



## **A STUDY OF ATTITUDE TOWARDS COMPUTER EDUCATION AMONG SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO GENDER, LOCALITY AND ACADEMIC STREAM**

**Hemant Lata Sharma**

Faculty of Education, M.D. University, Rohtak

**Jasbir Singh**

Department of Education, M. D. University, Rohtak

---

### ***Abstract***

---

*The purpose of the present study is to investigate the Attitude towards Computer Education of senior secondary school students in relation to Gender, Locality and Academic stream .Descriptive survey method was used. The sample was comprised of 200 senior secondary school students from District Rohtak of Haryana. The investigator adapted the Attitude towards Computer Education scale by Jahanur Ali (2001) for data collection. This scale has 28 items and standardized on under graduate students. But the investigator selected 20 items from this scale and then conducted the pilot study to know the reliability of this scale. The Cronbach Alpha value of CAS in current study is 0.831. Findings of the study showed no significant difference in the Attitude towards computer education of senior secondary school students in relation to Gender, Locality and Academic stream.*

---

**Keywords-***Attitude, Computer Education, Gender, Locality and Academic stream.*

### **1.0 INTRODUCTION**

#### **1.1 Theoretical Framework**

Computer, one of the most effective and powerful tool is advancing very fastly and affecting the life of everyone, whether literate or illiterate. The powerful impact of computer is visible in every aspect of our life. With the technological success and change,

computers have occupied a powerful place in society and education (Maddux, et.al, 1997). It has increased the human interaction with in educational context. Therefore, educational computing is an exciting new discipline whose effectiveness will depend on how today's teacher in training use computers in their own class room in future (Forcier, 1996).

## **1.2 Construct of Attitude towards Computer Education**

In general, to use computers in educational setting depends a lot on the computer related attitude of both teachers as well as students. According to Whitrow (1999), computer related attitude influence students desire to use computers, their desire to enrolling computer related subjects and courses and their choice of career path. Attitude towards Computer Education act as a key that affects students seeing the computer as a learning tool and that determines the possibility of computer being used in the future for learning or study (Teo, 2008). Studies conducted by Yencie (2003) and Cepni, Tas & Kose (2006) have shown that working with computers develop positive attitude towards computers. Reece and Gable (1982) in their study revealed that student's attitude towards computer is connected to their computer knowledge. Hamdi (1989) in his study found that many of the student's attitude about the use of computers in education change once students sit to computer learning and start performing through them by getting computerized tutorial

## **1.3 Purpose of the study**

The purpose of the study was to study the Attitude towards Computer Education of senior secondary school students. It was also investigated to what extent certain demographic variables i.e. Gender, Locality and Academic Stream effect Attitude towards Computer Education.

## **1.4 Objective of the study**

The study aims to achieve the following objectives.

1. To find out the difference on Gender basison Attitude towards Computer Education among senior secondary school students.
2. To find out the difference on Locality basis on Attitude towards Computer Education among senior secondary school students.
3. To find out the difference on Academic Stream basis on Attitude towards Computer Education among senior secondary school students.

## **1.5 Hypothesis**

For the purpose of the study, the following set of hypothesis were tested

**H1.** There is no significant Gender difference on the Attitude towards Computer Education among senior secondary school students.

**H2.** There is no significant Locality difference on the Attitude towards Computer Education among senior secondary school students.

**H3.** There is no significant Academic stream difference on the Attitude towards Computer Education among senior secondary school students.

## **2. Research Design and Methodology**

**2.1 Variables-** Attitude towards Computer Education was taken as dependent and Gender, Locality and Academic stream was taken as independent variable.

**2.2 Method-** Descriptive Survey Method was used.

**2.3 Sample-**In the present study; a random sample of 200 senior secondary school students from District Rohtak of Haryana state was taken.

**2.4 Research Instrument:** In the present study, following tool was used for data collection

**2.4.1 Attitude towards Computer Education scale by Jahanur Ali (2001)** - The scale has 28 items which was standardized on undergraduate students. For the present study, the scale was adapted and 20 items from this scale was selected. The total 20 items on a five point Likert scale are positively worded and given a score of '1','2','3','4', and '5' for strongly Disagree, Disagree ,Undecided, Agree, and Strongly Agree respectively. The total score range from 20 to 100 and higher score indicate more positive Attitude towards Computer Education. The Cronbach Alpha for the entire scale was 0.831.

### **2.4.2 Statistical Techniques**

Frequency, Percentage, Mean, S.D. and t-ratios were used to analyze the data.

