

INTEGRATING THE EDUCATION WITH THE TECHNOLOGY - RISE IN DEMAND FOR ONLINE EDUCATION IN INDIA

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ABSTRACT

In the Indian education system, teaching and learning process generally takes place in the traditional classroom setting, where the teacher face to face explains the content to the students. Nowadays, with the combination of innovation with instruction, new framework has changed the method of conveying knowledge. The purpose of learning or education is not only to make the individual literate but to develop rational thinking, knowledge and self-dependency. In the ongoing years, the enlistment of the understudies towards the Massive Open Online Courses (MOOCs) has expanded. India comes next after the United States in the number of understudies enlisted for the online courses. The current paper centers on the different foundations of MOOCs in India and attempts to discover the preferences, drawbacks and explanations behind the development of MOOCs or online learning platforms in India from the student's perspective.

The study further analyses the various factors which are independent of the usage of the online higher education platforms. The factors such as age of the respondents, stream taken by them and current educational qualifications were analyzed using the One-Way ANOVA.

Keywords: MOOCs, E-learning, Technology, Online Education

INTRODUCTION

Education provides information on the general surroundings and changes it to something better. It builds up the viewpoint of taking a gander at like. The interest in quality learning is expanding with the progression of time. Be that as it may, now and again it gets hard to go to classes on an everyday schedule because of voyaging time between home spots to foundations or might be because of clashing cutoff times to go to the talks. The student begins relying on the aberrant strategies for getting information, for example, separation training framework or through online instruction framework. The online training framework in India has been perceived as another support in the ongoing time (Kiran & Popuri, 2013). There have been significant advances in the field of open online courses and numerous online entrances that give college comparable instruction at least cost all across the world and their latent capacity showing signs of improvement with time. Online instruction has been becoming throughout the years; hardly any years back the individuals were uneducated because of the absence of mindfulness, resoluteness in the training framework, and numerous other related issues (Thakur, Khushu & Vinit, 2013). These gateways have been valuable for the immature and created nations. Many studies all over the globe have acknowledged this open door with open hands and are presently taking the courses on the web.

The traditional education system is characterized by the teaching-learning process where the teacher provides lectures to understand the studies of the students. Whereas the modern education system relies more on distance online education platforms which provide access to the material at any time and anywhere. One such method is MOOCs (Massive Open Online Courses). National Platform for MOOCs is SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds), NPTEL (National Programme on Technology Enhanced Learning), IIMBx (Indian Institute of Management, Bangalore) and many more. Whereas the International Platforms are EdX, Udacity, Khan Academy, Coursera, Edu Open, FutureLearn, etc. In India, it was built up in 2008 and picked up energy in the year 2012 as a popular online teaching tool (Sharangpani, 2017). Indian education scenario can be changed with the right implementation of the Information and Communication Technology (ICT) with the education (Pratibha & Chandra, 2009). Ever since the MOOCs have gained its importance it has changed the way students acquire knowledge. It has given the freedom to students to choose what to study, how to study, and when to study (Zuhairi, Karthikeyan & Priyadarshana, 2019). MOOCs demolish the obstacle of the distance of area in education through an electronic, efficient and secure way. It maintains a network of the person concerned with the education process such as professors, educators, students, and other irrespective of time and distance.

It has become important in India to invest in ICT to provide quality education and build quality of human capital for the upliftment of the Indian economy (Indrajit & Kunal, 2007). MOOC has a huge potential in the country. India comes second to the US, with 27% users on the Edx platform and 1.7 million registered users on Coursera from India as of December 2016 (Chauhan, 2017).

EXPLANATIONS OF INDIAN ONLINE EDUCATION PLATFORMS:

Numerous activities have been taken by the Indian government to give quality education to each side of the nation. Along these lines, endeavors were made to give the e-library, digital books, and so forth which is open for anybody and anytime. The government took initiatives for online courses by launching programs like e-PG pathshala (Chauhan, 2014). Thereafter, Indian government decided to make their platforms. In India, there are handfuls of universities and institutions having their platforms. A few of them are listed below:

1. SWAYAM: It stands for “Study Webs of Active-Learning for Young Aspiring Minds”. It is propelled by the Ministry of Human Resource Development (MHRD) and the Government of India. It began with the desire for 2,000 courses however presently just 200 courses are accessible (Kanjilal & Kaul, 2016). It offers courses for schools, certificates, graduate and postgraduate. Many activities have been taken by the Indian government to give quality training on each edge of the nation. In this way, endeavors were made to give the e-library, digital books and so on which is available by anybody.

