answer and Zero for each wrong answer on the ICT literacy test..

**3.3 Administration of the tool**:
. The investigator herself administered the tool in 8 schools. The selected pupil were given a copy of the questionnaire. After explaining the purpose of the study, they were asked to read the statements carefully and put a tick ( right) mark in the appropriate box. The investigator repeated each item both in Telugu and English medium and were given sufficient time to fill it up. Care was taken about covering all the variables like Boys and Girls students English and Telugu medium students and private and Government school students.

**4. Analysis and Interpretation of data:**
**4.1 Analysis of Personal data and graphical interpretation**
Distribution of Attitudes towards ICT items into selected subgroups.

| Sl. No. | Name of the area | No. of items | Percentages |
|---|---|---|---|
| 1 | **Anxiety** | 7 | 28% |
| 2 | Behavior | 5 | 20% |
| 3 | Importance | 4 | 16% |
| 4 | Feelings | 5 | 20% |
| 5 | Enjoyment | 4 | 16% |

From the above table Attitudes towards ICT test contains different subgroups like Anxiety (28%), Behavior (20%), Importance (16%), Feelings (20%) and Enjoyment (16%).

**4.2 There is no significant difference in the mean attitude Score of Boys and Girls of secondary school students towards ICT.**
*The Mean, S.D & t-values of Boys & Girls.*

| Variable | Anxiety | | | | Behavior | | | Importance | | | Feelings | | | Enjoyment | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | T | M | SD | T | M | SD | T | M | SD | T | M | SD | T |
| Boys | 58 | 26.31 | 4.59 | | 18.81 | 4.12 | | 17.0 | 2.94 | | 19.32 | 1.66 | | 16.22 | 2.75 | |
| | | | | 0.68 | | | 2.88 | | | 1.32 | | | 6.31 | | | 3.31 |
| Girls | 65 | 25.76 | 4.39 | | 16.85 | 3.51 | | 16.31 | 3.03 | | 15.85 | 3.59 | | 14.53 | 3.05 | |

The above table states that:
1) The difference in the mean attitude score of Boys & Girls students in the area of **anxiety** is not significant at 0.05 & 0.01 levels. Therefore $H_0$ is rejected at 0.05 & 0.01 levels.
2) The difference in the mean attitude score of Boys & Girls students in the area of **behavior** is significant at 0.05 & 0.01 levels. Therefore $H_0$ is rejected at 0.05 & 0.01 levels.
3) The difference in the mean attitude score of Boys & Girls students in the area of **importance** is not significant at 0.05 & 0.01 levels.
     Therefore Ho is accepted at 0.05 & 0.01 levels.
4) The difference n the mean attitude scores of Boys & Girls students in the area of **feelings** is significant at 0.05 & 0.01 levels.
     Therefore Ho is rejected at 0.05 & 0.01 levels.
5) The difference in the mean attitude score of Boys & Girls students in the area of **enjoyment** is significant at 0.05 & 0.01 levels.
     Therefore Ho is rejected at 0.05 & 0.01 levels.

**4.3 There is no significant difference in the mean attitude score of English and Telugu medium secondary school students towards ICT.**

**The Mean, S.D. & t- values of English and Telugu media School Students.**

| *Variable* | Anxiety | | | | Behavior | | | Importance | | | Feelings | | | Enjoyment | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | T | M | SD | T | M | SD | T | M | SD | T | M | SD | T |
| English | 61 | 25.03 | 4.46 | | 17.90 | 3.56 | | 16.42 | 2.87 | | 14.54 | 3.34 | | 15.03 | 2.90 | |
| | | | | 1.67 | | | 0.38 | | | 0.96 | | | 2.29 | | | 1.28 |
| Telugu | 62 | 26.27 | 3.79 | | 17.64 | 4.06 | | 16.91 | 3.04 | | 15.87 | 3.16 | | 15.70 | 3.10 | |

The above table states that

i)   The difference in the mean attitude score of English and Telugu media students in the area of **anxiety** is not significant at 0.05 & 0.01 levels.
Therefore Ho is accepted at 0.05 & 0.01 levels.

