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## Attitude of Adolescent Students towards E-Learning

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### Abstract

Now a days, due to growth of internet technology, E-Learning plays a significant role as a learning approach of educational institutions. Recent researches in the field of education have always worked on improvement of teaching learning process. Learner is the essence of whole teaching learning process. E-Learning is the use of technology to enable students to learn anytime and from anywhere. In this global world, technology is an important part of education system. We cannot exclude technology from education. In the area of education, E-learning has developed very fast due to the easy access of internet. E-Learning helps students for their progress. Today our education system has become more and more technological. So, students should have good technological knowledge. In the current situation, educators have been instrumental in finding new ways to ensure learning continues for children by

developing online and offline learning materials; learning about the working of video conferencing tools to be able to meet students regularly and conducting mental & social well-being sessions during the start of the school day and at closure. There are so many factors influencing the student's attitude towards E-Learning. Thus, in this study, the prime focus was to know the attitude of adolescent students towards the E-Learning. There are so many factors influencing the student's attitude towards E-Learning. Dimpal, Rani (2008) Attitude towards E-Learning (ATELS-RD) was used to find the attitude towards E-learning. Sample of 200 boys and girls adolescent students of government and private senior secondary schools was taken. The value of critical ratio (t-ratio) for attitude towards E-learning between boys and girls adolescent students of private

senior secondary schools comes out to be 3.09 which was significant. Since, the mean score on attitude towards E-Learning is higher for boys (214.43) as compared to girls (222.53), it may be inferred that girls adolescent students of private and government senior secondary school exhibit significantly higher attitude towards E-learning in comparison to the boys.

**Keywords: E-Learning, Attitude, Technology, Online, Adolescents**

## Introduction

E-Learning is a relatively new concept implying learning by means of digital media such as computers, web pages, video conferences systems and CD's. E-Learning covers a wide set of ICT technology based applications and processes, including computer-based learning, web-based learning, virtual classrooms and digital collaboration and networking. In recent years computers programs for E-Learning consisting of tools such as text, graphics, video, three dimensional object and animations have been developed. Though it is common insight that traditional learning is more efficient than E-Learning, the relevance of technology in Education has gained momentum and E-Learning has become a part of teaching in majority of the universities and educational institutions. It foster great interaction and collaboration in the students and it accommodates multiple learning activities. In the rapid moving world, we can sustain only by making ourselves capable of racing with the pace of the time and technology. E-Learning is the demand of the time and we have to prepare our young students to tackle all the challenges they face in the modern technological life. In the current situation, educators have been instrumental in finding new ways to ensure continue learning for children by developing online and offline learning materials; learning about the working of video conferencing tools to be able to meet students regularly and conducting mental & social well-being sessions during the school day. There are so many factors influencing the student's attitude towards E-Learning. Thus, in this study, the prime focus was to know the attitude of adolescent students towards the E-Learning. Several studies Clarke (2008), Al-Doub et.al. (2008), Ho, Li-An (2009), Aixia and Wang (2011), Alabdullaziz, Alanazy and Alyahya (2011), Liaw and Huang (2011), Williams et. al. (2011), Rhema and Miliszewska (2014), Mahmoud, Magarbi, Neama and Mohamed (2015), Glusac, et. al (2015), Mamattah (2016), Rizwana and Singh (2016), Ishmirekha, Handique; Konwar (2017) found that there was positive attitude towards E-Learning in relation to various demographical variables. While studies of Jasper et al. (2012), Ingec (2015), Pritilata, Pegu.Doley (2020)etc. found that there was no predictors of attitude towards E-learning in relation to various demographical variables.

In the era of science and technology, Information and Communication Technology (ICT) plays a significant role not only in classroom teaching but also in other fields. Now a days, due to growth of internet technology, E-Learning plays a significant role as a learning approach of educational institutions. Recent researches in the field of education have always worked on improvement of teaching learning process. Learner is the essence of whole teaching learning process. E-Learning is the use of technology to enable

students to learn anytime and from anywhere. In this global world, technology is an important part of education system. We cannot exclude technology from education. In the area of education, E- learning has developed very fast due to the easy access of internet. E-Learning helps students for their progress. Today our education system has become more and more technological. So, students should have good technological knowledge. In the current situation, educators have been instrumental in finding new ways to ensure learning continues for children by developing online and offline learning materials; learning about the working of video conferencing tools to be able to meet students regularly and conducting mental & social well-being sessions during the start of the school day and at closure. There are so many factors influencing the student's attitude towards E-Learning. The information is available on the tips of the fingers of students. Thus, in this study, the prime focus will be on to know the attitude of adolescent students towards the E-Learning.