2. NPTEL: It stands for “National Programme on Technology Enhanced Learning”. This initiative started in 2003 and is funded by MHRD. It is the joint initiative of seven Indian Institute of Technology (IIT Bombay, Delhi, Guwahati, Kanpur, Kharagpur, Madras, and Roorkee) and Indian Institute of Science (IISc) to provide the courses to engineering and science students. It is currently offering 1,200 courses and is preparing to launch 600 new courses. It has become the largest platform of technical courses in the world (Haumin & Madhusudan, 2019).

3. MookIT: This is initiated by the Indian Institute of Technology, Kanpur (IITK) in 2014. It is an open-source management system. This is developed to provide online courses at any level. It has been used in over 60 courses in India and abroad. It is a system build for the instructor, learner, and administrator to work effectively and efficiently.

4. IITBombayX: It is not for profit platform of MOOC launched by the Indian Institute of Technology, Bombay in 2014. The funding was done by the National Mission on Education through Information and Communication Technology (NME-ICT), Ministry of Human Resource Development (MHRD), and the Government of India. It offers over 63 courses on different subjects. The basic aim of IITBX is to become the leading platform for enhancing quality education.

5. IIMBx: Indian Institute of Management, Bangalore (IIMB) started offering its Massive Open Online Courses (MOOCs) in 2014 through IIMBx in partnership with the edX- a non-profit online education project by Harvard and MIT. It is formed on the philosophy that management education has the potential to transform behavior and that education should be provided to all the members of the society including those having physical disability and insufficiency to pay high fees for quality education (Haumin, 2019).

HIGHER EDUCATION, DISTANCE EDUCATION, AND E-LEARNING IN INDIA - A PERSPECTIVE:

The Report of 2016-2017 states that in India's advanced education framework; there are 864 colleges, 40,026 schools, and 11,669 independent organizations in the nation. There are 15 colleges solely for ladies. Just 2.6% of colleges run the Ph.D. program and 36.7% of colleges run Post Graduate Level programs. Complete enrolment in advanced education has been assessed to be 35.7 million with 19.0 million young men and 16.7 million young women. Young women establish 46.8% of the all-out enrolment (Higher Education Survey, 2016-17).

Higher education in India begins after the fulfillment of the twelfth norm. It reaches out to different fields, for example, expressions, trade, science, and expert degree programs like clinical, designing, and law. These are commonly finished through the normal full-time scholastic program. India moved towards the method of open learning by setting up the Indira Gandhi National Open University, which is the biggest college in the world (Deccan Herald, 2013). It was set up in 1985 and has present dynamic enlistment of 4,000,000 understudies. It was established with the reason for giving a great quality advanced education to all sections of the general public and to advance the separation and open learning among the students who can't gain admittance to the proper training framework. Notwithstanding one Central Open University, there are 13 State Open Universities and one State Private Open University. Likewise, 117 double mode colleges offer instruction through separation mode too. Separation enrolment comprises about 11.45% of the absolute enrolment in advanced education, of which 46.9% are female understudies (Higher Education Survey, 2016-17).

With the coming up of the advanced period, India fortifies its instruction framework by giving the training over the web, which is through MOOCs. The online instruction showcase in India right now exists at USD 247 million and is required to develop by multiple times before the finish of 2021 (Google and KPMG Survey, May 2017).

IMPORTANCE OF MOOCs IN INDIA:

As discussed above the MOOCs have few distinguishing features that lead to their popularity such as free registration, free access to anyone from anywhere at any time, no prior qualification, certification after completion of courses, and so on give numerous advantages in a populated economy, like India. Pandit (2016) talked about it “In a nation like India, where the greater part of the individuals live in far off territories doesn't have direct access to aptitude upgrade and quality learning, MOOCs can assume a significant job. It thus became beneficial for those who are bound by financial instability, physical limitations, and commuting issues”.

