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# Assessment of the attitude of higher secondary students towards computer based classroom learning

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**Abstract**

**The usage of computers in the classroom has a good effect on students' learning, which in turn affects both their attitudes and their academic performance. In addition to this, students must learn good computer usage habits.Computer can improve students' attitudes and academic performance, but it's also crucial for them to be aware of computer ergonomics because using a computer in an unsuitable environment might put one's health at risk. The goal of the proposed study project is to examine college students' attitudes towards the use of computer at the time of study. With the change of time classroom should be equipped with technology. The present study investigated the attitude of higher secondary students towards the use of computer in classroom learning. The results says 50% students shows high attitude towards computer based education (A.T.C.B.E) whereas 9.3 % students shown extreme attitude. Again it is investigated that male shown slightly more mean (192.33) than female (190.64).**

## INTRODUCTION

The quality of education, which is the primary component of the educational system, is crucial to the growth of society. Society is changing as a result of computer technology. Computer education has a significant place in our curriculum. Therefore, at this level, computer-based teaching should be prioritized. Higher secondary students must have a positive attitude toward computer-based education because computers are vital learning tools that can help students learn more and develop their creativity. On the other hand, though, computer anxiety also has an impact on how people feel about computer-based learning and creativity.

The situation is changing quickly in the sphere of information technology (IT). To meet the demands of the modern world, technological innovation and progress force us to get familiar with computer application and operation. Students must therefore be taught about the needs of society and how to use computers and other information technology in their daily lives. College students are increasingly using computers to meet their needs, which is related to their attitude, success, and ergonomic awareness.The use of computers in education is growing steadily as it makes it easier for students to get the necessary materials and has become increasingly important for researchers and educators working in higher education to successfully complete their responsibilities.The other fact is prolonged computer use can result in a number of typical physical discomforts, including impaired vision, backaches, neck strain, and other issues with posture. To solve such issues, ergonomic awareness is what we need. It will eliminate any potential health risks from prolonged sitting.

## REVIEW OF LITERATURE

**RupaPaliwal and Deepak Paliwal (2021)** The district of Nainital's in-service and pre-service male and female teachers were the subjects of the study. Based on the results of the statistical analysis, it was determined that 78 percent of all the teachers in the sample had a generally positive attitude towards computers, while 17 percent had a neutral view, and only 5 percent had an unfavorable opinion. Pre-service teachers and in-service teachers have different attitudes. The generational divide is discovered to be the cause of this discrepancy because younger people are more technologically

exposed. Since female teachers are more amenable to accepting social changes, there is no difference in their opinions between those who are now teaching and those who are just beginning their careers.

Yadav, Saroj, and Singh, Shiv Veer (2021)The goal of the current study was to examine undergraduate students' attitudes regarding computers and social ability. Research of the descriptive survey kind was employed for this. 320 undergraduate students from Kanpur, Uttar Pradesh, both in the city and the countryside, were randomly chosen to provide data (U.P.). The chosen sample was given the Social Competence Scale and the Computer Attitude Scale. The findings indicated that undergraduate male students had higher levels of social competence than undergraduate female students. Undergraduate students from metropolitan areas had higher levels of social competence than those from rural areas. Undergraduate students from urban and rural areas showed significantly different attitudes regarding computers, although there was no discernible difference between male and female students.

**Hassan, Hamid, and Aziz, Shamsa (2021)** It is advised that all colleges and schools where computer science or studies are being offered to students provide all the necessary and internationally recommended physical facilities, along with well-qualified and properly certified teachers. This is because the research findings showed that adequate physical facilities and computer-graduate teachers have a positive impact on students' attitudes towards computers.

**Objective of the study:**

1. Study the attitude of higher secondary students towards computer based education.

**Hypothesis of the Study**

**H0**$_1$The higher secondary students have a positive attitude about education using computers.
**H0**$_2$ Gender has no discernible influence on how high school pupils feel about computer-based education.

