Attitude towards Computer among Higher Secondary School Students in West Siang District of Arunachal Pradesh

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Abstract

The present study attempts to find out the attitude of higher secondary school students towards computer in West Siang District of Arunachal Pradesh. It was found that most of the students had neutral attitude towards computers. It was also found that students who were regular users of computers had more favourable attitudes towards computers compared to students who were not regular users; that students who used computers at home had more optimistic attitudes towards computers compared to students who never used computers at home; that students who spent more than three hours a week using computers had a more positive attitudes towards computers compared to those who spent less than three hours a week.

Key word: Attitude, Computer, Higher secondary, Arunachal Pradesh

In the digital age, computers have become essential tools in our daily lives. The use of computers has become increasingly important in higher secondary education, as it provides a means for students to access information, collaborate with peers, and engage in various learning activities.

As computers and technological applications spread more widely, many started to think about how essential it would be to have basic knowledge of computers. Many schools made the decision to buy computers in response to the growing government awareness of the importance of computer literacy.

Attitude towards computers refers to an individual's overall feelings or opinions about computers. Positive attitudes towards computers may lead to greater interest

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and engagement in computer-related tasks, while negative attitudes may result in disengagement and avoidance of computer-related tasks (Davis, 1989).

According to Smith, Caputi and Rawstorne(2000), the term "computer attitude" refers to an individual's evaluation of, or overall distaste for, computers and computer use.

Tamer and Halim (2013) found that 'A Positive attitude can accelerate learning, student achievement, and improve program effectiveness and negative attitudes hamper accelerated learning, student achievement, and teacher improvement as well as program effectiveness.

Whitrow (1999), indicated that students' perceptions of computers had a significant impact on their interest in learning about them, enrolling in classes on them, and ultimately choosing a career path that involves some aspect of computing.

Students' attitudes towards computers are affected by their familiarity and ease with the technology, as indicated by Levine and Donitsa-Schmidt in 1995.

Overall, attitude towards computers are important factors that can affect the performance and engagement of higher secondary school students in computer-related tasks. By understanding the factors that influence these concepts and implementing strategies to improve them, educators can help students become more confident and effective users of computers in their academic and professional lives.

Rationale of the study:

In today's digital age, where computers are omnipresent in nearly every aspect of life, understanding how students perceive and interact with these technological tools is essential. Students' attitudes towards computers can greatly influence their engagement and performance in academic settings. Positive attitudes can lead to higher motivation, increased participation, and enhanced learning outcomes. Conversely, negative attitudes or apprehensions about technology can hinder a student's educational experience. Therefore, studying students' attitudes can help educators tailor their teaching methods and curricula to better align with students' preferences, ultimately improving the quality of education. Another important rationale is that these attitudes play a pivotal role in shaping students' future prospects. In a world where digital skills are in high demand, a positive attitude toward computers can be a valuable asset. It can pave the way for successful integration into the workforce, as many careers and industries now require digital proficiency. This makes it vital to study students' attitude towards computers, as it can provide one with informed decisions about educational and vocational pathways. Furthermore, understanding students' attitudes toward

computers is crucial for shaping technology-related policies and initiatives in educational institutions. It can help in allocating resources for computer education, determining the need for technology-related support, and developing strategies to bridge the digital divide among students with differing attitudes and access to technology.

Objectives of the study:

1. To find out attitude towards computers among higher secondary school students in West Siang District of Arunachal Pradesh.
2. To compare the attitude towards computers among higher secondary students based on their computer usage.
3. To compare the attitude towards computer among higher secondary students based on their computer usage at home.
4. To compare the attitude towards computers among higher secondary students based on their weekly computer usage.

Null Hypotheses:

1. There is no significant difference in the attitude towards computers among higher secondary students based on their computer usage
2. There is no significant difference in the attitude towards computers among higher secondary students based on their computer usage at home
3. There is no significant difference in the attitude towards computers among higher secondary students based ontheir weekly computer usage

Methodology:

The descriptive survey method is a research approach that involves collecting data to provide a comprehensive description of a particular phenomenon or subject of interest. The present research also employs the descriptive survey method as it seeks to find out the attitude of higher secondary students towards computers and to compare them based on different variables.

Population and samples:

The population includes all higher secondary students in West Siang District of Arunachal Pradesh and the sample consists of 231 students with 118 male and 113 female students.