MOOCs bring a huge opportunity to Indian students to learn from the outstanding instructor. It allows the lower pay level understudies to get great quality training from anyplace and whenever as long they have the web connection. The rise of MOOCs in India has led to new unrest in advanced education (Priyadarshni, 2015). It provides an edge to compete at the global level. Also, the world is moving towards digital technology and it is the right time to adapt to those changes (Raja & Kallarakal, 2020). As seen the number of intake in the top universities is limited, so this feature provides a chance to gain knowledge from the professor of top universities at home and gain certification of course completion with minimum fees. Thus, it provides a competitive edge at the global level. Also, Indian Universities do not come in the top 100 universities in the world. On the other hand, the top MOOC providers' link up with the finest universities in the world such as Harvard, Cambridge, and Oxford (Chatterjee & Nath, 2014). This allows the potential learners to acquire knowledge from the well-known universities free of cost (except for the registration fee and internet connectivity).

LITERATURE REVIEW

Education is opening on the online platforms in the world and so does in India. Various examinations have been completed on the Massive Open Online Courses, E-learning, or online training framework in India as well as in the whole world. The importance of online education or awareness about the conventional method of teaching has created a buzz among teachers and learners (Bansal, 2017). According to Chatterjee & Nath (2014) Massive Open Online Courses (MOOCs) are an expected apparatus in giving class training and massive guidance to the huge crowd around the world. Due to its operation at a large level, it is emerging as a power to contest the long-established form of the conventional classroom setting in schools, colleges, and universities.

The studies highlighted the difficulties in the usage of MOOCs in India. According to Chatterjee & Nath (2014), Martzoukou *et al.* (2019) the developing countries such as India, do not count for significant huge numbers because of few constraints, for example, lower advanced education and deficiency of immense computerized framework hamper the usage of MOOCs in India. The measures to overcome these challenges were given by Chauhan (2017) India needs to provide better internet connectivity to its population and needs to encourage public-private partnerships (PPP) for more creation of MOOCs. Devgan (2013) proposed the structure for the fruitful usage of the MOOCs in India.

The analyses of research done in the online education from learners point, Yadav, Tiruwa & Suri (2017) reported that the internet-based stages upgrade the learning experience of the understudies by utilizing the online multimedia tools and applications (Bisht, Jasola & Bisht, 2020). The entire major internet-based learning platforms influenced the instructing and learning practices and it created an atmosphere that was more interactive and boundless from the time and physical boundaries. Whereas, Haumin & Madhusudhan (2019) and Nkuyubwatsi (2013) analyzed that MOOCs help in getting an education from the faculties of top universities, where getting admission for regular classroom teaching was a dream. It was also helpful for the people who want to excel in their job fields by pursuing the course of their interest (Tzavara & Wilczek, 2019).

Guardia, Mania & Sangra (2013) suggested that the learning materials and tools should be developed while keeping learners in the center. ICT in education has shifted from teacher-centric to student-centric (Dwivedi *et al.*, 2019) and (Kulal & Nayak, 2020). The analyses of the study from the professor's point were done. According to Evans & Myrick (2015) professors have educated faculty with little experience in online teaching. The same was pointed out by Ross *et al.* (2014) to expand the open online learning in the future it is important to work on the complexity of teaching and with the teacher's experience and identity. Peltier, Schibrowsky & Drago (2007); Joshi, Vinay & Bhaskar (2020) also pointed out the problems faced by faculties, the role of the instructor was different in both the format, and new skills and techniques are needed for the online environment. Thus, overall

findings suggested that the online education system is more complex than selecting the textbook or making the assignments.

Few of the studies on the comparison between offline and online approaches by the learner point have been analyzed (Daymont, Blau & Campbell, 2011). It was found out that the students who preferred the traditional classroom setting; the main reason was that they prefer the one-to-one interaction with the classmates and the instructor. Whereas, the students who preferred online classrooms; the main reason for flexibility to learn anywhere and anytime. The same results had been seen in the research of Anstine & Skidmore (2005) and Means *et al.* (2003).

While many examinations were directed on the correlation of online, offline and mixed learning results on the exhibition of the students. Tang & Bryne (2007) reported that the blended classroom was those in which at least 25% of the syllabus was taught online. The advantages of such a format includes-greater and effective lecture delivery to the students, share of workload among the faculties, development of an effective virtual learning platform, increase in the involvement of the teacher and learner, and feedback. Al-Qahtani & Higgins (2012) also favored blended learning as the student's achievement was more in blended learning. The opposite results were seen in Anstine & Skidmore's (2005) research, suggesting that the students achieve more in traditional settings in comparison to other modes. Whereas, the findings of Utts *et al.* (2003) also reported that the hybrid offering has the potential over the traditional format.

