ANALYSIS OF THE FACTORS AFFECTING E-LEARNING USING DIGITAL LEARNING PLATFORMS

VARUN KUMAR S G[1], SANTOSH B R[2], KISHORE L[3], SACHIN SWAR[4]

[1]Assistant Professor-Selection Grade, Manipal Institute of Management (MIM), Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, India – 576104.

[2]Associate Professor, Manipal Institute of Management (MIM), Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, India – 576104.

[3]Assistant Professor-Senior Scale, Department of Commerce (DOC), Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, India – 576104.

[4]Marketing Manager, MBS Distributors, Karwar, Karnataka, India – 581303.

Abstract

E-learning has become inevitable for the learners and opened up new opportunities for acquiring the knowledge. Few major factors affecting E-learning usage in higher educational institutes are considered in this study. This study aims to analyse the factors which affects the learning while using learning platforms among the students from various fields of higher education. The objective here is to check if there is any difference among male and female learners in terms of major factor associated with the digital learning platforms. Another objective of this study is to analyse whether there is any difference in preferences when compared with current education level and the area of study. For the hypotheses defined in this study, two well-known non-parametric tests, namely, Mann-Whitney U test and Kruskal Wallis tests are utilised. The results of the study revealed that ease of submissions and online help features of the course are the two most prominent factors affecting usage of E-learning and further findings are discussed in detail in the subsequent section.

Keywords: E-learning, Digital Learning Platforms, Learning Management System, MOOCs.

Introduction

The advancements of Information and multimedia technology, and the effective use of internet as a new way of teaching, has a made a revolutionary change in the traditional teaching process (Tao, Yeh, & Sun, 2006). In educational organizations (e.g., high schools, universities, etc.) and in labour life, the query of how to utilise present statistics and communication knowledge for learning purposes is significant. E-learning in its broadest sense refers to any learning that is electronically enabled. In a marginally smaller sense, it is discovering that is empowered by the utilization of computerized innovations. Limited

further, it turns into any discovering that is Web-based or web empowered. The E-learning is one of the efficient ways to learn in the present education system where the users can choose their own way of interest to study. The E-learning here indicates the usage of electronic devices in order to acquire the knowledge. Guidance over the Internet is seen by numerous individuals to be a huge achievement in educating and teach (Keller & Cernerud, 2002). E-Learning has become a significant subject in ongoing information studies advancements under the new innovative stages as Virtual Reality and Virtual Learning Surroundings. E-learning is characterized as the utilization of computer innovation, essentially finished or through the web, to convey data and guidelines to people (Ong & Welsh, 2006). Many higher education academies and institutions adopted and offer the new technology of E-learning courses. It is contended that the accomplished results from the traditional education and training programs are frequently a long way from perfect. (Chen & Hsiang, 2007).

The proportion of E-learning achievement should incorporate various builds so as to evaluate the degree and nature of this achievement (Wang, 2007). The basic administrative apprehension is to know how the students observe E-learning and how to progress appropriation of E-learning among students. The current administrative problem here is the means by which to urge staff to encourage E-learning without utilizing pressure or conflicting with the personnel's genuine convictions. To do this, it is expected to comprehend factors that may energize or debilitate social expectation and utilization conduct (Ugur & Turan, 2018). In the course of the most recent couple of years, ICTs (Information and Communication Technologies) have achieved interdependencies, connectedness, improved coordinated effort, and a changed way to deal with administration conveyance including education. What's more, the utilization of these information and technologies in education (and eLearning) implies various things to various individuals relying upon their framework. Given this situation there is need along these lines to investigate some degree of detail, with respect to the different settings, for instance the significant pointers in the separate nations. For a similar explanation it is very important to investigate the appreciation of E-Learning in the various settings of the study.

