



EXPLORING ADOLESCENT STUDENTS' ATTITUDE TOWARDS THE EFFECTIVENESS OF E-LEARNING IN THEIR ACADEMIC LIFE

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ABSTRACT The present study was intended to explore and compare the attitude of adolescent students towards the effectiveness of e-Learning in their academic life. Random sampling technique was used to draw the sample from various high schools of district Srinagar. The sample for the present study consisted of 100 adolescent students (50 male and 50 female). Data was collected by using Dimpal Rani's Attitude Towards e-Learning Scale. Statistical techniques of Mean, S.D. and t-test were used to analyse the data. The results indicated that adolescent students have favourable attitude towards e-Learning. Both male and female high school students have positive attitude towards e-Learning. The results of the study further revealed that there exists no significant difference between adolescent male and female students in their attitude towards e-Learning.

KEYWORDS : e-Learning, Adolescent students, High school, Male, Female.

INTRODUCTION

The role of technology in the educational sector is increasing at a phenomenal rate and has revolutionised traditional form of teaching-learning processes. Different types of technological tools have been developed to cater to the diverse backgrounds and demands of the learners. One of the important technological innovations is e-learning which may be described as the application of broadband internet and computers to assist teaching and learning (Bhatia, 2011). E-learning covers a wide set of applications and processes, such as Web-based learning, computer-based learning, virtual classrooms and digital collaboration. It includes delivering content via the internet, intranet/extranet (LAN/WAN), audio and video, satellite broadcast, interactive TV and CD-ROM. E-learning is the use of Information and Communication Technology e.g. Internet, Computer, Mobile phone, Television, Radio etc. to enhance teaching and learning activities (Oye, *et al.*, 2012). Masrom (2007) defines e-learning as "learning facilitated and supported through the utilization of information and communication technology (ICTs)". Its use in different educational processes is designed to improve the performance of learning (Al-Adwan and Smedley, 2012). The term e-learning covers a broad spectrum of pedagogical tools and approaches that continues to evolve to meet the needs of students and educators. E-Learning involves the use of computers and internet to aid in the learning process. The term E-Learning means Electronic Learning and it is basically the online delivery of information communication, training and learning. With the global communication and internet connection speed, web content has grown richer and more interactive for users (Aixia and Wang, 2011). E-learning allows you to learn anywhere and usually at any time, as long as you have a properly configured computer. Electronic learning can be CD-ROM-based, network-based; Intranet-based or Internet-based. It can include text, video, audio, animation and virtual environments. It can be a very rich learning experience that can even surpass the level of training you might experience in a crowded classroom. Essentially, e-learning is a way of teaching and learning quite distinct from traditional learning in that it uses network technologies to create, foster, deliver, and facilitate learning, anytime and anywhere. The benefits of e-learning have been discussed in many articles but fundamentally four main advantages have been identified: It gives learners the freedom to decide when lessons are taken, it isn't dependent on the time constraints of the instructor, it allows the freedom to express thoughts and ask questions, and it makes course materials available on demand. The advent of information technologies to universities has improved the teaching-learning process. Students can increase their learning skills using information technology. Newton (2003) pointed out that e-learning system has three main areas: improving access to education and training; enhancing the quality of teaching and learning; and the need for higher education institutions to maintain competitive advantage in a changing market place for students. E-learning is an also an effective way of eliminating the need for paper, thus saving trees. E-learning does not require paper and reduction in the usage of paper means more forests. By eliminating the use of paper, e-Learning helps save hundreds of millions of trees and increase the area under forest cover. Text books can be converted into e-books and since they remain online, can save on printing costs. E-learning reduces the need for transportation

considerably and this means lower CO₂ levels. One of the biggest advantages of the online learning is that education can be delivered anytime, anywhere.