RESEARCH METHODOLOGY:

The data for the study of the online higher education system in India has been collected from the structured questionnaire. The questionnaire was sent online mode via Google Forms to the sample respondent. The size of the total sample was 495 consisting of 338 males and 154 females. The sample range covers learners of all age groups and different educational backgrounds such as Science, Commerce, and Humanities.

To test the internal consistency in the data collected Cronbach Alpha using the reliability test in SPSS has been used, the value so computed was 0.7 which makes the data reliable. Further analysis is done using the Analysis of Variance also known as ANOVA. To test the null hypothesis the Analysis of Variance and Post Hoc Multiple Comparisons test has been applied.

OBJECTIVES OF THE STUDY

The principal objectives of the examination are as per the following:

1. What are the major reasons behind the adoption of the online higher education framework in India by the learners?
2. To find out which type of pedagogical approach is preferable by the students?
3. To analyze different factors that are independent of the mean usage of the online higher education system?

HYPOTHESIS OF THE STUDY

As per the set objectives, this study mainly regulates to examine the following hypothesis:

- H_{0a} : The mean usage of the online platform for higher education is not dependent on the age of the learner.
 H_{1a} : The mean usage of the online platform for higher education is dependent on the age of the learner.
- H_{0b} : The mean usage of the online platform for higher education is not dependent on the stream of learners.
 H_{1b} : The mean usage of the online platform for higher education is dependent on the stream of the learner.
- H_{0c} : The mean usage of the online platform for higher education is not dependent on current education status
 H_{1c} : The mean usage of the online platform for higher education is dependent on current education status

4. DATA ANALYSIS AND INTERPRETATION:

The data analysis has been done using the SPSS software. It has been divided into two parts. The first part consists of the descriptive analysis (through frequency tables and frequency pie chart) and the second part consists of the ANOVA analysis.

Possible reasons for the preference of online mode over the offline mode of learning:

Table 1: Online Mode Over The Offline Mode

Reasons	Frequency	%	Cumulative %
Convenience to learn from home and no need to travel	176	35.6	35.6
Quality of study material provided	41	8.3	43.8
They are priced lower	25	5.1	48.9
Privilege to learn from outstanding mentors	44	8.9	57.8

It is seen through table 1 that 176 people felt that the online mode is better over the traditional classroom method as they can learn from home and they do not need to travel anywhere, whereas 41 respondents believed that the quality of material provided by the online course instructor is better, whereas 25 respondents said that the online courses are priced lower than the price charged by the traditional classroom settings and whereas 44 respondents said that online mode gives the privilege to learn from the outstanding mentors. The majority of the respondents with 35.6% are in the favor of online mode because it is more convenient to learn from home and they do not need to travel to any other place for attending any class. Thus, it saves the travel cost of the learner. The reason with 8.9% in favor said that the online mode gives them the privilege to learn from outstanding mentors, as it gives them the chance to learn from the faculty of the different institute (Anstine & Skidmore, 2005. Also it is observed by Bisht, Jasola & Bisht (2020) that students feel less difficulty and pressure in online examination.

Possible reasons for the preference of offline mode over the online mode of learning:

Table 2: Preference Of Offline Mode Over The Online Mode

Reasons	Frequency	%	Cumulative %
Ability to ask questions directly to the trainer	133	26.9	26.9
Commitment to learn	65	13.1	53.1
To focus on learning without any distraction	72	14.5	48.7
Branding of the university	23	4.6	53.3

The frequency distribution table 2 shows the possible reasons for choosing the offline classroom setting over the online mode of learning by the respondent. According to the research, 133 find the offline mode effective because it gives the chance to ask the questions directly to the instructor. Secondly, 72 people have the opinion that the traditional classroom setting is more focused and the learning process continues without any distraction. Whereas 65 people believed that commitment to learning comes from the offline classroom setting. Thus, it can be reported that the majority of 26.9% of people believe that the effectiveness of learning is achieved when there are one-to-one interactions between the students and the teachers (Bisht, Jasola & Bisht, 2020); (Dwivedi *et al.*, 2019).

