

Learners' Attitude and Preference towards e-Learning: An Empirical Study

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Abstract

The rapid advancement in technology remains as a predominant factor for influencing E-learning. The advent of E-learning platforms and modules which is benefitting different sectors is amazing that could only be dreamt a decade ago. The present study was undertaken with the core objective to assess learners' attitude and preference towards E-learning. The study has been conducted among 125 respondents of Vellalar College for Women (Autonomous), of self financing wing with the students who have completed minimum of two E-learning modules and underwent assessment. The study is descriptive in nature and ensures random sampling method for data collection. A well designed questionnaire is prepared and data have been collected through Google forms. The tools employed are chi-square analysis, one way Analysis of Variance and Henry Garrett ranking technique. The result of chi square test shows that there exist significant association between interest in E-learning and learners' attitude and preference towards E-learning. The study concluded by recommending the student community to adopt blended learning system for their personal growth and development.

Keywords: Attitude, Blended learning, E-learning and Preference

1. Introduction

E-learning uses interactive web based platform to facilitate teaching and learning process. It delivers learning resources to the learners scattered in different geographical region in a minimum span of time. It veers traditional teaching pedagogy i.e. physical teacher-student environment for disseminating information. E-learning is changing the educational perspective and provides hybrid learning experience of combining face-to-face traditional classroom learning with internet oriented learning. Emergence of rapid fire technology have broaden the reachability and made the education system more interesting, flexible, consistent, convenient, cost-effective, repeatable and accessible for everyone. Broadband and unlimited internet connectivity is an added advantage to incorporate Learning Management

System (LMS) which provides various features like registration of courses, distribution of learning material, tracking learner's progress, conducting tests, interaction between teacher and learner and other educational needs to support teaching and learning process. In this aspect, the present study attempts to examine learner's attitude and preference towards E-learning by the college students in Erode city.

2. Review of Literature

Gunasekaran et al.¹ investigated on E-learning applications and found its key role in various fields for its wider flexibility and feasibility among people in the present scenario. Sumit Goyal² inferred that E-learning to be the most trending mode of literacy which would otherwise take over the traditional mode of teaching

culture. Meaghan Lister³ found that there were four main factors while designing E-learning and on-line courses which include structure of the course, presentation of the content, interactive and collaborative action and prompt response. Samir Abou El-Seoud et al.⁴ assessed the E-learning impact in advanced learning in Egyptian University. It was revealed that E-learning module such as Moodle encouraged learners towards new learning methodology. Anna Sun and Xiu Fang Chen⁵ found that to make online education effective, both learners and instructors should create learning community, good course material, entertain two-way communication and mastered mentors for the program. Mousazadesh Somayeh et al.⁶ reviewed E-learning impact in Tehran and concluded that government must provide adequate high-speed internet lines and support for the promotion of E-learning for the future prospects. Samir Thakkar and Hiren Joshi⁷ noted that the students' attitude towards E-learning was not affected by difference in gender, locality or social category of the student.

3. Objectives

- To study the factors determining E-learning.
- To assess the learners' attitude and preference towards E-learning.
- To analyze the problems faced by E-learners in E-learning.

4. Research Methodology

This study is systematically and scientifically organized. It describes learners' attitude and preference towards E-learning and hence the nature of research is descriptive. For the present enquiry, population comprise of students

of Vellalar College for Women (Autonomous), Erode of self financing wing who have completed minimum of two E-learning modules and underwent assessment. To ensure reliability, nearly seventy percentage of the population are considered and the sample size being 125 respondents. Hence, this research uses simple random sampling method for collecting the data. In order to obtain primary data from the respondents, structured questionnaire has been prepared and data are collected through Google forms during the month of June 2019. The secondary data has been collected from all associated sources such as books, journals and internet web sources. The collected data are analyzed by employing scientific tools such as chi-square analysis, one way Analysis of Variance and Henry Garrett ranking technique. The Cronbach's alpha examines the reliability of measures. Hence, this study undertakes reliability test for the E-learners' attitude and preference and the resultant outcome is given in Table 1.

From the above Table 1, it is clear that the study has good reliability as the value of Cronbach's Alpha is above 0.7 and hence, the research can be taken for further research.

5. Formulation of Hypotheses

H_{01} : Interest in E-learning and attitude does not influence preference towards E-learning.

H_{02} : There is no significant relationship between future ambition and attitude, preference towards E-learning.

6. Analysis and Discussion

The findings are summarized as below:

Table 1. Reliability test

Sl.No.	Variable	Cronbach's Alpha (α)
1	Learners' attitude and preference towards E-learning	0.770

Source: Computed

6.1 Details of Study Factors of the Respondents

The respondents considered for the study belong to various socio-economic background. The Table 2 depicts

the responses of independent variable.

