Scholastic Seed Inc.

www.gjeis.com

global Journal of ENTERPRISE INFORMATION SYSTEM

Perceptional Barriers of E-learning of Teachers and Learners in India

– R. K. Soni*
Director, AICTE, New Delhi
rksoni.jbp@gmail.com https://orcid.org/0000-0001-8508-6736

– Satish R. Gaikwad
Asstt. Director, Research Unit, IGNOU, New Delhi
satishrrg@gmail.com https://orcid.org/0000-0002-1557-4272

– Manish Sitlani
IIPS, DAVV, Indore, MP
msitlani1@gmail.com https://orcid.org/0000-0002-0347-6114

ARTICLE HISTORY

Paper Nomenclature: Empirical Research Paper
Paper Code: GJEISV12N4OD2020ERP4
Submission Online at www.gjeis.com: 12-Oct-2020
Manuscript Acknowledged: 13-Oct-2020
Originality Check: 13-Oct-2020
Originality Test (Plag) Ratio (Urkund): 0%
Author Revert with Rectified Copy: 02-Nov-2020
Peer Reviewers Comment (Open): 04-Nov-2020
Single Blind Reviewers Remarks: 13-Dec 2020
Double Blind Reviewers Remarks: 18-Dec-2020
Triple Blind Reviewers Remarks: 20-Dec-2020
Authour Update (w.r.t. correction, suggestion & observation): 25-Dec-2020
Camera-Ready-Copy: 26-Dec-2020
Editorial Board Excerpt & Citation: 30-Dec- 2020
Published Online First: 31-Dec 2020

ABSTRACT

Purpose: India is a fast-developing country with large population. Providing education to such a large population itself is a challenge and access to quality training for professional and personal development and education through powerful tool of e-learning has become need of the hour. e-Learning has so much of potential in India, but adoption has been slow and will need a major marketing and awareness effort. In India, globalization of education has generated sudden quantitative growth in higher education. However, to meet this sudden growth there is an acute dearth of qualified and trained teaching faculty. To implement successful e-learning environment, it is very important to identify and remove or minimise the barriers before teachers and learners. Intrinsic barriers are related to individual perceptions and these barriers are sometimes based on the personal experiences of the respondents. This study is intended to investigate the perception of barriers related to e-Learning in formal higher education in India along with analysis of prospect of e-Learning in the related areas.

Design/Methodology/ Approach: This research study is a descriptive study which aims to study the existing scenario related to barriers of implementing e-learning in higher education sector in India. This study has adopted quantitative approach using primary data. The quantitative data was collected through survey questionnaire. This survey questionnaire was developed after reliability testing and validation.

Findings: This paper highlights the Intrinsic/ Perceptional barriers in implementing E-learning in Higher Education in India. The biggest problem in the growth of e-Learning in Higher Education of India seems to be Intrinsic/ perceptional problem. Faculty members and learners have concerns regarding lack of motivations and interest towards e-Learning. Respondents also indicated difficulty and Frustration to adopt and opt for e-Learning.

Originality/ Value: This research study outlines the triangulation of the results related to perception barriers perceived by faculty members, administrators and learners and highlights that these barriers are of paramount importance and their minimisation or removal is most important aspect for successful implementation of e-learning. Therefore, policy makers should come out with some motivational mechanism to overcome such psychological barrier. A dedicated ICT department needs to be established in every educational organization. Faculty and learners are key stakeholders of any higher education institute, and e-learning cannot be successfully implemented until and unless the intrinsic barriers are removed. There is need for further systemic research to unearth the key factors associated with these intrinsic barriers and identify the solution to remove these factors.

KEYWORDS E-learning | Teacher | Environment | Education | ICT | Barrier

***Corresponding Author** (Soni et Al)*

- Present Volume & Issue (Cycle): Volume 12 | Issue 4 | Oct-Dec 2020
- International Standard Serial Number: Online ISSN: 0975-1432 | Print ISSN: 0975-153X
- DOI (Crossref, USA) https://doi.org/10.18311/gjeis/2020
- Bibliographic database: OCLC Number (WorldCat): 988732114
- Impact Factor: 2.69 (GIF, Citescore, SIF), CiteFactor: 3.57 (2019-20)
- Editor-in-Chief: Dr. Subodh Kesharwani
- Frequency: Quarterly
- Published Since: 2009
- Research database: EBSCO https://www.ebsco.com
- Review Pedagogy: Single Blind Review/ Double Blind Review/ Triple Blind Review/ Open Review

- Publisher: Scholastic Seed Inc. and KARAM Society
- Place: New Delhi, India.
- Repository (figshare): 704442/13

Introduction and Rational

India is a fast-developing country with large population and providing education to such a large population itself is a challenge and access to quality training for professional and personal development and education through powerful tool of e-learning has become the need of hour.

There are number of organizations across the globe, which provide training and impart education through e-resources. e-Learning has so much of potential in India, but adoption has been slow and will need a major marketing and awareness effort (Martin et al., 2003;Awadhiya & Miglani, 2016).

e-Learning is a largely used terminology generally denoting to web-based and online education, blended learning, distributed, networked and flexible learning, etc. It is progressively being accepted as an instrument to increase the access to high quality education and developmental opportunities and encompasses of all forms of electronically supported learning and teaching methods.(Sharma & Mishra, 2008; Pulist, S. K., 2013).