## METHODOLOGY

The population of the current study consists of all upper secondary-level students from the various higher secondary schools in the Hazaribagh district, regardless of gender, stream, or school type.In the current study, the researcher must assess students' attitudes toward their creativity and computer phobia at the upper secondary level. Even if the study had been conducted on the entire population, it would not have been feasible to do so for a variety of reasons, such as time, student availability, etc. Therefore, the researcher will select 800 pupils from upper secondary levels at random. There were 268 students from a private school, 267 from a government school, and 265 from an assisted school. It is also divided into a 406 Science stream and a 394 Expressions stream. The example is additionally ordered as an orientation type. A total of 401 male and 399 female high school students were chosen. For the purpose of gathering data, a sample will be chosen from the Hazaribagh district.The sample size for the current study was chosen based on the methods of random sampling.The null hypotheses were tested at the 0.05 and 0.01 level of significance, and t-values or CR-values, F-tests, and product moment correlation methods were also computed.

## DATA COLLECTION AND ANALYSIS

**Table-1(A) Frequency Distribution Of Attitude Scores Of Higher Secondary Students Towards computer based education**

| Sr. No. | Percentageof A.T.C.B.EScore | Categories | Frequency | %of the Students |
|---|---|---|---|---|
| 1 | 81 %to above | ExtremelyHigh | 75 | 9.37% |
| 2 | 66 %to 80 % | High | 400 | 50.0% |
| 3 | 55 %to 65 % | AboveAverage | 270 | 33.75% |
| 4 | 49 %to 54 % | Average | 34 | 4.25% |
| 5 | 38 %to 48 % | BelowAverage | 21 | 2.65% |
| 6 | 30 %to 37 % | Low | 0 | 0 % |
| 7 | 29 %to below | ExtremelyLow | 0 | 0 % |
| **Total** | | | 800 | 100 % |

**Table-1(B) Higher secondary student's attitude towards computer based education**

| | N | Minimum | Maximum | Mean | Category |
|---|---|---|---|---|---|
| **Totalattitude** | 800 | 42.41 % | 94.72 % | 70.74% | High |

According to table 1(A) above, 9.37 percent of students received scores of 81 percent or higher, 50 percent received scores between 66 and 80 percent, 34.25 percent received scores between 55 and 65 percent, 4.5 percent received scores between 49 and 54 percent, and 2.65 percent received scores between 38 and 48 percent. According to standards, pupils are regarded to have an averagely positive attitude toward computer-based education if they scored over 49 percent.

The table makes it abundantly evident that 98.5 percent of respondents scored higher than 48 percent. Just 2.65 % of pupils received scores between 38 and 48, which is below average. According to table 1(B), the higher secondary students' overall attitude toward computer-based education is quite favorable, with a mean score of 70.74 percent. Additionally, it should be mentioned that every kid displayed a very positive attitude toward education that is computer-based. Thus, the first hypothesis is adopted.

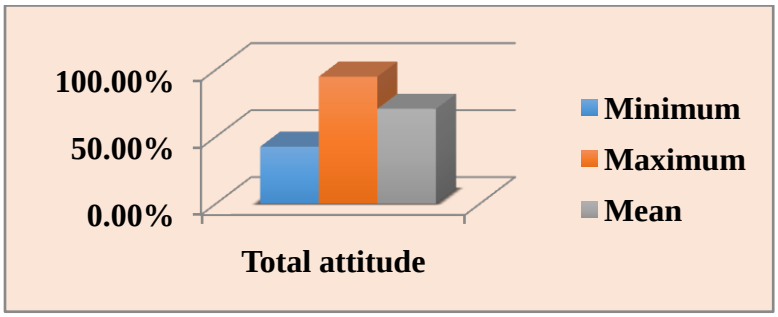


**Fig-1: higher secondary student's attitude towards computer based education**

**Table 2: T- test for showing the significant effect of gender on A.T.C.B.E of higher secondarystudents**

| Gender | N | Mean | S.D. | $S.E_D$ | t-value | Tablevalue | Significance |
|---|---|---|---|---|---|---|---|
| Male | 410 | 192.33 | 25.42 | 1.81 | 2.03 | t.05=1.94<br>t.01=2.58 | *Significant |
| Female | 390 | 190.64 | 21.73 | | | | |

***Significantat0.05levelofconfidence***

There are 410 male higher secondary pupils overall, according to Table 4.2. Male higher secondary students' mean and standard deviation are 192.33 and 25.42, respectively. Additionally, it reveals that there are 390 female higher secondary pupils overall. Female higher secondary students' mean and standard deviation are 190.64 and 21.73 respectively. The calculated t value for higher secondary pupils in both genders is 2.03 at the df = 798 level. However, the table value at level 0.05 is 1.94, and at level 0.01 at df = 798, it is 2.58.