A tool that distinguishes and quantifies the significant achievement elements of E-learning from partners' observation will be of incredible incentive to researchers, experts and advanced education foundations. Recognizing and estimating E-learning significant achievement variables can help advanced education foundations and establishments to more readily create E-learning frameworks that fit the two students' and teachers' desires. E-learning achievement can be estimated by students' perspectives and adoption level towards E-learning empowered courses. In this study we are going to find out the usage rate of E-learning among students. E-Learning makes understand the topic easily to students. They can learn through mobile, laptop, PC, Tablet. So, it is very convenient for students to learn the topics anytime. Student will concentrate on learning. Therefore, the education challenges to scrutinize why such creativities are not properly being executed, hence the major purpose of the study is to examine the usage level of E-learning among the students. E-Learning helps the student when they are distracted they can stop the learning and continue later. E-Learning will help the teachers to teach the topics easily to the students, to explain in words they can use video tools to visualize the content. It makes better understanding to the students. E-

learning usage is investigated from the point of view of advancement of technology. E-learning, consequently, should be innovative and advantageous by the probable adopters. An education society, both by the people besides the associations is required aimed at the accomplishment of E-learning advancement to occur. (Lin & Lee, 2005)

The quick development in Information Communication and Technologies (ICT) have gotten exceptional variations in the present century, just as influenced the demand of current modern societies. ICT is getting increasingly essential in our day by day survives and in our educational framework. Accordingly, there is an emerging interest on educational associations to use ICT to empower the capacities and data understudy's prerequisite for the 21st century. Understanding the effect of ICT, the present enlightening establishments endeavour to revamp their informative instructive plans and classroom facilities, to attach the existing modernization gap in educating and instruction. This innovation technique requires viable assumption of advances into existing condition to furnish students with information on explicit branches of information, to elevate significant learning and to improve skilful productivity. (Buabeng & Andoh, 2012)

In this technology based advanced world, students are not using E-learning frequently. It is seen that there are many E-learning sites with their own unique features released but still student's usage level to the modern technology of learning is not even quarter of traditional based learning system. This is because of user's behaviour and assumptions of E-learning sites, its comfort level, whether they will get proper and quality knowledge about what they are finding and whether learning makes interesting compare to classroom learning. The main objective of this study is to examine the level of absorption of E-learning habits among different streams. This study is qualitative in nature and is limited by time, collecting responses from the students of various streams or area of study and qualitative aspects of E-learning in this current generation.

Literature review

In this section, a brief literature review was carried out which mainly addresses the concept and applications of E-Learning. E-learning is amalgamation of learner, faculty, instructor, technical staff, administrative, learner support and applying internet and other knowledge (Volery & Lord, 2000). E-Learning provides student domination over the content, learning continuance, speed of learning, time, granting them to retain their understanding to meet their personal goals and revolutionize the role of instructor. Accepting E-learning and technology require large contribution in time, money, space that need to be validated to authority (Jorge, Ruiz, Mintzer, Rosanne, & Leipzig, 2006). E-learning will help to instruct from anywhere to anyone and at any time. Now E-learning is heading towards overall computerization of administrating teaching and learning in practise by means of software called LMS (Learning Management Systems). Lecturers or instructors' forecasts or guided to undergo prompt conversion and become E-learning content developers. Lecturers are ceasing to survive as instructor, generally compelled to accept role of content experts, instructional designers, graphic artist, media producers and programmers. (Govindasamy, 2002). It has identified that the pedagogical issues have still not been addressed and that the focus is given more towards technical, administrative and financial aspects (Hamish, Richard, & Bald, 2005).

Moore (2001) hypothesizes that developments are significant just on the off chance if they, in addition to extra possessions, supports in accomplishing competitive benefit which, in economic-rationalistic models is understood in monetary relations. E-learning can possibly improve higher education institutions learning and showing capacities, procedures and still oversee information applicable to instructing and learning. E-learning, is like all other developments, can't improve authoritative accomplishment on the off chance that it isn't utilized. It is significant, in any case, that in certain cases selection of advancement may prompt more unfortunate impacts than non-adoption (Berkun, 2007). Higher educational organizations have achieved and observed numerous sequences of technological creativities over the previous years. Beginning of E-learning technologies characterizes fundamental innovations within the procedure, organisation, sequence, and transport of education. According to Marshall (2004) there is reception that e-Learning wishes to be diffused into the informative machine and a better know-how of the best manner to familiarize improvements is essential among the end users.

Past researchers inspecting the appropriation and dispersion of E-learning can be classified as taking a full scale before small-scale methodology. Full scale level investigations have been worried about fundamental change that changes the whole establishment through authoritative and basic change (Yates, 2001).