The class format they prefer:

Table 3: Class format

Class format	Frequency	Percentage	Cumulative %
Meeting regularly in the classroom, rather than online classes.	123	24.8	24.8
Completing coursework online, rather than taking a regular class.	63	12.7	37.6
Combination of online and offline teaching mode.	249	50.3	87.9

The frequency distribution table 3 shows the class format of the students that prefer the effective learning process. It can be seen that 123 students feel that meeting regularly in the classroom, rather than taking online classes is better, 63 respondents felt that completing coursework online rather than meeting regularly in the classroom is better and 249 people felt that the combination of both online and offline mode leads to a better understanding of the concepts. The majority of people with 50.3% think that effective learning is achieved when the teaching process is done with the combination of offline mode and online mode. The same also concluded in the research of Tang & Bryne (2007) and Uttset *al.* (2003).

Descriptive Analysis of the data collected through the frequency Pie chart

What are the major advantages of the online education system?

Figure 1: Major advantages of an online education system

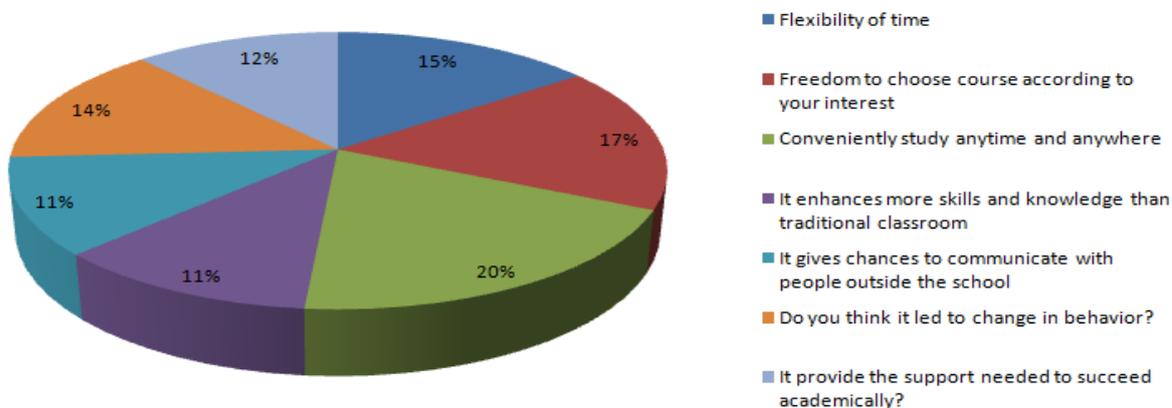


Figure 1 shows the different advantages of the online education system according to the respondent. They listed 7 major reasons for choosing online courses. It can be seen that most of the people with 20% said that the online system has a feature of conveniently study anywhere and anytime, that is they don't need to travel anywhere to acquire the knowledge they can learn from home or any other place (Kulal & Nayak, 2020).

The next reason with 17% of respondents in favor said that the online courses give the freedom to choose the course according to their interest that is they can learn whatever they want to and not just the subjects provided by their traditional teaching method. 15% of the people said that the online education system provides the flexibility of timings that means the learner does not have to follow a strict schedule of the lectures they can learn anytime they want to. 14% of people have believed that taking an online course has led to a change in their behavior, as it may be possible that through these courses they have acquired few skills and have led to change in their behavior.

What are the possible reasons for the emergence of the online education system?