## OBJECTIVES OF THE STUDY

The major objectives of the study were:

- 1.To study and compare attitude of boys and girls adolescent students of Government Senior Secondary schools towards E-Learning
- 2.To study and compare attitude of boys and girls adolescent students of Private Senior Secondary schools towards E-Learning.
- 3.To study and compare attitude of boys and girls adolescent students of Government and Private Senior Secondary schools towards E-learning.

## HYPOTHESES OF THE STUDY

The following hypotheses formulated for the present study were :-

1. There is no significant difference in attitude towards E- learning between boys and girls adolescent students of Government Senior Secondary schools.
2. There is no significant difference in attitude towards E- learning between boys and girls adolescent students of private Senior Secondary schools.
3. There is no significant difference in attitude towards E- learning between boys and girls adolescent students of Government and private Senior Secondary schools .

## DESIGN OF THE STUDY

The present investigation was designed to study the attitude of adolescent students towards E-Learning. A descriptive survey method of investigation was used for the present study.

## SAMPLE

Sample of 200 boys and girls adolescent students of government and private senior secondary schools of Amritsar city was taken for study.

## TOOL TO BE USED

Dimpal, Rani (2008) Attitude towards E-Learning (ATELS-RD).

## DELIMITATIONS OF THE STUDY

1. Sample of 200 boys and girls adolescent students of government and private senior secondary schools was taken.
2. Sample of 200 boys and girls of government and private secondary schools of Amritsar city was taken.

For the verification of first mentioned hypotheses, first of all raw scores obtained from Attitude Towards E-Learning (ATELS-RD) were calculated and tabulated for comparing the Attitude Towards E-Learning of boys and girls adolescent students of government senior secondary schools. Mean and Standard Deviation of Attitude Towards E-Learning scores of boys and girls were calculated. Further, t-test of significance for the mean was applied. The value of Mean, Standard Deviation, Standard Error and t-ratio of the Attitude Towards E-learning scores of boys and girls is shown in table.

**TABLE 4.1**

**MEAN, STANDARD DEVIATION, STANDARD ERROR AND CRITICAL RATIO (t-ratio) FOR THE MEASURES OF ATTITUDE TOWARDS E- LEARNING BETWEEN BOYS AND GIRLS ADOLESCENT STUDENTS OF GOVERNMENT SENIOR SECONDARY SCHOOLS.**

	MPLE(N)	MEAN(M)	STANDARD DEVIATION( $\sigma$ )	STANDARD ERROR OF MEAN (SEM)	CRITICAL RATIO (T-RATIO)
<b>BOYS</b>	50	208.60	14.672	2.075	<b>5.704 SIGNIFICANT</b>
<b>GIRLS</b>	50	225.62	15.163	2.144	

The results in table 4.1 clearly indicated that the value of critical ratio (t-ratio) for attitude towards E-learning between boys and girls adolescent students of government

Senior secondary schools comes out to be 5.704 which was significant. Since, the mean score on attitude towards E-Learning was higher for girls (225.62) as compared to boys (208.60), it may be inferred that girls adolescent students of government senior secondary school exhibit significantly higher attitude towards E-learning in comparison to the boys. Thus, the hypotheses that “there was no significant difference in attitude towards E-learning between boys and girls adolescent students of government senior secondary schools” was **rejected** at 0.01 level of significance.

For the verification of second hypotheses, Further, t-test of significance for the mean was applied. The values of Mean, Standard Deviation, Standard Error and t-ratio of the Attitude Towards E-learning scores of boys and girls is shown in table.

**TABLE 4.2**

**MEAN, STANDARD DEVIATION, STANDARD ERROR AND CRITICAL RATIO (t-ratio) FOR THE MEASURES OF ATTITUDE TOWARDS E- LEARNING BETWEEN BOYS AND GIRLS ADOLESCENT STUDENTS OF PRIVATE SENIOR SECONDARY SCHOOLS.**

	MPLE(N)	MEAN(M)	STANDARD DEVIATION ( $\sigma$ )	STANDARD ERROR OF MEAN (SEM)	CRITICAL RATIO (T-RATIO)
<b>BOYS</b>	50	220.26	18.502	2.617	<b>0.1991 NOT SIGNIFICANT</b>
<b>GIRLS</b>	50	219.44	22.485	3.180	

The results in table 4.2 clearly indicated that the value of critical ratio

(t-ratio) for attitude towards E-learning between boys and girls adolescent students of private senior secondary schools comes out to be 0.1991 which was not significant. Since, the mean score on attitude towards E-Learning is higher for boys (220.26) as compared to girls (219.44), it may be inferred that boys adolescent students of private senior secondary school exhibit significantly higher attitude towards E-learning in comparison to the girls. Thus, the hypotheses that “there was no significant difference in attitude towards E-learning between boys and girls adolescent students of private senior secondary schools” was **accepted** at 0.01 level of significance.