Normally such examinations at a large-scale level are to create hierarchical speculations in which innovation is a significant driver for modification. The hidden reason is essentially spoken to by mechanical prevalence as a pioneer for the appropriation of creative items and performs. Adoption and dispersion study would benefit by a consolidating approach that considers mutually institutional and individual issues that lead to the selection, or something else, of E-learning (de Freitas & Oliver, 2005). The significant job that E-learning plays in getting to, gathering, examining and moving of data and information (Bates, 10 June 2009), the crucial commitment to the advancement of scholarly staff and students, and the enhancements showing techniques and learning the executive's framework (Begiievic, Divjak, & Hunjak, 2007), have brought about expanding the popularity of E-learning in various instructive foundations and associations. The persistent strain to reduce expenses through diminishing the quantity of the employed scholastic operate, then the significant measure of endeavours that are shown by colleges to expand enlistment charges through contribution adaptable agendas that ensemble various student's requirements, have likewise prodded the requirement for colleges to leave the idea of E-learning. In any case, aimed at E-learning to be effective, Campbell and Swift (2005) show that equally the teachers and the students need to alter their mentalities, conviction, conduct, point of view and propensities to effectively receive the utilization of innovation.

Brower (2002) positions that educators' anxiety and reluctance to embrace E-learning as another method for instructing is ascribed to their inclination. The contention is that to instruct, at that point they need to contact understudies and be near them, and subsequently, utilizing E-learning may drastically change the way they encourage which is fundamentally founded on getting in contact with students. Dabholkar (1999) theorized that individuals all the while have positive and negative mentalities or convictions towards innovation. A positive conviction or boldness would encourage singular acknowledgment towards

innovation or technology, while a negative mentality or conviction may keep them down. Meanwhile E-learning is for the most part dependent on the utilization of innovation to convey content by means of web or internet, it has been inferred that E-learning is viewed as essential and interesting for students, instructors and administrators (Rossiter, 2007), and consequently, educators may oppose embracing the utilization of such framework.

The environmental surroundings have been recognized to fall into in somewhat four classifications: land, cultural, political, globalization and consistency. Environmental settings incorporate the nearness to the wellspring of advancement and the framework since a portion of the developments must be embraced when certain foundation is set up. Societal culture is worried about the standards and the conviction structures that should be stood up to for the development to be received. Under legislative issues, selection moderating components are estimated against the administrative structures and standards that control entertainers' practices. The globalization and consistency classes manage the thought that the world is one social network whose advancements and utilization of these developments ought to be synchronized. (Njenga, January 2011). Environmental surroundings have an influence on the adoption of E-learning and usage of educational knowledge by college students for a better education organization in developing countries. (M Nasiru & Salihu Ibrahim, 2018). An E-learning program has helped IBM company to save $16 Million and Price water House cooper's initiative reduced cost of per person training by approximately 87% Cutting 50% of the time invested E-learning is surely feasible mode of learning (Cengiz Hakan Aydun & Deniz).

E-Learning widen the reach of land–grant University to students who might not have contact to campus. Student gratification in online course must be consistently analyses to potentially raise in E-learning (Robert, Travis, J Thomas, & Megan, 2012). E-learning acceptance is advanced from the information organization adoption point of view. This proposes that a previous circumstance for knowledge successfully operate E-learning system is that students literally use them. Thus, better information of the element that disturb IT adoption and their inter-relationships are a pre-cursor to an improved knowledge of student usage of E-learning systems (Muneer Mahmood, David, & Carmel , 2009). Conniving decent E-learning services is a difficult task and needs a multidisciplinary method. E-learning facilities have been quickly established due to nationwide telecommunication organization and high-speed internet. The various devices of M-learning are Notebook computers, Personal digital assistance, Tablet PC, Cellular phones, Smart phones. The research gap identified is that this study does not speak about how conventional institutes were not able to adapt to this system of learning (Tsvetozar, 2004).