Table 2 indicates that a maximum of 89% were pursuing under graduation, 41% belong to B.Sc. (CS), 81% were from III year, 58% preferred modern learning (internet based ICT education) system, 58% were with

Table 2. Study factors

Factors	Classification	Respondents	Percentage
Programme of study	Under Graduation	111	89
	Post Graduation	14	11
	Total	125	100
Course of study	B.Sc. (CS)	51	41
	B.Sc. (IT)	33	26
	B.Sc. (CT)	16	13
	B.C.A	12	10
	M.C.A	13	10
	Total	125	100
Year of study	I year	8	6
	II year	16	13
	III year	101	81
	Total	125	100
Preferred learning methodology	Traditional Learning (Plug and Play)	52	42
	Modern Learning (Internet based/ ICT education)	73	58
	Total	125	100
Future ambition	To seek job	72	58
	To be self-employed	40	32
	To do nothing	13	10
	Total	125	100

Table 2 Continued

Interest in E-learning	Self-concern	99	79
	Compulsion	26	21
	Total	125	100
Preferred E-learning platform	Swayam	78	62
	MOOCs	13	10
	Code academy	21	17
	Others	13	10
	Total	125	100
Time spent per day in E-learning	Less than 1 hour	87	70
	1-3 hours	32	26
	More than 3 hours	6	4
	Total	125	100

Source: Computed

future ambition to seek job, 79% had self concern towards E-learning, 62% preferred Swayam E-learning platform and 70% spend less than one hour per day for E-learning.

6.2 Factors Influencing E-learning

The Table 3 examines the factors that influence E-learning system among the respondents by using simple percentage analysis.

Table 3. Factors Influence in E-learning

Factors	No. of Respondents	Percentage
Highly expertise	27	22
Consistency in course content	32	26
Cost effectiveness	15	12
Flexibility in learning resources	38	30
Wide reach	13	10
Total	125	100

Source: Computed

Table 3 shows that maximum of 30% felt flexibility as the factor that influenced them in E-learning, 26% opined there is consistency in course contents, 22% opined it to be highly expertise, 12% opined it as cost effective and 10% opined that it has wide reach.

6.3 Learners' Attitudes and Preferences towards E-learning

The various statements in Table 4, shows the learners' attitudes and preferences towards E-learning and is analyzed with simple percentage analysis.

The Table 4 depicts that the majority of 50% of the respondents strongly agreed that they felt confident in using computer, 37% agree that they prefer ICT for education purpose, 31% agreed that it provides opportunity to explore new insight, 33% agree that it

improves their learning perspective, 34% agree that it is more convenient and user friendly, 39% strongly agree that it enriches the quality of learning, 41% strongly agree that it gives user contentment and 38% strongly agree that learners are passionate in exploring E-learning process.

6.3.1 Association between Learners' Attitudes and Preferences towards E-learning

Association between factors is measured with eight statements and the responses are graded with Likert's five point scaling technique with 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree. Learners' attitudes and preferences towards E-learning are categorized into three levels based on mean and standard deviation score. The results of Table 5 are as follows.

Table 4. Learners' attitudes and preferences towards E-learning

S.No.	Statements	SA	A	N	DA	SDA
1	Confidence level in using computers	63 (50%)	24 (19%)	24 (19%)	7 (6%)	7 (6%)
2	Prefer ICT for education purpose	38 (30%)	46 (37%)	28 (22%)	6 (5%)	7 (6%)
3	Provides opportunity to explore new insight	38 (30%)	39 (31%)	31 (25%)	7 (6%)	10 (8%)
4	Improves learning perspective	40 (32%)	41 (33%)	26 (21%)	10 (8%)	8 (6%)
5	More convenient and user friendly	36 (29%)	42 (34%)	28 (22%)	8 (6%)	11 (9%)
6	Enriches the quality of learning	49 (39%)	21 (17%)	32 (26%)	14 (11%)	9 (7%)
7	Gives user contentment	51 (41%)	33 (26%)	27 (22%)	8 (6%)	6 (5%)
8	Passionate in exploring E-learning process	48 (38%)	30 (24%)	28 (23%)	9 (7%)	10 (8%)

(SA-Strongly Agree, A-Agree, N-Neutral, DA-Disagree, SDA-Strongly Disagree)

Note: Number represents the frequency and number in bracket represent percentage

Source: Computed

Table 5. Learners' attitudes and preferences towards E-learning

Category	Range	No. of Respondents	Percentage (%)
Low	≤ 11.7	29	23.2
Medium	11.7- 23.5	73	58.4
High	>23.5	23	18.4
Total		125	100

Source: Computed

It is understood from Table 5 that,

- Low level impact – 29 respondents (≤ 11.7 range).
- Medium level impact -73 respondents (11.7-23.5 range).
- High level impact - 23 respondents (>23.5).

With the intention to assess the influence of interest on E-learning and learners' attitudes on preferences towards E-learning, a two-way table is presented and the results are portrayed in Table 6.