For the verification of third hypotheses, Further, t-test of significance for the mean was applied. The value of Mean, Standard Deviation, Standard Error and t-ratio of the Attitude Towards E-learning scores of boys and

girls is shown in table 4.3.

**TABLE 4.3**

**MEAN, STANDARD DEVIATION, STANDARD ERROR AND CRITICAL RATIO (t-ratio) FOR THE MEASURES OF ATTITUDE TOWARDS E- LEARNING BETWEEN BOYS AND GIRLS ADOLESCENT STUDENTS OF PRIVATE AND GOVERNMENT SENIOR SECONDARY SCHOOLS.**

	MPLE(N)	IEAN(M)	STANDARD DEVIATION ( $\sigma$ )	STANDARD ERROR OF MEAN (SEM)	CRITICALRATIO (T-RATIO)
<b>BOYS</b>	100	214.43	17.615	1.76	<b>3.09</b> <b>SIGNIFICANT</b>
<b>GIRLS</b>	100	222.53	19.3304	1.93304	

The results in table 4.3 clearly indicated that the value of critical ratio

(t-ratio) for attitude towards E-learning between boys and girls adolescent students of private senior secondary schools comes out to be 3.09 which was significant. Since, the mean score on attitude towards E-Learning was higher for boys (214.43) as compared to girls (222.53), it may be inferred that girls adolescent students of private and government senior secondary school exhibit significantly higher attitude towards E-learning in comparison to the boys. Thus, the hypotheses that “there was no significant difference in attitude towards E-learning between boys and girls adolescent students of private and government senior secondary schools” was **rejected** at 0.01 level of significance.

In the light of analysis and interpretation of results following findings and conclusions were drawn:-1. The value of critical ratio (t-ratio) for attitude towards E-learning between boys and girls adolescent students of government senior secondary schools comes out to be 5.704 which was significant. Since, the mean score on attitude towards E-Learning is higher for girls (225.62) as compared to boys (208.60), it may be inferred that girls adolescent students of government senior secondary school exhibit significantly higher attitude towards E-learning in comparison to the boys. 2.The value of critical ratio (t-ratio) for attitude towards E-learning between boys and girls adolescent students of private senior secondary schools comes out to be 0.1991 which is not significant. Since, the mean score on attitude towards E-Learning was higher for boys (220.26) as compared to girls (219.44), it may be inferred that boys adolescent students of private senior secondary school exhibit significantly higher attitude towards E-learning in comparison to the girls. 3.The

value of critical ratio (t-ratio) for attitude towards E-learning between boys and girls adolescent students of private senior secondary schools comes out to be 3.09 which was significant. Since, the mean score on attitude towards E-Learning is higher for boys (214.43) as compared to girls (222.53), it may be inferred that girls adolescent students of private and government senior secondary school exhibit significantly higher attitude towards E-learning in comparison to the boys.

The major Educational Implications which are thought to be essential for the development of attitude of adolescent students towards E-Learning were Workshops, training programmes for Senior Secondary School students should be organized for developing their attitude towards E-Learning. The teachers and parents should motivate the students to use E-Learning platforms. Parental and teachers support can play crucial role in keeping children motivated. A strong family network and a healthy environment at home and school helps in strengthening the ability to cope with problems. Findings of the study showed that male & female students differ in their attitude towards E-Learning. Hence, proper facilities should be arranged for them. Emphasis should be given on providing necessary IT facilities so that students may use more and more E-Learning material in their teaching-learning process. Curriculum framers can also incorporate some of the inspiring contents of E-Learning. Development of different kinds of software/mobile apps, available open to teachers and students to cater the local needs will be encouraged and facilitated. Special efforts should be made by the teachers in order to make the students interested in studies and to enable them to put on well with studies. Individual attention should be given and proper use of E-Learning should be made while teaching. Students, who are studying at high school level should be trained in using Computer and Internet. Each school should have E-Learning library along with internet facilities. E-Learning awareness, attitude, literacy programme have to be conducted periodically for the student community. Schools should provide learning material along with the e-Learning package, so that learners can be benefited by any time. The Government can encourage the teachers to develop effective materials in School education to cover the curriculum of School education. The present study opens up certain avenues for further research. Research can be conducted on large samples at state level, at different levels i.e. senior secondary level, graduation level and post-graduation level, on the the opinion of the teachers. Administrators, stakeholders and parents for developing the attitude towards E-Learning among students in this regard, Cross-country comparisons can also be made to assess attitude towards E-Learning, replicated in different types of Schools such as Corporation, Government, Matriculation and so on, to investigate student's attitude from other sides of cultural, social, educational issues.

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