Thus e-learning presents an opportunity to enhance learning. So, it is very important to design an efficient e-learning platform for teaching, learning resources and administration for higher education (Nelasco, *et al.* 2007; Drigas, *et al.* 2005; Zimmerman 2008). It may be used in many forms, i.e. as a supplement to traditional lectures, asynchronous distance learning, learning management systems or online learning (Concannon, Flynn & Campbell, 2005). The combination of traditional learning (face-to-face lectures) and web-based courses is known as "blended learning". This mixes the features of virtual and real environments to provide a holistic information production and enhance the students' learning. E-learning has started as a new paradigm which uses telecommunications and information technology in the education system. This paradigm makes the educational process easier by using the network. E-learning has made knowledge and learning possible anytime and anywhere by using the Internet and its networks like Wide Area Networks (WANs), or Local Area Networks (LANs) (Ajadi, Salawn & Adeoye, 2008). Therefore, E-learning proved that it can offer exceptional opportunities for providing learners with rich and educationally powerful learning experiences (Khirwadkar, Hewit & Chaudhari, 2013). It is with this back ground that the present investigator has made a humble attempt to study the attitude of adolescent students' towards the effectiveness of e-Learning in their academic life.

OBJECTIVES

1. To study the attitude of adolescent students towards e-learning benefits.
2. To compare the attitude of adolescent male and female students towards e-learning.
3. To compare adolescent male and female on interest dimension of e-learning.
4. To compare adolescent male and female students on usefulness dimension of e-learning.
5. To compare adolescent male and female students on ease dimension of e-learning.
6. To compare adolescent male and female students on confidence dimension e-learning.

HYPOTHESES

1. Adolescent male and female students do not differ significantly in their attitude towards e-learning.
2. Adolescent male and female students do not differ significantly on interest dimension of e-learning.
3. Adolescent male and female students do not differ significantly on usefulness dimension e-learning.
4. Adolescent male and female students do not differ significantly on ease dimension of e-learning.
5. Adolescent male and female students do not differ significantly on confidence dimension of e-learning.

SAMPLE

The sample for the present study consisted of 100 high school adolescent students (50 male and 50 female) pursuing their studies in various high schools of District Srinagar. Random sampling technique was used to draw the sample from various high schools of District Srinagar.

TOOLS USED

The data for the present study was collected with the help of Dimpal Rani's Attitude towards e-Learning Scale which assesses four dimensions i.e. e-learning interest, e-learning usefulness; ease of e-learning and e-learning confidence.

ANALYSIS AND INTERPRETATION

In order to achieve the objectives formulated for the present study, the data collected has been tabulated as under.

Table 1.1:- Mean comparison of Adolescent Male and Female students on composite score of Attitude towards e-Learning

Group	N	Mean	S. D	t -Value	Level of Significance
Male	50	210.42	8.61	0.97	Not Significant
Female	50	208.74	8.71		

Table 1.1 shows the mean comparison of adolescent male and female high school students on composite score of attitude towards e-Learning. The calculated t-value 0.97 is less than tabulated t-value at 0.05 level of significance, which shows that there is no significant difference between male and female students in their attitude towards e-Learning. Thus from the confirmation of the results from the above table, the hypothesis which reads as, "Adolescent Male and female students do not differ significantly in their attitude towards e-learning", stands accepted.

Table 1.2:- Mean comparison of Adolescent Male and Female students on interest dimension of e-Learning

Group	N	Mean	S. D	t -Value	Level of Significance
Male	50	42.32	2.70	0.74	Not Significant
Female	50	41.92	2.89		

Table 1.2 depicts the mean comparison of adolescent male and female students on interest dimension of e-Learning. The calculated t-value 0.74 is less than tabulated t-value at 0.05 level of significance, which shows that there exists no significant difference between male and female students on interest dimension of e-Learning. Thus from the confirmation of the results from the above table, the hypothesis which reads as, "Adolescent Male and female students do not differ significantly on interest dimension of e-learning", stands accepted.

Table 1.3:- Mean comparison of Adolescent Male and Female students on usefulness dimension e-Learning

Group	N	Mean	S. D	t -Value	Level of Significance
Male	50	88.66	7.67	0.86	Not Significant
Female	50	87.4	7.01		

Table 1.3 shows the mean comparison of male and female students on usefulness dimension of e-Learning. The calculated t-value 0.86 is less than tabulated t-value at 0.05 level of significance, which shows that there exists no significant difference between adolescent male and female high school students on usefulness dimension of e-Learning. Thus from the confirmation of the results from the above table, the hypothesis which reads as, "Adolescent Male and female students do not differ significantly on usefulness dimension of e-learning", stands accepted.