## **3. Analysis and Interpretation**

### **3.1 Demographic characteristics of the sample.**

**Table 1.1 Demographic characteristics**

Variables	Categories	Frequency	Percentage
Gender	Boys	98	49%
	Girls	102	51%
	Rural	94	47%



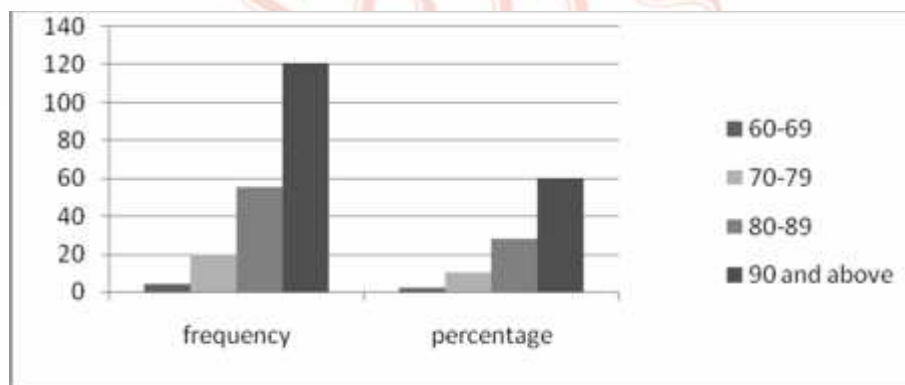
Locality	Urban	106	53%
Academic Stream	Arts	100	50%
	Commerce	100	50%

**3.2 Distribution of Attitude towards computer education scores among senior secondary school student**

**Table 1.2 Attitudes towards Computer Education**

Sr. No.	Score of students	Frequency	Percentage
1	90 and above	121	60%
2	80-89	055	28%
3	70-79	020	10%
4	60-69	004	2%
	Total	200	100%

From the Table 1.2 it is found that 60% of students scored 90 and above marks; 28% students scored 80 to 89 marks, where as 10% students scored between 70 to 79 marks and 2% students scored 60 to 69 marks. Thus most of the students i.e. 88%of the students scored above 80marks.From this, it is clear that most of the students in the present study have positive attitude towards computer education and it is evident from Figure 1.1 also.



**Figure 1.1**

### **3.3 Comparison of the score of Attitude towards Computer Education between Boys and Girls of senior secondary school.**

**Table 1.3 Group Statistics for Attitude towards Computer Education and Gender**

Sr. No.	Gender	N	Mean	S.D.	t-Ratio	Significance Level at 0.05
1	Boys	98	88.27	37.18	0.259	Not significant
2	Girls	102	89.89	55.17		

The descriptive statistics display N, Mean and Standard deviation for both Boys and Girls. Girls have a higher mean value as compared to boys for the attitude towards computer education. From the Table 1.3, it is clear that calculated t-value (0.259) is not significant at .05 levels. Therefore, we accept null hypothesis to be true since there exist no significant gender difference for attitude towards computer education. Therefore H<sub>1</sub>, "There is no significant gender difference in the Attitude towards Computer Education among senior secondary school students" is ACCEPTED.

### **3.4 Comparison of the score of Attitude towards Computer Education between Rural and Urban students of senior secondary school.**

**Table 1.4 Group Statistics for Attitude towards Computer Education and Locality**

Sr. No.	Locality	N	Mean	S.D.	t-Ratio	Significance Level at 0.05
1	Rural	94	89.07	44.11	0.121	Not significant
2	Urban	106	89.21	48.33		

The descriptive statistics display N, Mean and Standard deviation for both Rural and Urban. Urban students have a higher mean value as compared to Rural students for the attitude towards computer education. From the Table 1.4, it is clear that calculated t-value (0.121) is not significant at .05 levels. Therefore, we accept null hypothesis to be true since there exist no significant locality difference for attitude towards computer education. Therefore H<sub>2</sub>,

“There is no significant locality difference in the Attitude towards Computer Education among senior secondary school students” is ACCEPTED.