ii)  The difference in the mean attitude score of English and Telugu media students in the area of **behavior** is not significant at 0.05 & 0.01 levels.
There fore H0 is accepted at 0.05 & 0.01 levels.

iii) The difference in the mean attitude score of English and Telugu media students in the area of **importance** is not significant at 0.05 & 0.01 levels.
Therefore Ho is accepted at 0.05 & 0.01 levels.

iv)  The difference in the mean attitude score of English and Telugu media students in the area of **feeling** is significant at 0.05 levels.
Therefore H0 is rejected at only 0.05 levels.

v)   The difference in the mean attitude score of English and Telugu media students in the area of **enjoyment** is not significant at 0.05 & 0.01 levels.
Therefore Ho is accepted at 0.05 & 0.01 levels .

***4.4 There is no significant difference in the mean attitude score of Private and Government secondary school students towards ICT.***

**The Mean, S.D. & t- values of Private and Government school students**

| Variable | Anxiety | | | | Behavior | | | Importance | | | Feelings | | | Enjoyment | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | M | SD | T | M | SD | T | M | SD | T | M | SD | T | M | SD | T |
| Private | 60 | 26.25 | 4.72 | | 17.6 | 3.47 | | 17.1 | 2.88 | | 15.75 | 3.11 | | 15.91 | 2.59 | |
| | | | | 1.86 | | | 0.14 | | | 1.84 | | | 1.82 | | | 2.27 |
| Government | 63 | 24.85 | 3.53 | | 17.7 | 4.10 | | 16.12 | 3.02 | | 14.69 | 3.43 | | 14.75 | 3.23 | |

The above table states that,

i)   The difference in the mean attitude score of government and private school students in the area of **anxiety** is not significant at0.05 & 0.01 levels.
Therefore Ho is accepted at 0.05 & 0.01 levels.

ii)  The difference in the mean attitude score of government and private school students in the area of **behavior** is not significant at 0.05 & 0.01 levels.
Therefore Ho is accepted at 0.05 & 0.01 levels

iii) The difference in the mean attitude score of government and private school students in the area of **importance** is not significant at 0.05 & 0.01 levels.
Therefore Ho is accepted at 0.05 & 0.01 levels.

iv)  The difference in the mean attitude score of government and private school students in the area of **feelings** is significant at only 0.05 levels.
Therefore Ho is accepted at only 0.05 and 0.05 levels.

v)   The difference in the mean attitude score of government and private school students in the area of **enjoyment** is significant at only 0.05 levels.
Therefore Ho is rejected at only 0.05 levels

**5. RESULTS AND CONCLUSION:**

**5.1 Findings of the study**

- The Boys & Girls students differ significantly in respect of behavior at 0.05 & 0.01 levels. Further they differ significantly in respect of feeling and  enjoyment at 0.05 & 0.05 levels.
- They do not, however, differ significantly in respect of anxiety and importance at 0.05 & 0.01 levels. The Government School students do not differ significantly from Private school students in respect of the areas of anxiety behavior, importance, enjoyment at 0.05 & 0.01 levels. Further they differ significantly in respect of feelings at 0.05 & 0.01 levels.
- The English medium students do not differ significantly from Telugu medium students in respect of the areas of anxiety, behavior, importance, feelings at 0.05 & 0.01 levels. Further they differ significantly in respect of enjoyment at 0.05 levels only. For the purpose of objective based analysis mean, standard deviation t-ratio was used.

**5.2      Conclusions of the Study:**

1. There is no significant difference was found in the mean attitude score of Boys and Girls in the subgroups of anxiety and importance. But it shows there is significant difference mean score subgroups like behaviour, feelings and enjoyment.
2.  There is no significant difference was found in the mean attitude score of English and Telugu media in the subgroups of anxiety, behaviour, enjoyment and importance. But it shows there is significant difference mean score subgroup like feelings.
3. There is no significant difference was found in the mean attitude  score of Government and Private school students in the subgroups   of anxiety, behavior, feelings and importance. But it shows there is significant difference mean score subgroup like enjoyment.

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