From the Table 6, it was observed that the percentage of high level of learners' attitude and preference towards E-learning is the highest (87.0%) among self

concern learning and same is the lowest (13.0%) among compulsion learning. The percentage of medium level of learners' attitude and preference towards E-learning is the highest (83.6%) among self concern learning and same is the lowest (16.4%) among compulsion learning. The percentage of low level of learners' attitude and preference towards E-learning is the highest (62.1%) among self concern learning and same is the lowest (37.9%) among compulsion learning.

In order to ascertain the association of interest in E-learning, learners' attitude and preferences towards

Table 6. Interest on E-learning and learners' attitudes, preferences towards E-learning (Two-way Table)

Interest in E-learning	Learners' Attitudes and Preferences towards E-learning			Total
	Low	Medium	High	
Self concern	18 (62.1%)	61 (83.6%)	20 (87.0%)	99
Compulsion	11 (37.9%)	12 (16.4%)	3 (13.0%)	26
Total	29	73	23	125

Source: Computed

Table 7. Interest in E-learning and learners' attitudes, preferences (Chi-square Analysis)

Factor	Calculated χ^2 Value	Table Value	D.F	Remarks
Interest in E-learning	6.849	5.991	2	Significant at 5% level

Source: Computed

E-learning, the null hypothesis was formulated and tested with chi-square. Table 7 shows the results are as follows.

Table 7 explains that the calculated chi-square value is greater than the table value and the result is significant at 5% level. From the analysis, it can be concluded that there is a significant influence of interest in E-learning and learners' attitude on preferences towards e-learning.

6.3.2 Future Ambition with Attitude and Preference towards E-learning

An attempt was undertaken to assess the significant difference between future ambition with attitudes and preferences towards E-learning by framing a null hypothesis and the same has been tested with analysis of variance at 5% level of significance. The details of the findings are shown in Table 8.

The Table 8 shows that 'p' value (0.363) was more than 0.05. Hence, the null hypothesis is accepted and it

can be concluded that there is no significant relationship between future ambition with attitude and preference towards E-learning.

6.4 E-learners' Problems

The E-learners' problems are analyzed by applying Henry Garrett's Ranking Technique. Results are given in Table 9.

The above Table 9, displays that internet connection is ranked as the first problem with the highest mean score of 51.34, adaptability struggle is ranked as the second problem with the mean score of 50.58, unrealistic deadlines is ranked as the third problem with the mean score of 50.52, technical issues is ranked as the fourth problem with 49.64, time management is ranked as the fifth problem with 49.27 and lack of self motivation is ranked as the sixth problem with the mean score of 48.75.

Table 8. Future ambition with attitude and preference towards E-learning

Sources of Variations	Sum of Squares	DF	Mean Square	'F' Value	'p' Value
Between Groups	0.852	2	0.426	1.021	0.363 ^{NS}
Within Groups	50.860	122	0.417		
Total	51.712	124			

Note: NS- Not Significant

Source: Computed

Table 9. E-learners' problems

Problems	Total Score	Mean Score	Rank
Adaptability struggle	6323	50.58	II
Technical issues	6205	49.64	IV
Internet connection	6418	51.34	I
Time management	6159	49.27	V
Lack of self motivation	6094	48.75	VI
Unrealistic deadlines	6315	50.52	III

Source: Computed

7. Major Findings

The major findings of the study are summarized below:

- It is inferred that there is a significant association between interest in E-learning and learners' attitude and preference towards E-learning.
- It is observed that there is no significant difference among future ambition with attitude and preference towards E-learning.
- It is found that internet connection is ranked as the primary problem faced by the E-learners.

8. Suggestions

The following suggestions are offered to enhance learners' attitude and preference towards E-learning.

It is observed from this research that majority of the respondents spend less than one hour per day on E-learning. To widen the knowledge, the students can take initiative to go beyond curriculum. So, it is recommended to the students to spare their free time towards E-learning.

Most of the respondents ranked internet connection as a main issue in E-learning. Hence, it is suggested that

students can check the internet speed and plan their work accordingly, troubleshoot their hardware so that interruption can be minimized.

The blended learning and adoption of technology in the learning process becomes the order of the day. Hence, it is suggested that the students should enhance their interest towards E-learning and make use of various online portals that are implemented by various agencies.

9. Conclusion

In today's digital era, everyone can observe the paradigm shift in teaching and learning process. E-learning uses the network technology to design the content, deliver, monitor the progress, administer and extend the learning environment. Its advancement is unpredictable. Notably, the development of E-learning software application known as Learning Management System (LMS), specialized E-learning application, portals, mobile learning, mind mapping software for educational stakeholders and flexibility automatically pulls everyone towards E-learning. In this aspect, the core of the research work was to gauge learners' attitude and preference

towards E-learning. The study analyzed with the respect to interest in E-learning and future ambition of the respondents. It was also observed that there is a strong influence of interest in E-learning and learners' attitude on preference towards E-learning. Also it is showed there is no significant relationship between future ambition with attitude and preference towards E-learning. The study recommends the students to adopt blended learning system for their personal growth and development.

10. References

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