Figure 2: Reasons for the emergence of the online education system

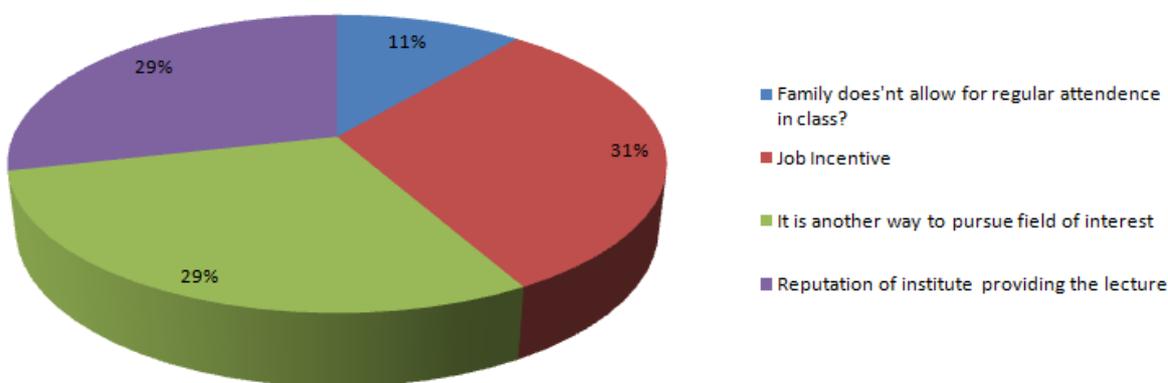


Figure 2 shows the different possible reasons for the emergence of the online education system according to the respondents. The respondents have pointed out the four major reasons which led to the emergence of online education platforms. Most of the people with 31% in favor believed that the online course helps in getting job incentives Whereas 29% believe that it is a platform which allows the learner to pursue their field of interest by enrolling into the courses of their choice and also at times it is not possible to get admission in the reputed institute

so a platform where they can avail the lectures of such reputed universities becomes important for the learners. Because these online platforms provide the courses from the best institute at minimal or zero fees.

DATA ANALYSIS USING ANOVA

Considering the Age of the learner as an Independent Factor:

To test the null hypothesis (H_{0a}) that the mean usage of an online platform for higher education is not dependent on the age of the learner, One Way ANOVA was conducted. The four categories of age are considered as 18-22 years, 23-27 years, 28-33 years, and above 33 years. The mean scores of the learner of different ages were found out along with standard deviation. Based on this, the F-value was computed. The results are as follows:

Table 4: Age of learner as an independent factor

Particulars	Age of the learner	Mean value	F Value	P-Value
Invest time in online study	18-22 years	1.4	2	0.113
	23-27 years	1.59		
	28-33 years	1.55		
	Above 33 years	1.7		
Comfortable communicating electronically	18-22 years	1.68	1.99	0.114
	23-27 years	1.48		
	28-33 years	1.55		
	Above 33 years	1.54		
Class format (a combination of online and traditional teaching method)	18-22 years	2.69	1.27	0.282
	23-27 years	2.69		
	28-33 years	3.16		
	Above 33 years	2.37		
E-Learning is more convenient for study	18-22 years	1.94	0.398	0.754
	23-27 years	2.01		
	28-33 years	2		
	Above 33 years	2.2		
E-Learning leads to change in behavior	18-22 years	2.83	0.9	0.441
	23-27 years	2.7		
	28-33 years	2.55		
	Above 33 years	3		
E-Learning helps in succeeding academically	18-22 years	2.36	1.69	0.168
	23-27 years	2.39		
	28-33 years	2.33		
	Above 33 years	2.87		
E-Learning helps in getting job incentive	18-22 years	2.75	0.613	0.607
	23-27 years	2.86		
	28-33 years	2.56		
	Above 33 years	2.75		
It has a better teaching environment	18-22 years	2.33	0.501	0.681
	23-27 years	2.35		
	28-33 years	2.5		
	Above 33 years	2.6		

Since the p-value is more than .005, the null hypothesis (H_{0a}) is accepted concerning the 5% level of significance in time investment (.113), communicating electronically (.114), class format preference (.282), convenient way of study (.754), behavior change (.441), succeeding academically (.168), job incentive (.607) and better teaching

environment (.681). Consequently, it is reasoned that there is no significant distinction between the mean utilization of the online stage for advanced education and the age of the student. It seems that the satisfaction from the online platform is the same for all the ages of the learner, as there a few advantages of online education over the traditional teaching pattern. In support of this, Tang & Byrne (2007) found similar results that most scholarly pioneers (57%) accept that the results from internet education are equivalent or better than the conventional or personal instructing strategy. Thus, the age of the learner does not differentiate from learning through online platforms. Although, it contradicts (Lowell & Morris Jr, 2019) stating that the generation gap lead to the difference in comfort and familiarity with technology.