Methodology

The primary data collected for this study was gathered directly from the students of various streams and institutes of Manipal Academy of Higher Education that have adopted E-learning through structured questionnaires circulated online. The questionnaire formed for the research was structured and close ended. The questionnaire was formed to analyse and conclude the attitude of students towards E-learning and knowing if they would resist to the change in learning or teaching or adopt to it. Most of the respondents of the questionnaire

faced multiple choice questions and a Likert scale to understand the choice as well as magnitude of acceptance or resistance with the respondents depict towards various factors of E-learning. Convenience sampling method was adopted in this study for the collection of data from the respondents. The sample chosen for survey consisted of nearly 172 members that included students from various Engineering, Management, Medical; Commerce institutes etc. students who were conversant with the E-learning platform. Various non-parametric methods such as Mann-Whitney U test and Kruskal-Wallis test were utilized in this study for the data analysis.

Propositions

P_1: There is significant difference in factors affecting E-learning among learners based on their gender.

P_2: There is significant difference in factors affecting E-learning across the current education level.

P_3: There is significant difference in factors affecting E-learning across the area of study.

Data Analysis

Respondents under this study utilised various E-Learning platforms also called as Massive Open Online Courses (MOOCs) to access the courses of their area. Currently, Coursera is leading this segment in providing vast amount of courses from various fields. The prominent list of platforms used by respondents is provided in the Chart 1. In this chart, it is seen that the highest number of respondents used Coursera followed by YouTube, Byju's, Swayam and other platform which were Udacity and Unacademy applications. The respondents had to select multiple options of application which they use as platform of E-learning.
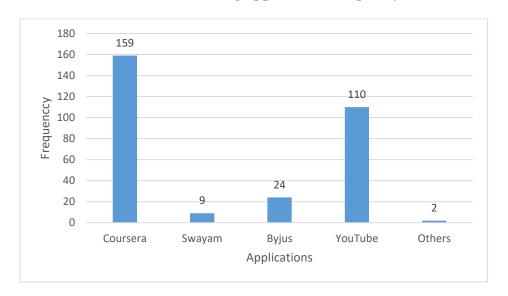
Chart 1: E-learning applications frequency

In this study, two non-parametric tests are used, viz., Mann-Whitney U test and Kruskal-Wallis test. Mann-Whitney u test is used to measure whether there is any difference in the

factors which affects E-learning among male and female learners. Kruskal-Wallis test is used to check whether the respondents significantly differ in their opinion based on the current level of education and the area of their study. The following sections details about the four non-parametric tests used in this study. Table 1 shows the results of Mann-Whitney U test in terms of mean ranks given to various factors of E-Learning by Male and Female respondents.

Table 1: Mann-Whitney U test summary in testing the differences in factors affecting E-learning between males and females

Ranks				
	Gender	N	Mean Rank	Sum of Ranks
Comfortable with E-learning	Male	91	84.32	7673.5
	Female	81	88.94	7204.5
	Total	172		
E-learning makes learning interesting	Male	91	85.31	7763.5
	Female	81	87.83	7114.5
	Total	172		
E-learning gives complete knowledge	Male	91	86.32	7855
	Female	81	86.7	7023
	Total	172		
E-learning gives quality knowledge	Male	91	87.01	7918
	Female	81	85.93	6960
	Total	172		
Downloading materials is easy	Male	91	83.4	7589.5
	Female	81	89.98	7288.5
	Total	172		
E-learning aids in clearing doubts	Male	91	88.13	8019.5
	Female	81	84.67	6858.5
	Total	172		
Ease of submissions	Male	91	96.79	8808
	Female	81	74.94	6070
	Total	172		
Importance of assignments, quizzes and tests	Male	91	89.14	8111.5
	Female	81	83.54	6766.5
	Total	172		
Demonstrating the results to outsiders	Male	91	88.17	8023.5
	Female	81	84.62	6854.5

	Total	172		
Irrelevant information	Male	91	87.08	7924
	Female	81	85.85	6954
	Total	172		
Bring new opportunities of learning	Male	91	90.74	8257
	Female	81	81.74	6621
	Total	172		
Provokes to do further research/studies	Male	91	91.64	8339
	Female	81	80.73	6539
	Total	172		
Navigate through the course	Male	91	84.7	7707.5
	Female	81	88.52	7170.5
	Total	172		
Online help features of the course	Male	91	79.92	7273
	Female	81	93.89	7605
	Total	172		
Consumes more time	Male	91	86.59	7880
	Female	81	86.4	6998
	Total	172		
Overall satisfaction	Male	91	90.54	8239
	Female	81	81.96	6639
	Total	172		