### **3.5 Comparison of the score of Attitude towards Computer Education between Arts and Commerce students of senior secondary school.**

**Table 1.5 Group Statistics for Attitude towards Computer Education and Academic Stream**

Sr. No.	Stream	N	Mean	S.D.	t-Ratio	Significance Level at 0.05
1	Arts	100	89.9	53.73	0.226	Not significant
2	Commerce	100	88.4	38.80		

The descriptive statistics display N, Mean and Standard deviation for both Arts and Commerce. Arts students have a higher mean value as compared to Commerce students for the attitude towards computer education. From the Table 1.5, it is clear that calculated t-value (0.226) is not significant at .05 levels. Therefore, we accept null hypothesis to be true since there exist no significant Academic stream difference for attitude towards computer education. Therefore H<sub>3</sub>, “There is no significant Academic stream difference in the Attitude towards Computer Education among senior secondary school students” is ACCEPTED.

### **Discussion of Results**

1 From the above findings, it has been found that there is no significant gender difference on the Attitude towards Computer Education among senior secondary school students. This shows that boys and girls have same perception about the Computer Education. This led credence to earlier findings of Rohner and Simonson (1981), Rosen, Sears and Weil (1987) Kotrlik, and Smith (1988), Todman and Lawrenson (1992), Nash and Moroz (1997).

2. Another finding of this study revealed that there is no significant locality difference on the Attitude towards Computer Education among senior secondary school students. It shows that locality (Rural and Urban) does not have any effect on the Attitude towards

Computer Education. Jomy Johnsoon (2009) also revealed no significance difference in the use of Computer between rural and urban students of higher secondary school.

3. Another finding of this study indicates that there is no significant Academic Stream difference on the Attitude towards Computer Education among senior secondary school students. On other hand, Adebowale, Adediwura, Bada, (2009) in his study found that Commercial students demonstrated better Attitude towards Computer than students of Arts, which is contradictory to our finding. The difference in the result may be due to the time factor. In present time, computer is taught as a subject even at the primary level which helps in developing attitude towards Computer Education in all the students even at the early stage.

#### **References:**

Adebowale, O.F, Adediwura, A.A., Bada, T. A. (2009), Correlates of Computer Attitude among Secondary School Students in Lagos State, Nigeria. *International Journal of Computing and ICT Research*, Vol. 3, No. 2, 20 - 30.

Çepni, S. Ta , E. and Köse, S. (2006). The effects of computer-assisted material on students' cognitive levels, misconceptions and attitudes towards science. *Computers & Education*, 46 (2), 192-205.

Forcier, C. Richard. (1996). "The Computer as a Productivity Tool in Education". Prentice-Hall, Inc. A Simon & Schuster Company in United States of America

Hamdi, Nargis. (1989). the effect of learning use style via computer in postgraduate students achievement and their attitudes towards computers in education. *Studies*, Vol.16, No.6, 81 - 95.

Jomy Johnsoon(2009). A Study on Use of Computer among Higher Secondary Students as Related with their Achievement in Computer Science, *Malaysian Journal of Education Technology*. Vol 9, 27-31

Kotrllk, J.W. and Smith, M.N. (1988). Computer Anxiety Levels of Vocational Agriculture Teachers. *Journal of Agricultural Education*.

Maddux, Cleborne, et. al. (1997). "Educational Computing Learning with Tomorrow's Technologies". A Viacom Company in United States of America.

Nash, J. &Moroz, P., (1997), 'An Examination of the Factor Structures of the Computer Attitude Scale' *Journal of Educational Computing Research*, 17(4), 341-356.



- Reece, M. and Gable, R. (1982). The Development and Validation of a Scale of General Attitudes toward Computers. *Educational and Psychological Scale*. 42, 913- 916.
- Rohner, D. J. & Simonson, M. R. (1981) Development of an index of computer anxiety. A paper presented at the Annual Convention of the Association of Educational Communications and Technology, Philadelphia, April (ERIC doc. no. 207 487)
- Rosen, L. D., Sears, D. C. & Weil, M. M. (1987) Computer phobia, *Behavior Research Methods, Instruments, & Computers*, 19, 167-179.
- Todman, J. and Lawrenson, H. (1992) Computer Anxiety in Primary Schoolchildren and University Students *British Educational Research Journal*, Vol. 18, No. 1, 63-72
- Teo, T. (2008). Assessing the computer attitudes of students: An Asian perspective. *Computers in Human Behavior*, 24 (4), 1634-1642
- Whitrow, T.J. (1999). Integrating Computers Across the Curriculum: Students' Computer-related Attitude Changes. Unpublished B.Ed Honours Thesis, School of Education, Flinders University, Adelaide.
- Yenice, N. (2003). Effects of computer-assisted science instruction on students attitudes towards science and computers. *The Turkish Online Journal of Educational Technology-TOJET*, 2(4). Retrieved from <http://www.tojet.net/articles/3114.htm>.