Considering Stream of the learner as an Independent Factor:

To test the null hypothesis (H_{0b}) that the mean usage of the online platform for higher education is not dependent on the stream of the learner, One Way ANOVA was applied. The four categories of the stream are considered as Science, Commerce, Humanities, and others. The mean scores of the learner of different Stream were found out along with standard deviation. Based on this, the F-value was computed. The results are as follows:

Table 5: Stream of a learner as an independent factor

Particulars	Stream	Mean Value	F Value	p-value
Invest time in online study	Science	2.7	6.36	0
	Commerce	2.34		
	Humanities	2.28		
	Others	2.38		
Comfortable communicating electronically	Science	1.63	1.64	0.003
	Commerce	1.47		
	Humanities	1.75		
	Other	1.72		
Class format (a combination of online and traditional teaching method)	Science	2.83	3.41	0.017
	Commerce	2.56		
	Humanities	2.25		
	Other	2.37		
E-Learning is more convenient for study	Science	1.96	1.58	0.001
	Commerce	1.84		
	Humanities	2.21		
	Other	2.22		
E-Learning leads to change in behavior	Science	2.78	2.21	0.005
	Commerce	2.77		
	Humanities	3.25		
	Other	2.59		
E-Learning helps in succeeding academically	Science	2.37	1.987	0.0115
	Commerce	2.36		
	Humanities	2.84		
	Other	2.33		
E-Learning helps in getting job incentive	Science	2.83	0.464	0.001
	Commerce	2.68		
	Humanities	2.68		
	Other	2.77		
It has a better teaching environment	Science	2.36	2.27	0.005
	Commerce	2.21		
	Humanities	2.21		
	Other	2.72		
	Science	2.2	0.25	0.001

Flexibility and freedom to study anywhere and anytime	Commerce	2.1		
	Humanities	2.18		
	Other	2.25		

Since the P-Value is less than .005, the null hypothesis (H_{0b}) is rejected concerning 5% significant level for time investment (.000), communicating electronically (.003), convenient study (.001), behavior change (.005), job incentive (.001), better teaching environment (.005), flexible and freedom to learn from anywhere and anytime (.001). Consequently, it is reasoned that there is a significant distinction between the mean usage of the online platform for higher education and the stream of the learner (H_{1b}). Based on the mean comparisons it is observed that the mean scores of the time investment in online education are more of science students (2.70) whereas for commerce (2.34), humanities (2.28) and others it is (2.28) from which it can be observed that science students invest more time on learning online. If the mean scores are compared of communicating electronically, it is found out that the mean score of humanities students is (1.75) which is higher than science (1.63), commerce (1.47), and others (1.75), thus humanities students are more comfortable communicating electronically. Thus it can be concluded that according to their respective stream the students prefer to study online and their satisfaction level differs accordingly. It gives them a chance to acquire additional academic facilities that otherwise might not be available (Kumar, 2019). The conceivable explanation can be the MOOCs are ruled by the designing, data, and correspondence innovation and software engineering disciplines (Bozkurt, Keskin & Waard, 2016).

Considering Current Educational Level of the learner as an Independent Factor:

To test the null hypothesis (H_{0d}) that the mean usage of an online platform for higher education is independent of the current educational level of the learner, One Way ANOVA was conducted.

Table 6: Current educational level as an independent factor

Particulars	Current status	Mean Value	F value	P-value
Invest time in online study	Graduate	2.56	2.91	.034
	Postgraduate	2.66		
	Research scholar	2.28		
	Working professionals	2.20		
Comfortable communicating electronically	Graduate	1.68	2.10	.099
	Postgraduate	1.47		
	Research scholar	1.46		
	Working professionals	1.60		
Class format (a combination of online and traditional teaching method)	Graduate	2.71	.219	.883
	Postgraduate	2.60		
	Research scholar	2.60		
	Working professionals	2.65		
E-Learning is more convenient for study	Graduate	1.97	.75	.519
	Postgraduate	2.06		
	Research scholar	1.67		
	Working professionals	2.00		
E-Learning leads to change in behavior	Graduate	2.87	1.81	.144
	Postgraduate	2.65		
	Research scholar	2.89		
	Working professionals	2.51		
E-Learning helps in succeeding academically	Graduate	2.43	.694	.556
	Postgraduate	2.36		
	Research scholar	2.89		
	Working professionals	2.51		
E-Learning helps in getting job incentive	Graduate	2.77	.459	.711
	Postgraduate	2.84		

