



**RESEARCH ARTICLE**

**Attitude of Prospective Elementary Teachers towards Computer in Relation to their Academic Achievement**

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**ABSTRACT**

*The present study was conducted on 100 prospective elementary teachers to assess their attitude towards computer in relation to their academic achievement in the Sonapat district of Haryana. The data were collected and it was concluded that there was positive relationship between the attitude of prospective elementary teachers towards computer and their academic achievement. Female prospective elementary teachers showed positive relationship but male prospective elementary teachers showed negative relationship between their attitude towards computer and their academic achievement. It was also found that there was significant difference in the attitude of prospective elementary teachers towards computer and in their academic achievement on the basis of their gender*

**Key words:** Elementary teachers, Computer, Academic achievement

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**INTRODUCTION**

The presence of computer technology in schools has increased dramatically and predictions are that this trend will continue to accelerate. Technology usage in the classroom motivates students and teachers. It increases productivity and facilitates instructions. Computers have become a valuable tool in the schools. Students and teachers are making use of computers for making teaching-learning more effective. The teachers can make use of computers to make maximum result to their work. Computers help teachers keeping electronic copies of all their course materials, test, course syllabus and school report on computer disks. Computer technology can be used for assessment purposes at various levels ranging from the management of the assessment information to a fully automated assessment system.

Technology facilitates learning when it is used with effective instruction practice so that the students learn the content area to a deeper level. Educators use technology to create rich environments where student work and shows evidence of conceptual understanding beyond recall. Many researches have been conducted in this respect, some of them are: Rekas et. al. (2006) conducted a study on attitudes of design students towards computer usage in design and as a result students' attitudes towards the use of computer in design were found to be positive. A significant gender difference in attitudes towards computer was observed with males having more positive attitudes than females. As well as the students' attitude towards computer usage in design was highly related to their general attitudes towards computers but it was not correlated with their perception of instructors' attitude toward the use of computer in design. Murithi *et.al.* (2011) conducted a study that students had positive attitude towards the use of computer in relation to the computer studies curriculum. The study recommended that students should spend a lot of time in doing practice so as to master the contents of the computer studies curriculum. Kutluca (2011) conducted a study on computer usage and attitudes towards computers of prospective preschool teacher and his study determined that the prospective preschool teachers use computers more at home and internet cafes and their levels of using computer programme are intermediate or upper. It was also determined that there was a significant difference

according to the variables of taking computer experience and class of the scores of attitudes towards computers. Smith, *et.al.* (2012) conducted a study and found that young female students tend to have a higher affinity towards social technology aptitude than males while male tend to have a higher affinity toward technical technology aptitude than female students. However, no difference was found in attitudes of liking or confidence towards computer technology. Abedalziz *et.al.*(2013) measured attitudes towards computer and internet usage among postgraduate students in Malaysia and found that participants have a high level perception of the usefulness and their control of the computer and internet. They also found no significant difference between participants attitudes toward the internet and computer related with gender field of study ethnicity. They also found that the students attitudes towards computer and internet was age related. Alfred, Kuranchie, *et.al.* (2014) conducted a study and disclosed that the majority of the students did not have access to computers at home and those who had it for long. The study also revealed that the female students had more positive attitude towards computer education than their male counterparts. The study also recommended that the government policy on one laptop per child must be vigorously pursued to enable all senior high school students to have access to computers at home to improve their competencies and knowledge in information technology. Chaichan, *et.al.* (2014) conducted a study that the analysis of the study revealed gender difference in attitudes towards the use of computer technology in learning English. Female students showed high and positive attitudes towards the use of computer technologies in learning English than males. Kilic, *et.al.* (2015) vconducted a study and found that female students have a more positive attitude towards computer technology than male students . It can be concluded that correct and proper use of computer technologies can be accepted as a component of overcoming stress method. Kitchkarn Orachorn (2015) conducted a research to investigate attitudes toward using computer as a learning tool among undergraduate students in a private university and his research revealed that students had positive attitudes towards using computers as a learning tool. The factors of gender and experience of using computers were not found to affect students' attitudes while the factor of perceived abilities in using programs had an effect on their attitudes.

#### **JUSTIFICATION OF THE STUDY**

With the wide use of computers, equipping students with computer skills has become an important goal of school systems across our country. The development of these skills forms part of school curricula. Sophisticated use of computers in the classrooms can help teachers cover more complex subjects, devote more individual attention to students and allow students initiative. The use of computer in schools for educational purposes helps students in their academic achievements. Therefore the investigator is intended to study the attitude of prospective elementary teachers towards the use of computer in relation to their academic achievement.

#### **OBJECTIVES OF THE STUDY**

1. To study the relationship between the attitude scores and academic achievement of prospective elementary teachers.
2. To study the relationship between the attitude scores and academic achievement of male prospective elementary teachers.
3. To study the relationship between the attitude scores and academic achievement of female prospective elementary teachers.
4. To study the significant difference between male and female prospective elementary teachers in their attitude towards computer.
5. To study the significant difference between male and female prospective elementary teachers in their academic achievement.

### HYPOTHESES OF THE STUDY

1. There is no relationship between the attitude scores and academic achievement of prospective of prospective elementary teachers.
2. There is no relationship between the attitude scores and academic achievement of male prospective elementary teachers.
3. There is no relationship between the attitude scores and academic achievement of female prospective elementary teachers.
4. There is no significant difference between male and female prospective elementary teachers in their attitude towards computer.
5. There is no significant difference between male and female prospective elementary teachers in their academic achievement.