Tools employed:

For collecting data, the investigator employed the Computer Attitude Scale (2009) developed by Khatoon and Sharma.

Analysis and interpretation of findings

Analysis and interpretation of the present findings are done in accordance with the objectives stated as follows:

Objective 1: To find out attitude towards computers among higher secondary school students in West Siang District of Arunachal Pradesh

The following table shows the number and percentages of higher secondary students' level of attitude towards computer.

Table No.1

Table No.1 Attitude of higher secondary school students towards computer (N=231)

Attitude	No. of students	Percentages
Favourable attitude	40	17.32%
Neutral attitude	153	66.23%
Unfavourable attitude	38	16.45%

From table 1, we can see that majority (66.23%) of higher secondary students had neutral attitude towards computers. Students having favourable attitude (17.32%) are slightly more than students who had unfavourable attitude (16.45%) towards computer.

Objective – 2: To compare the attitude towards computers among higher secondary students based on their computer usage.

Attitude towards computer were compared between students who used computer (user) and students who never used computer (non-user). For this, the mean and standard deviation of the two groups were calculated and the mean difference was tested by applying 't' test and the details are presented in the following table - 2

Table – 2

Attitude towards computer between computer user students and computer non-user students

Groups	N	Mean	SD	MD	t- value	Sig level
Computer user	150	75.59	7.375	3.537	3.615	0.01
Computer non-user	81	72.05	6.548			

Table No - 2 shows that the 't' value for the significance of difference between computer user students and non-user students is 3.615. Since the calculated 't' value is greater than the criterion 't' value, therefore, it can be concluded that there is a significant difference in the attitude towards computer between computer user students and non-user students. Therefore, the null hypothesis No. 1 that assumes that there is no significant difference in the attitude towards computers among higher secondary students based on their computer usage is rejected, since the two groups differed significantly at .01 level of confidence. A comparison of their mean scores show that this difference is in favour of the computer user students, as their mean score is found to be higher than non-user students. The result shows that computer user students have more favourable attitudes towards computer than the computer non-user students.

Objective – 3: To compare the attitude towards computer among higher secondary students based on their computer usage at home.

Attitude towards computers were compared between students who used computer at home and students who do not use computer at home. For this, the mean and standard deviation of the two groups were calculated and the mean difference was tested by applying 't' test and the details are presented in the following table - 3

Table – 3

Attitude towards computer between computer user at home and computer non-user at home

Groups	N	Mean	SD	MD	t- value	Sig level
User at home	98	75.76	8.133	2.447	2.466	0.05
Non-user at home	133	73.31	6.419			

Table No - 3 reveals that the 't' value for the significance of difference between computer user at home and non-user at home is 2.466. Since the calculated 't' value is greater than the criterion 't' value at .05 level, therefore, it can be concluded that there is a significant difference in the attitude towards computer between user at home and

non-user at home. Therefore, the null hypothesis No. 2 that assumes there is no significant difference in the attitude towards computers among higher secondary students based on their computer usage at home is rejected, since the two groups differed significantly at .05 level of confidence. A comparison of their mean score shows that this difference is in favour of the user at home, as their mean score is found to be higher than the non-user at home. The result shows that students who used computer at home have more favourable attitudes towards computer compared to those students who do not use computer at home.

Objective – 4: To compare the attitude towards computers among higher secondary students based on their weekly computer usage.

Attitude towards computers were also compared between students who spends less than three hours a week using computer and those students who spends more than three hours a week using computer. For this, the mean and standard deviation of the two groups were calculated and the mean difference was tested by applying 't' test and the details are presented in the following table – 4

Table – 4

Attitude towards computer between students with shorter computer usage per week and students with longer computer usage per week.

Groups	N	Mean	SD	MD	t- value	Sig level
User for shorter hours a week	179	73.77	6.777	2.556	2.248	0.05
User for longer hours a week	52	76.33	8.579			

Looking at Table No – 4, one can see that the 't' value for the significance of difference in the attitude towards computer between students who dedicate less than three hours a week using computers and those who allocate more than three hours a week using computers is 2.248. Since the calculated 't' value is greater than the criterion 't' value, therefore, it can be concluded that there is a significant difference in the attitude towards computers between students with shorter computer usage and students with longer computer usage per week. Therefore, the null hypothesis No. 3 that assumes that there no significant differences difference in the attitude towards computers among higher secondary students based on their weekly computer usage is rejected, since the two groups differed significantly at .05 level of confidence. A comparison of their mean score shows that this difference is in favour of the students with longer computer usage per week, as their mean score is found to be higher than students with shorter

computer usage per week. The result shows that students who spend more than three hours a week using computer have higher attitude towards computers compared to students who spends less than three hours a week using computers.