	Research scholar	2.82		
	Working professionals	2.57		
It has a better teaching environment	Graduate	2.33	1.04	.372
	Postgraduate	2.40		
	Research scholar	2.10		
	Working professionals	2.62		
Flexibility and freedom to study anywhere and anytime	Graduate	2.22	1.42	.234
	Postgraduate	2.21		
	Research scholar	1.75		
	Working professionals	2.08		

Since the p-value is more than .005, the null hypothesis (H_{0c}) is accepted at a 5% significant level for time investment (.034), communicating electronically (.099), class format preference (.883), convenient study (.519), behavior change (.144), succeeding academically (.556), job incentive (.711), better teaching environment (.372) and flexibility and freedom to study from anywhere and anytime (.234). Thus, it can be analyzed that there is no significant difference between the mean usage of the online platform for higher education and the current educational level of the student. Although Sharma *et al.* (2017) has contradictory results, showing the working professionals dominate MOOCs learning, as it helps in developing skills and keeping ahead in the field of work (Ilyas and Zaman, 2020).

RESEARCH FINDINGS AND CONCLUSION

The Massive Open Online Courses or MOOCs gives free, boundless, and simple cooperation to the students. It is a platform that does not require any pre-qualifications for enrollment in the course. Strong internet connectivity is the only requirement for availing of any online course.

The present study has identified few factors which lead to the emergence of online platforms or e-learning according to the students; (a) convenience to learn from home and no need to travel that saves the travel time from home to the university; (b) enrolling for the online courses is another way for the pursuing the field of interests and (c) it provides the way of earning the job incentive. The online courses are generally pursued by the student working full time and having family responsibilities on their shoulders, so the online courses help them to earn the graduate degree in a flexible format which they might not have done through the traditional classroom (Anstine & Skidmore, 2016). It helps in balancing work and other responsibilities (Tzavara & Wilczek, 2019).

Despite the growing demand for online education, its effectiveness gets lost due to certain drawbacks such as there is a lack of one-to-one interaction between the student and the learner, which leads to a loss of interest in the study. The face-to-face conversation helps in building the emotional relations among the students and their peers and teachers. The commitment to learning is reduced as it does not give a chance to ask the questions directly to the instructor.

It was seen through the analysis that students prefer to study in a blended format, where they are taught in the traditional classroom as well as through online mode. The students avoid strictly regular traditional classes or strictly online classes. Around 87% of the total students surveyed, it was seen that they have more effective learning when they are taught in the combination of both the formats. In the coming years, the classes would be held in the combination of both the teaching format, where the students would be given the study materials through online mode and their questions and queries would be solved through the face-to-face interaction of the teacher and the learner. This combination would be more time-saving and effective (Utts *et al.*, 2003).

Using the ANOVA this research concludes that the age of the learner and the current educational qualifications does not depend upon the usage of online platforms for higher education. But the stream of learner; science, commerce, humanities, and others are dependent upon the usage of online platforms for higher education. According to their respective stream, the students prefer to study online and their satisfaction level differs accordingly. Based on the mean comparisons it is observed that the mean scores of the time investment in online education are more of science students than the commerce, humanities, and other streams from which it is observed that science students invest more time on learning online.

This research establishes the new ground by providing the quantitative analyses of different factors influencing the students for the online courses; studied from the learner point of view instead of only finding out the challenges from the implementation of such a model in India.

RECOMMENDATIONS AND SUGGESTIONS

The results found that there is a gap between the interests of quality instruction in India. The online stages started by the administration of India, SWAYAM, and a few activities by the colleges such as NPTEL, IIMBx, and so forth will overcome many barriers between the interests of value training by the young people of India. Some suggestions and recommendations from the study:

- From the reactions of the understudies, it was seen that the eye to eye collaboration between the understudy and educator is significant for the culmination of a viable learning process. The educator ought to consistently attempt to talk about the ideas and the material given to them.
- Effective and efficient learning can take place when the instructor and the student both meet in both the type of class formats. The solving of the doubts and assignments should be done in the traditional class setting whereas the learning of material and content should be done through the online mode of education.
- Looking at the current pandemic and lockdown situation, the coming future will more rely on online platforms for acquiring knowledge. The government of India should provide internet connectivity and the devices to the remote areas so that the benefits can also be availed by them.

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