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# Attitude of senior secondary students towards e-learning

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## **ABSTRACT**

The central purpose of education is to help individuals make necessary adjustments towards a constant changing environment. e-learning is efficient as it eliminates distance and subsequent commutes. The different types of e-learning are based on, means of communication, schedule, e-learning class structure and technologies applied. Positive attitudes can help teachers to deal with the new situation with less stress and so enable them to take steps appropriately in tune with the need of the students and the institution. In this view point the researchers have undertaken this study. The present study was conducted in New Delhi and 800 senior secondary level school students were selected. The descriptive study method was adopted; stratified random sampling technique was used in selecting the samples. A well-designed and pre-tested questionnaire was used to collect primary data. The result revealed that Students' personal variables such as, gender, subject specialization, parents' education, parents' monthly income and school management are differed significantly among themselves. Suitable suggestions are given to improve students' attitude towards e-learning paradigm.

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#### Introduction

Education can be viewed in one sense as the transmission of values and accumulated knowledge of a society. It is a process by which individuals gain knowledge, develop attitudes and skills. Formal education is acquired through organized study or instruction in a school or in a college, while informal education acquired from day-to-day experiences or through relatively unplanned or undirected contracts with communication tools such as books, periodicals, motion pictures, radio, television and internet. The central purpose of education is to help individuals make necessary adjustments towards a constant changing environment. The computer age has changed the entire world, especially incorporates in the areas of self-motivation, communication, efficiency and technology. e-learning helps learners to overcome the limited social interactions and facilitates for self-motivation. e-learning is efficient as it eliminates distance and subsequent commutes. Physical distance is eliminated, because the e-learning content is designed with media that can be accessed from properly equipped computer terminals, and other means of internet accessible technology. elearning is flexible, used to describing a means of teaching through technology. The different types of e-learning are based on, means of communication, schedule, e-learning class structure and technologies applied.

#### Attitude

According to Anastasi (1976), an attitude is often defined as a tendency to react favourably or unfavourably towards a designated class of stimuli, such as a national or racial group, a custom or an institution. An attitude is a dispositional readiness to respond to certain situations, persons or objects. Attitude testing is essential to achieve a number of purposes such as, 'to what extent the necessary attitudes have been developed in the students', 'to enable the students to develop desirable attitudes', 'to help teachers in understand students' attitudes predispose the

person to action, 'to help the teacher in good teaching' and 'to help the students in their career plans'. In measuring attitudes of students, the scales which include various dimension namely, direction, degree and intensity.

## **Literature Review**

Sanjaya Mishra and Santosh Pand (2007) studied the development and factors of an instrument to measure students' attitude towards e-learning. His 12-item attitude towards elearning scale developed shows a high probability of differentiating between positive and negative attitudes towards Elina Us Chanor and Erkki Sutinen (2007) conducted a study on identifying students' attitudes on elearning, the effects of students learning skills and institutional support at University of Joensuu, Finland. The results revealed differences suggest that students with more learning skills see tutoring in an e-learning course more laborious but also most important than students with less learning skills. The results revealed also that the amount of students' training in e-learning is in correlations with their level of satisfaction towards the support by their institution; in universities where the amount and skills of students training was high, students' attitudes towards the support by their university were considerably more positive than in universities providing less training. Vasiliki Vrana (2005) conducted a study on analysizing academic staff and students' attitudes towards the adoption of e-learning. The study reveals the skills in e-learning and the attitude of faculty and students for e-learning and educational technologies. He found that the general positive opinion of e-learning and educational technologies, the recognition of difficulties by both groups in the use of e-learning and educational technologies and the expression of the need to be supported by the institution in their effort, the positive disposition of faculty to use educational technologies and the relatively good level of their aptitude in elearning, the fact the students appear more conservative towards

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e-learning and educational technologies. The fact that there are no patterns of correlation between variables. Faculty take firm positions because they have better knowledge, students on the other hand, lack the e-learning experience and may be less well-informed about e-learning and educational technologies and therefore they hesitate to express firm opinion.

## **Statement of the problem**

The traditional mode teaching institutions are under pressure to expand their media repository and also to achieve economies of scale. The environment has well-motivated students and they have been prepared to receive knowledge through e-learning process. In order to accelerate the acceptance of e-learning and implementation in institutions, wide adoption of e-learning in institutions, it is more important to understand attitude of students and accordingly plan for managing the change process. If students are not comfortable with the technology, the future generation may suffer leading to a poor reputation for the program and the institution. Positive attitudes can help students to deal with the new situation with lesser stress and so enable them to take steps appropriately in tune with the need of the society. In this view point the authors have set-forth the following objectives for this study.

## objective of the study

The main objective of this study is as,

> To study the senior secondary students' attitude towards elearning.

Null Hypothesis: There is no significant difference among students' attitude towards e-learning.

## Methodology

Since the main objective of this study is to know the attitude of students towards e-learning. Descriptive study method was adopted, which is to be appropriative for this study. Stratified random sampling technique was used in selecting the samples. The present study was conducted in New Delhi. Directorate of Education in New Delhi region is divided into 12 districts and 29 zones with hierarchy from district to zones. Each district consists of two or more zones, in it with district education officer as the head of education. From the list of 12 districts in the whole Union Territory of New Delhi, 2 districts were selected by the drawing of lots. There 184 schools running under government and private management including 132 schools under the first category and 52 under the second category. The schools in each category were first written in the alphabetical order and from the first 12 were chosen and 6 from the second category on the basis of random sampling technique, 800 senior secondary students were selected. A well-designed and pretested questionnaire was used to collect primary data. The inventory consists of 35 statements for students attitude by using five point scale 'Strongly Agree' (5), 'Agree' (4), 'Undecided' (3), 'Disagree'(2) and 'Strongly Disagree'(1).