### METHODOLOGY

The investigator has adopted Descriptive Survey Method to study the present problem.

#### Sample of the Study and Sampling Technique:

The sample for the present study constituted a representative group of 100 prospective elementary teachers of district Sonapat in Haryana. It was drawn through 'Stratified Random Sampling Technique.'

#### Tools used for the Study:

The following tool has been used in the present investigation.

- Computer Attitude Scale (2009) by Dr.Tahira Khan and Monika Sharma.
- Last exam of scores were taken as their academic achievement.

#### Statistical Techniques Used:

In this study Means, SD, "t"-ratio and Product Moment Correlation were used for the analysis of data.

#### Analysis and Interpretation of Data:

In order to find out the attitude of the prospective elementary teachers towards computer data were collected and analyzed as follows:

**Table 1:** Coefficient of correlation between attitude scores and academic achievement of prospective elementary teachers

| Variables                                    | N   | Correlation(r) |
|----------------------------------------------|-----|----------------|
| Attitude Scores<br>&<br>Academic Achievement | 100 | 0.226          |

The first objective of the study was "To study the relationship between the attitude scores and academic achievement of prospective elementary teachers." It is clear from the table that coefficient of correlation is 0.226. It means that the two variables i.e. attitude scores and academic achievement are positively correlated with each other. This means that there is relationship between academic achievement of prospective elementary teachers and their attitude towards computer. Hence the null hypothesis "There is no relationship between the attitude scores and academic achievement of prospective of prospective elementary teachers." is rejected.

The second objective of the study was "To study the relationship between the attitude scores and academic achievement of male prospective elementary teachers." It is clear from the table that coefficient of correlation is -0.058. It means that the two variables i.e. attitude scores and academic achievement are negatively correlated with each other. This means that there is no relationship between academic achievement of prospective elementary teachers and their

attitude towards computer. Hence the null hypothesis “There is no relationship between the attitude scores and academic achievement of male prospective elementary teachers” is rejected.

**Table 2:** Coefficient of correlation between attitude scores and academic achievement of male prospective elementary teachers

| Variables                              | N  | Correlation (r) |
|----------------------------------------|----|-----------------|
| Attitude Scores & Academic Achievement | 44 | -0.058          |

**Table 3:** Coefficient of correlation between attitude scores and academic achievement of female prospective elementary teachers

| Variables                              | N  | Correlation (r) |
|----------------------------------------|----|-----------------|
| Attitude Scores & Academic Achievement | 56 | 0.39            |

The third objective of the study was “To study the relationship between the attitude scores and academic achievement of female prospective elementary teachers.” It is clear from the table that coefficient of correlation is 0.39. It means that the two variables i.e. attitude scores and academic achievement are positively correlated with each other. This means that there is relationship between academic achievement of prospective elementary teachers and their attitude towards computer. Hence the null hypothesis “There is no relationship between the attitude scores and academic achievement of female prospective elementary teachers.” is rejected.

**Table 4:** Significance of difference between male and female Prospective Elementary Teachers in their attitudes towards computer

| Attitude Towards Computer | N  | M     | SD   | SED  | t value |
|---------------------------|----|-------|------|------|---------|
| Males                     | 44 | 73.14 | 5.36 | 1.04 | 7.31*   |
| Females                   | 56 | 80.75 | 5.03 |      |         |

\*Significant at 0.1 level of significance

The fourth objective of the study was “To study the significant difference between male and female prospective elementary teachers in their attitude towards computer”. It is clear from the table that the obtained ‘t’ value is higher than the table value at 0.1 level of significance. So it is significant. Hence the null hypothesis, “There is no significant difference between male and female prospective elementary teachers in their attitude towards computer.” is rejected. From the above table it is also revealed that the mean score of male prospective elementary teachers is 73.14 and the mean score of females prospective elementary teachers is 80.75. This concludes that the females prospective elementary teachers have more favorable attitude towards computer than the males prospective elementary teachers.

**Table 5:** Significance of difference between male and female Prospective Elementary Teachers in their academic achievement

| Academic achievement | N  | M      | SD   | SED  | t value |
|----------------------|----|--------|------|------|---------|
| Male                 | 44 | 392.68 | 2.58 | 0.61 | 5.90*   |
| Female               | 56 | 396.28 | 3.62 |      |         |

\*Significant at 0.1 level of significance

The fifth objective of the study was “To study the significant difference between male and female prospective elementary teachers in their academic achievement”. It is clear from the table that the obtained ‘t’ value is higher than the table value at 0.1 level of significance. So it is significant. Hence the null hypothesis, “There is no significant difference between male and female prospective elementary teachers in their academic achievement.” is rejected. From the above table it is also revealed that the mean score of female prospective elementary teachers is 396.28 and the mean score of male prospective elementary teachers is 392.68. This concludes that the female prospective elementary teachers have more favorable attitude towards computer than the male prospective elementary teachers.

#### EDUCATIONAL IMPLICATIONS OF THE STUDY

The findings of the study revealed that the prospective elementary teachers showed positive relationship between their academic achievement and their attitude towards computer. Teaching and learning through computer helps in the academic achievements of both teachers and students. Knowledge of computer facilitates the teaching – learning process remarkably, thus, the institutions have to provide computer facilities to the future teachers so that they can teach to the students with the help of computers.

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