Table 1.4:- Mean comparison of Adolescent Male and Female students on ease dimension of e-Learning

Group	N	Mean	S. D	t -Value	Level of Significance
Male	50	45.24	2.65	1.04	Not Significant
Female	50	45.76	2.36		

Table 1.4 shows the mean comparison of adolescent male and female high school students on ease dimension of e-Learning. The calculated t-value 1.04 is less than tabulated t-value at 0.05 level of significance, which shows that there exists no significant difference between male and female high school students on ease dimension of e-Learning. Thus from the confirmation of the results from the above table, the hypothesis which reads as, "Adolescent Male and female students do not differ significantly on ease dimension of e-learning", stands accepted.

Table 1.5:- Mean comparison of Adolescent Male and Female students on confidence dimension e-Learning

Group	N	Mean	S. D	t -Value	Level of Significance
Male	50	34.1	2.11	1.08	Not Significant
Female	50	33.7	1.83		

Table 1.5 depicts the mean comparison of adolescent male and female students on confidence dimension of e-Learning. The calculated t-value 1.08 is less than tabulated t-value at 0.05 level of significance, which shows that there exists no significant difference between adolescent male and female high school students on confidence dimension of e-Learning. Thus from the confirmation of the results from the above table, the hypothesis which reads as, "Adolescent Male and female students do not differ significantly on confidence dimension of e-learning", stands accepted.

FINDINGS

- It has been found that adolescent male and female high school students have favourable attitude towards e-Learning.
- No significant difference has been found between adolescent male and female high school students in their attitude towards e-Learning
- No significant difference has been found between adolescent male and female students on interest dimension of e-Learning as both groups agree that e-Learning is more interesting than classroom teaching; getting information through e-Learning is enjoyable.
- No significant difference has been found between adolescent male and female high school students on usefulness dimension of e-Learning as both groups agree that learning becomes fun through e-Learning, e-Learning keeps them up to date and helps them in assignments, and projects.
- No significant difference has been found between adolescent male and female students on ease dimension of e-Learning as both groups agree that e-Learning is boon for students and is easy to use; difficult concepts can be easily comprehended by using internet.
- No significant difference has been found between adolescent male and female high school students on confidence dimension of e-Learning as both groups agree that e-Learning improve performance and makes them more confident and competent.

INFERENTIAL SUGGESTIONS

E-Learning is an approach to facilitate and enhance learning using information and communication technologies. It covers a wide set of applications and processes, such as web - based learning, computer based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, Intranet (Local Area Network), extranet (Wide Area Network), audio and video tapes; satellite broadcast, internet TV, CD-ROM, and more. E-learning makes new knowledge and skills available immediately and reduces the learning time required to master even the most complicated topics. E-learning is the changing trend of education. The modern technologies particularly the Internet, made education no longer limited to the four walls of the classroom. Learning is self-paced and gives students a chance to speed up or slow down as necessary allowing them to choose content appropriate to their differing interests, needs and skill levels. It is unbound by time and place. Travel time and associated costs are reduced or eliminated and it also has positive impact on environment. E-learning is beneficial for environment as it is an effective way of eliminating the need for paper, thus saving trees; learners need not to travel to attend instructional programmes, and the reduction in travel goes a long way in reducing the emission of carbon-dioxide. Reading materials are online and can be downloaded at anytime. Some learners are better prepared than others to use e-learning technologies to facilitate their educational progress; students' awareness of computer and internet skills seems to be a crucial factor in accounting for the success of e-learning applications in education. E-Learning is an experience with new communication technologies hence, needs mastery of new knowledge and skills. Therefore, students should be taught and encouraged to try e-learning strategies. There must be scope for knowing and making use of modern technologies, e-contents, e-books etc. There must be appropriate technical infrastructure in place with learners being fairly proficient with computers to benefit from online learning opportunities.

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