From the Table 2, it is evident that the ease of submissions and online help features of the course are the only two factors which differ significantly. From the mean ranks obtained in the Table 1, it is clear that the male students provided the higher rank for ease of submissions than the female students. Whereas, for the Online help features of the course the female students provided the higher rankings. For the rest of the factors, hence, it can be concluded that there is no significant difference in factors affecting E-learning among learners based on their gender.

Table 2: Mann-Whitney U Test Statistics in testing the differences in factors affecting E-learning between males and females

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Comfortable with E-learning	3487.5	7673.5	-0.66	0.51
E-learning makes learning interesting	3577.5	7763.5	-0.36	0.72
E-learning gives complete knowledge	3669	7855	-0.05	0.96
E-learning gives quality knowledge	3639	6960	-0.15	0.88
Downloading materials is easy	3403.5	7589.5	-0.94	0.35
E-learning aids in clearing doubts	3537.5	6858.5	-0.48	0.63
Ease of submissions	2749	6070	-3.15	0.00
Importance of assignments, quizzes and tests	3445.5	6766.5	-0.80	0.43
Demonstrating the results to outsiders	3533.5	6854.5	-0.51	0.61
Irrelevant information	3633	6954	-0.17	0.86
Bring new opportunities of learning	3300	6621	-1.33	0.18
Provokes to do further research/studies	3218	6539	-1.56	0.12
Navigate through the course	3521.5	7707.5	-0.54	0.59
Online help features of the course	3087	7273	-1.97	0.05
Consumes more time	3677	6998	-0.03	0.98
Overall satisfaction	3318	6639	-1.24	0.21

Kruskal – Wallis test

To test whether the factors affecting E-learning differs significantly across the current education level of the students as well as their area of study two non-parametric tests are conducted. The first one is Kruskal – Wallis test to check the difference in the factors affecting E-Learning across the current education level of the students. And the second test is, Kruskal – Wallis test to check the difference in the factors affecting E-Learning across the Area of study. Table 3 provides the summary statistics of factors affecting E-Learning across current education level. The table provides an overview of the mean rank given to the factors by the students corresponding to their education level. Table 4 provides the results of the Kruskal – Wallis test with the significance level for each factor.

Table 3: Kruskal – Wallis test results summary in testing the difference across the current education level

Ranks			
	Current education	N	Mean Rank
Comfortable with E-learning	Under graduate	47	74.55
	Post graduate	111	91.59
	PhD	14	86.21
	Total	172	
E-learning makes learning interesting	Under graduate	47	76.73
	Post graduate	111	91.05
	PhD	14	83.18
	Total	172	
E-learning gives complete knowledge	Under graduate	47	70.88
	Post graduate	111	95.42
	PhD	14	68.21
	Total	172	
E-learning gives quality knowledge	Under graduate	47	59.32
	Post graduate	111	96.65
	PhD	14	97.25
	Total	172	
Downloading materials is easy	Under graduate	47	68.48
	Post graduate	111	96.08
	PhD	14	71.07
	Total	172	
E-learning aids in clearing doubts	Under graduate	47	71.38
	Post graduate	111	94.29
	PhD	14	75.50
	Total	172	
Ease of submissions	Under graduate	47	66.69
	Post graduate	111	95.23
	PhD	14	83.79
	Total	172	
importance of assignments, quizzes and tests	Under graduate	47	83.81
	Post graduate	111	86.41
	PhD	14	96.21
	Total	172	
Demonstrating the results to outsiders	Under graduate	47	87.40
	Post graduate	111	90.74
	PhD	14	49.82
	Total	172	