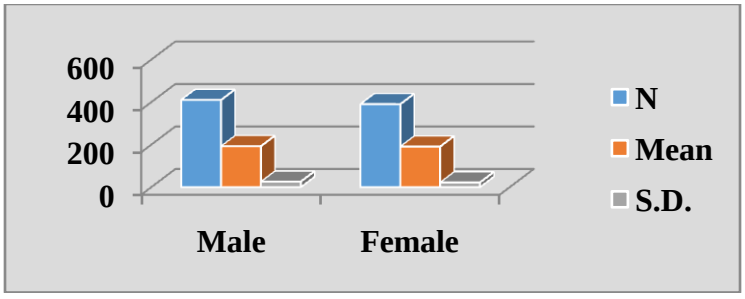


**Figure 2: t- test for showing the significant effect of gender on A.T.C.B.E of higher secondary students**

As a result, at the level of 0.05, the estimated value of t is higher than the table value (2.03>1.96). Thus, it is evident that there are major differences between upper secondary students of both sexes in terms of the A.T.C.B.E. Therefore, hypothesis no. 2 is disproved. Male higher secondary students have a more positive attitude toward computer-based education than female higher secondary students because the mean attitude of male higher secondary students is higher than that of female higher secondary students.

It is evident that male upper secondary students are more accepting of computer-based learning than female higher secondary students.

## CONCLUSION

The study and interpretation of the data at hand led to the following conclusions:

1. The higher secondary students have a highly favorable attitude toward computer-based education, as evidenced by their mean percentage score of 68.76%, which is highly favorable by standard measures.
2. There are notable differences in attitudes toward computer-based education between male and female high school students. Additionally, it should be mentioned that male high school students have a more positive attitude toward computer-based education than female students.

## REFERENCES

[1]. Andrew, M.Colman & Rod Corston (1996)-"Gender and Social Facilitation Effects on Computer Competence and Attitudes toward Computers", Journal Educational Computing Research,1996,Vol.14(2)PP-171-183

[2]. Coley, R., Cradler, J.& Engel,P.(2020). Computers and classrooms: The states of technology in U.S. Schools. Princeton, NJ: Educational Testing service, Policy Information centre,37.

[3]. Underwood, J.,& Brown,J.(Eds)(2020). Integrated Learning Systems: Potential in to practice. Oxford,UK: Heinemann /NCET.

[4]. Yixin, Zhang & Sue, Espinoza (2020);" Relationships Among Computer Self-Efficacy, Attitudes Toward Computers, and Desirability of Learning Computing Skills" *Journal of Researchon Computingin Education*, 1998, Volume30, Issue*4*,PP- 420-436

[5]. Ede, FredO. and Panigrahi, Bhagaban (2019)-"Attitudes toward Computers: A Comparison of Indian and Nigerian Students", African Economic and Business Review, Fall1998,Vol.1, Num2,PP-1-22

[6]. Zhang,Y.(2019).Relationships among compute rself-efficacy, attitudes toward computers, and desirability ofl earning computing skills. *Journal of ResearchonComputinginEducation*,*30*(4).

[7]. Ray, Charles M.; Sormunen, Carolee; Harris, Thomas M. (2019)- "Men's andWomen'sAttitudes towardComputerTechnology:AComparison."*OfficeSystemsResearchJournal*,Spt.1999,Vol.17(1)PP-1-8

[8]. Koedinger, K. and Anderson, J. (2019) PUMP algebra project: AI and high school math. Pittsburgh; PA:Carnegie Mellon university, Human computer interaction institute. Retrieved Feb. 2003 from http://act.psy.cmu.edu/awpt/awpthome. Html

[9]. Underwood, J., & Brown, J. (Eds) (2019). Integrated Learning Systems: Potential into practice. Oxford, UK:Heinemann/NCET.

[10]. Afzaal H Seyall; Md.Mahbubur Rahim, & Mohd.NoahAbd Rahman(2019) –" Computer attitudes of non-computing academics: a study of technical colleges in Brunei Darussalam." Information & Management, Volume37,Issue4,June2000,Pages 169–180

[11]. McKinnon,H.,Nolan,P.,& Sinclair,K,E.(2019).A longitudinal study of student attitudes toward computers: resolving an attitude decay paradox. *Journal of Research onComputinginEducation*,Vol.*32*(3).