#### Results and discussion

In order to test the hypothesis the mean scores secured by the students are compared and computed by using 'F' test and 't' test. To compare the attitude scores of students towards elearning, their personal characteristics such as, Gender, Subject Specialization, Parents Educational Qualifications, Parents Monthly Income and School Management are categorized scientifically and systematically. The proposed null hypothesis is sub-divided based on the students' personal variables and discussed as follow.

## Personal Variables and Attitude of Students towards elearning

The Table-1 shows the results of one-way analysis of variance and independent sample 't' test, Mean, Standard Deviations among the students based on their personal variables.

 $H_01a$ : There is no significant difference between Male and Female Students on their Attitude towards e-learning.

The students are categorized as 'male' and 'female' and their mean scores towards e-learning are 44.47 and 42.66 respectively. The mean scores show that students do vary in their attitude towards e-learning. The standard deviation values also show the similar proportion in difference between male and female. Further, obtained 't' value (1.913) is significant at the 0.05 level since the 'p' value is 0.056. Hence, the proposed hypothesis is not accepted.

 $\mathbf{H_01b}$ : There is no significant difference between *Arts* and *Science* subject opted students' *Attitude* towards e-learning.

The students are categorized according to their subject specialization as 'arts' and 'science' and their mean scores towards e-learning are 41.10 and 44.89 respectively. The mean scores show that Arts subject studying students have shown lesser level attitude than Science students towards e-learning. Further, obtained 't' value (3.815) is significant at the 0.01 level since the 'p' value is 0.00. Hence, the proposed hypothesis is not accepted.

 $H_01\hat{c}$ : There is no significant difference among the various students' attitude based on their parents educational qualification towards e-learning.

The students are categorized according to their parents educational qualifications as 'School level', 'College level' and 'Professional' and their mean scores towards e-learning are 37.41, 44.13 and 53.73 respectively. The mean scores show that students' parents educational qualification show difference in their attitude towards e-learning. Further, obtained 'F' value (110.330) is significant at the 0.01 level since the 'p' value is 0.00. Hence, the proposed hypothesis is not accepted.

 $H_01d$ : There is no significant difference among the students' Attitude towards e-learning according to their parents monthly income.

Table 1. Results of One-way Analysis of Variance and 't' test among the Students' Attitude towards e-learning

Personal Variables	Categories	N	Mean	S.D.	't'	<b>'р'</b>
Gender	Male	436	44.47	12.668	1.913	0.056
	Female	364	42.66	14.033		
Subject Specialization	Arts	262	41.10	12.394	3.815	0.00
	Science	538	44.89	13.599		
Parents Educational Qualification	School level	316	37.41	10.395	110.330#	0.00
	College level	303	44.13	11.433		
	Professional	181	53.73	14.463		
Parents Monthly Income	Upto Rs.10,000	178	29.56	3.609	388.905#	0.00
	Rs.10000- 20000	398	42.96	9.765		
	Above Rs.20000	224	56.08	11.918		
School Management	Government	553	41.54	12.670	6.877	0.001
	Private	247	48.36	13.583		

Source: Computed.

<sup># - &#</sup>x27;F' values

According to parents' monthly income students are categorized as. 'Upto Rs.10,000', 'Rs.10,000 – 20,000' and Above Rs.20,000' and their mean scores towards e-learning attitude are 29.56, 42.96 and 56.08, respectively. Parents' monthly income affects the attitude of students towards e-learning, which is very clear from the mean scores. Further, obtained 'F' value (388.905) is significant at the 0.01 level since the 'p' value is 0.00. Hence, the proposed hypothesis is not accepted.

**H**<sub>0</sub>**1e**: There is no significant difference between *private* and *government* school students' *Attitude* towards e-learning.

The obtained mean scores are 41.54 for government school students and 48.36 for private school students' attitude scores towards e-learning. The result indicates that the private school students are much interested towards e-learning. Further, obtained 't' value (6.877) is significant at the 0.01 level since the 'p' value is 0.001. Hence, the proposed hypothesis is not accepted.

## **Summary and conclusion**

The different types of e-learning are based on, means of communication, schedule, e-learning class structure and technologies applied. Positive attitudes can help teachers to deal with the new situation with less stress and so enable them to take steps appropriately in tune with the need of the students and the institution. In this view point the researchers have undertaken this study. The present study was conducted in New Delhi and 800 senior secondary level school students were selected. The result revealed that Students' personal variables categories such as, male (gender), science specialized students, professional educational qualification acquired parents children, high

monthly income earning parents children and private school management children are showing positive attitude than other category students. Attitude towards e-learning among the students are differed significantly according to their personal variables. Hence, the authors suggest to the policy makers and governments that they are intended to revamp the curriculum and to equip infrastructure according to the new paradigm. Further, orientation to the teachers on e-learning will realize them to accept the new methods of teaching.

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