Irrelevant information	Under graduate	47	78.21
	Post graduate	111	90.05
	PhD	14	86.14
	Total	172	
Bring new opportunities of learning	Under graduate	47	90.51
	Post graduate	111	81.20
	PhD	14	115.07
	Total	172	
Provokes to do further research/studies	Under graduate	47	90.03
	Post graduate	111	86.32
	PhD	14	76.11
	Total	172	
Navigate through the course	Under graduate	47	67.70
	Post graduate	111	95.21
	PhD	14	80.54
	Total	172	
Online help features of the course	Under graduate	47	70.19
	Post graduate	111	96.32
	PhD	14	63.39
	Total	172	
Consumes more time	Under graduate	47	74.28
	Post graduate	111	96.54
	PhD	14	47.96
	Total	172	
Overall satisfaction	Under graduate	47	74.70
	Post graduate	111	93.59
	PhD	14	69.89
	Total	172	

From the Table 4, it can be concluded that the eleven factors out of the sixteen defined in this study are statistically significant and all factors differ significantly across the current level of education. Whereas, the five remaining factors, does not differ significantly across the current education level.

Table 4: Kruskal – Wallis test Statistics in testing the difference across the current education level

	Chi-Square	df	Asymp. Sig.
Comfortable with E-learning	4.620	2	.099
E-learning makes learning interesting	3.214	2	.201
E-learning gives complete knowledge	11.347	2	.003
E-learning gives quality knowledge	22.737	2	.000
Downloading materials is easy	13.748	2	.001
E-learning aids in clearing doubts	8.730	2	.013
Ease of submissions	13.122	2	.001
Importance of assignments, quizzes and tests	.786	2	.675
Demonstrating the results to outsiders	9.924	2	.007
Irrelevant information	2.197	2	.333
Bring new opportunities of learning	7.833	2	.020
Provokes to do further research/studies	.998	2	.607
Navigate through the course	12.046	2	.002
Online help features of the course	14.270	2	.001
Consumes more time	17.124	2	.000
Overall satisfaction	7.829	2	.020

Further, while testing the differences in E-Learning factors across various area of study in considered and the summary statistics for the same is given in the Table 5. This table provides comprehensive results of the mean ranks provided by the students across the various area of study. The results of Kruskal-Wallis test for the same test is provided in the Table 6.

Table 5: Kruskal – Wallis test results summary in testing the differences in the area of study

Area of Study		N	Mean Rank	Area of Study		N	Mean Rank
Comfortable with e-learning	Engineering	13	92.08	Downloading materials is easy	Engineering	13	77.35
	Management	103	95.22		Management	103	98.20
	Commerce	18	77.33		Commerce	18	79.28
	Medical	20	83.58		Medical	20	42.75
	Pharmacy	4	46.25		Pharmacy	4	65.50
	Hotel management	11	54.64		Hotel management	11	92.50
	Others	3	8.00		Others	3	65.50
	Total	172			Total	172	
E-learning makes learning interesting	Engineering	13	87.23	E-learning aids in clearing doubts	Engineering	13	61.31
	Management	103	92.49		Management	103	94.87
	Commerce	18	69.58		Commerce	18	49.28
	Medical	20	89.20		Medical	20	97.75
	Pharmacy	4	79.50		Pharmacy	4	102.50
	Hotel management	11	75.91		Hotel management	11	68.14
	Others	3	9.50		Others	3	102.50
	Total	172			Total	172	
E-learning gives complete knowledge	Engineering	13	97.19	Ease of submissions	Engineering	13	104.00
	Management	103	93.64		Management	103	86.94
	Commerce	18	68.08		Commerce	18	75.72
	Medical	20	75.63		Medical	20	83.18
	Pharmacy	4	92.00		Pharmacy	4	120.25
	Hotel management	11	77.59		Hotel management	11	94.68
	Others	3	3.50		Others	3	7.50
	Total	172			Total	172	
E-learning gives quality knowledge	Engineering	13	35.81	importance of assignments, quizzes and tests	Engineering	13	113.35
	Management	103	96.09		Management	103	86.04
	Commerce	18	76.42		Commerce	18	73.89
	Medical	20	83.00		Medical	20	67.03
	Pharmacy	4	83.00		Pharmacy	4	87.00
	Hotel management	11	81.73		Hotel management	11	97.18
	Others	3	83.00		Others	3	151.50
	Total	172			Total	172	