Discussions on the findings of the present study:

1. It was found that majority (66.23%) of higher secondary students had a neutral attitude towards computers.A likely reason for the majority of higher secondary students having a neutral attitude towards computers could be a lack of exposure to or limited experience with computers. Many students might not have had sufficient opportunities to explore and engage with computers in ways that would lead to strongly positive or negative attitudes. In educational settings, computer usage and digital literacy programs may vary, and not all students may have access to computers at home. As a result, their interactions with computers might be limited to basic tasks or school-related activities, which may not be extensive enough to generate strong opinions. Also, some students may not have encountered specific computer applications or experiences that deeply resonate with their interests or needs. A neutral attitude may stem from a lack of exposure to the full range of computer applications and their potential benefits, leaving students in a position of neutrality due to a lack of strong positive or negative experiences.
2. The study also found that computer user students have a more favourable attitude towards computer than the computer non-user students. There can be many reasons for this finding. Computer users have practical, hands-on experience with computers, which allows them to explore various applications, software, and digital resources. This familiarity often leads to a positive attitude as they realize the practical benefits and versatility of computers. They also tend to have higher levels of digital literacy and are more adept at using digital tools, which can lead to increased confidence and comfort with technology. Students who use computers for educational purposes or skill development recognize the advantages of technology in achieving their goals, leading to a more favorable attitude.
3. The present research also found that students who use computers at home have a more favourable attitude towards computers compared to those students who do not use computers at home. The basis for such finding could be that students who have access to computers at home are exposed to technology on a regular basis. This exposure allows them to become more familiar with computers, besides, students who use computers at home have the opportunity to engage in hands-on learning. They can explore various applications, conduct research, and complete assignments, which can contribute to a favorable attitude as they see the practical benefits of computer use. Also, computers are essential for

communication and social interaction, especially through email, social media, and video conferencing. Students who use computers at home may have a more favorable attitude because of the connectivity and social opportunities they offer.

4. The result of the present study also shows that students who spend more than three hours a week using computer have higher attitude towards computers compared to students who spends less than three hours a week using computers. Some of the reason for this finding could be because spending more time using a computer allows students to gain a higher level of proficiency in computer-related tasks and software applications. This increased competence could lead to a more positive attitude as they feel more capable and in control. Moreover, spending more time on computers allows students to access educational resources, conduct in-depth research, and complete assignments more effectively which could have contributed to a positive attitude.

Suggestions for improving students' attitude towards computers:

1. Integrate technology and computers into the educational curriculum. Use interactive learning software, online resources, and digital assignments to make learning with computers engaging and relevant.
2. Implement digital literacy programs that teach students essential computer skills, such as using software, navigating the internet, and understanding digital safety and ethics.
3. Encourage practical, hands-on activities that allow students to explore computers and technology. Projects, coding exercises, and creative assignments can make computer use more enjoyable.
4. Showcase successful individuals who have advantageously used computer skills in their careers. Guest speakers or role models can inspire students to see the practical benefits of computer proficiency.
5. Be aware that students have different interests and learning styles. Offer choices in computer-related activities and assignments to cater to diverse preferences.
6. Promote collaborative projects and activities that require students to work together using computers. Collaborative learning can foster a sense of community and shared enthusiasm for technology.
7. Encourage students to use computers for creative expression, such as digital storytelling, multimedia presentations, or art projects. These activities can make computer use more enjoyable and fulfilling.

8. Highlight the real-world relevance of computer skills. Discuss how digital literacy and technology proficiency are crucial for future career opportunities and personal development.
9. Acknowledge and celebrate students' achievements and efforts in computer-related tasks. Positive reinforcement can boost confidence and encourage a more favorable attitude.
10. Educate students about responsible and ethical computer use. Teaching digital citizenship and online safety can instill a sense of responsibility and good attitudes towards technology.

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