Demonstrating the results to outsiders	Engineering	13	80.46	Navigate through the course	Engineering	13	87.85
	Management	103	91.94		Management	103	90.97
	Commerce	18	72.50		Commerce	18	94.06
	Medical	20	90.18		Medical	20	79.38
	Pharmacy	4	121.50		Pharmacy	4	90.75
	Hotel management	11	68.32		Hotel management	11	58.18
	Others	3	5.50		Others	3	27.50
	Total	172			Total	172	
Irrelevant information	Engineering	13	75.46	online help features of the course	Engineering	13	67.08
	Management	103	89.52		Management	103	96.72
	Commerce	18	66.83		Commerce	18	60.64
	Medical	20	107.50		Medical	20	86.05
	Pharmacy	4	99.00		Pharmacy	4	124.75
	Hotel management	11	82.64		Hotel management	11	40.68
	Others	3	6.00		Others	3	95.00
	Total	172			Total	172	
Bring new opportunities of learning	Engineering	13	98.04	Consumes more time	Engineering	13	83.92
	Management	103	84.66		Management	103	81.95
	Commerce	18	53.33		Commerce	18	81.67
	Medical	20	109.75		Medical	20	97.48
	Pharmacy	4	109.75		Pharmacy	4	118.50
	Hotel management	11	113.14		Hotel management	11	98.55
	Others	3	15.00		Others	3	123.00
	Total	172			Total	172	
Provokes to do further research/studies	Engineering	13	72.08	Overall satisfaction	Engineering	13	80.42
	Management	103	85.55		Management	103	92.02
	COMMERCE	18	61.19		Commerce	18	73.94
	MEDICAL	20	106.90		Medical	20	76.55
	Pharmacy	4	85.50		Pharmacy	4	116.25
	Hotel management	11	100.77		Hotel management	11	90.77
	Others	3	146.50		Others	3	9.50
	Total	172			Total	172	

The Table 6. Provides, the Chi-square test statistics and degrees of freedom along with the significance levels for each factors considered in this study. It can be seen that all the fourteen factors differ significantly across the various areas of study. However, two factors namely, navigate through the course and consumes more time does not differ significantly.

Therefore, it can be concluded that the majority of the factors affecting E-Learning differs significantly across the various area of study.

Table 6: Kruskal – Wallis test Statistics in testing the differences in the area of study

	Chi-Square	df	Asymp. Sig.
Comfortable with E-learning	22.18554	6	0.001121
E-learning makes learning interesting	13.06466	6	0.042021
E-learning gives complete knowledge	16.74941	6	0.01025
E-learning gives quality knowledge	21.54791	6	0.001462
Downloading materials is easy	27.65771	6	0.000109
E-learning aids in clearing doubts	22.06449	6	0.001179
Ease of submissions	14.73729	6	0.022401
importance of assignments, quizzes and tests	15.96093	6	0.013965
Demonstrating the results to outsiders	16.89716	6	0.009669
Irrelevant information	18.27916	6	0.005571
Bring new opportunities of learning	29.68092	6	4.52E-05
Provokes to do further research/studies	16.94583	6	0.009484
Navigate through the course	11.07024	6	0.08623
Online help features of the course	26.44816	6	0.000184
Consumes more time	6.473199	6	0.372318
Overall satisfaction	14.67994	6	0.022898

Conclusion

E-Learning has occupied a prominent place in the modern world of education. With the advancement of technology and availability of E-resources eased the learning habits. In this study an effort is made to analyse the factors which affects the learning while using various E-learning platforms among the students from various fields of higher education. To measure whether there is any significant difference in the factors affecting E-learning among male and female learners, Mann-Whitney U test is used. Except for two factors that is ease of submissions and online help features the results showed that there is no significant difference in the factors affecting E-learning among male and female learners. Further, Kruskal –Wallis test was conducted to check whether the factors affecting E-learning differs significantly across the current education level of the students as well as their area of study. Most of the factors like ease of submission, learning is interesting and comfortable with E-learning had a significant impact on E-learning usage. However, two factors that is navigating through the course and consuming more time was found to be non-significant across the current

education levels of the end users. Finally, to conclude E-learning has made a revolutionary change in the traditional teaching process and has resulted in enhanced learning experience.

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