The education sector in India is no longer bound to just classrooms. Thanks to new start-ups, higher internet and smart phone penetration, the online learning space in India is growing manifold. The e-Learning market in India is estimated to be around $3 billion. The central government's efforts to make digital learning available to students in every corner of the country are also aiding the sector (Bhattacharya & Sharma, 2007).

In recent years, the Indian government has invested a great amount of money and has put considerable efforts into providing quality education and promoting new technologies to all citizens. Several initiatives have been set up to develop the e-Infrastructures, which are deemed necessary to support and encourage distance learning. Perhaps the most significant among these e-Infrastructures, the Integrated National Knowledge Network (iNKN) endeavours to build a "technology backbone" in the country (Andronico et al.,2008).

e-Learning has so much of potential in India, but adoption has been slow and will need a major marketing and awareness effort (Aggarwal, 2009). In India, globalization of education has generated sudden quantitative growth in higher education. But to meet this sudden growth there is acute dearth of high-quality trained teaching faculty. An effective education system must provide harmonious balance between the theory and practical knowledge in order to understand the technical aspects and applications in real life. Most of the universities are having their distance learning program divisions (DLPD) and virtual classrooms. These virtual classroom and virtual institutes are growing at high speed to replace the traditional classroom learning (c-Learning) with the emerging e-Learning technology. e-Learning growth mainly depend on ICT infrastructure and internet penetration. India is now having good ICT infrastructure and internet base is also strong enough (Scott et al., 2008; Gowthaman et al., 2017).

Conventional system of learning is effective but it has its own limitation in respect to accommodation of number of learners, time and place. The education receiving population in India is growing exponentially. Therefore, there is a need for new system of learning which is not only effective but has more potential and can cater the entire population of the world. The e-Learning is the solution for the problem and the system is already operational.

Implementation of e-Learning is having many problems, in spite of that Indian e-Learning market is fast growing market. Despite the many positives for technology-enabled learning, India's e-Learning industry is facing its share of challenges. The key challenges identified are accreditation and recognition, costs, lack of awareness and, resistance from a segment of traditionally-oriented faculty and administrators in some institutions of higher learning. Hence in brief, there are problems in implementation of e-Learning even though it has massive prospects and advantages in India to cater educational need of vast population of the country (Garai & Shadrach, 2006).

As far as higher education sector is concerned, various stakeholders include learners, faculties, administrators, academic institutions, government and non-government regulators/policymakers, society at large, etc. Researchers and experts including Kundi et al. (2010) have opined that teachers, students and education administrators are the main stakeholder of e-Learning in any educational set up.

To Implement successful e-learning environment it is very important that the barriers faced by teachers and learners are identified and addressed in such a way that they get removed or minimised (Yacob et al., 2012; Awadhiya et al., 2014; Andersson, 2008). There are various types of barriers such as extrinsic barriers and intrinsic barriers. These barriers are specific to country to country and sometimes region to region. Intrinsic barriers are related to perceptions of an individual and these barriers are sometimes based on the personal experiences of the respondents (Bingimlas,2009).Since India is very diversified country in terms of socioeconomic conditions, languages, the study is intended to investigate problems related to e-Learning in formal higher education in India along with analysis of prospect of e-Learning in the related area (Olson et al., 2011)

Methodology

This research study is a descriptive study which aims to study the existing scenario related to barriers of implementing

e-learning in higher education sector in India. This study has adopted quantitative approach using primary data. This study is a part of a major study, which was carried out to identify the:

- Technological barriers to implement E-learning in Higher Education in India
- Pedagogical barriers to implement E-learning in Higher Education in India
- Intrinsic/ Perceptional barriers to implement E-learning in Higher Education in India

This paper presents the results related to Intrinsic/ Perceptional barriers to implement E-learning in Higher Education in India.

The quantitative data was collected through survey questionnaire method. This survey questionnaire was developed after reliability testing and validation.

This survey questionnaire aimed to get the views and opinions of the faculty, administrators' and learners' Intrinsic Barriers to e-learning:

a. Lack of motivation towards e-Learning
b. e-Learning will not add value to my performance
c. Difficulty to adopt e-Learning
d. Lack of interest to use e-Learning
e. Poor previous experiences with e-Learning
f. Complication and Frustration in using e-Learning
g. e-Learning is not engaging enough

The population of this study comprised of all the learners, faculties and administrators associated with formal higher education institutes in India which have adopted e-Learning practices. Required data was collected from a total of 300 learners and 200 faculties and administrators.

Results and Discussion

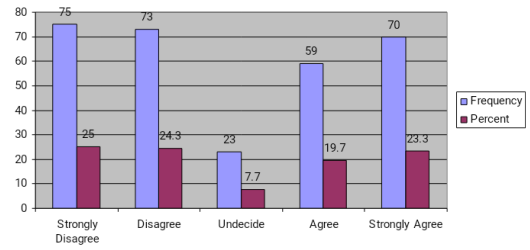
Responses towards Intrinsic Barriers of E-Learning

The analysis of the data collected from 300 learners and 200 faculties and administrators from various Higher Education Institutes is presented below:

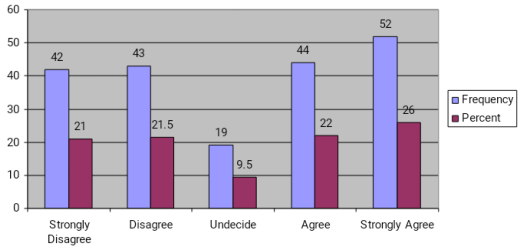
A. Lack of motivations towards e-Learning

The responses collected from the sample respondents including learners and faculties and administrators have been exhibited in charts below:

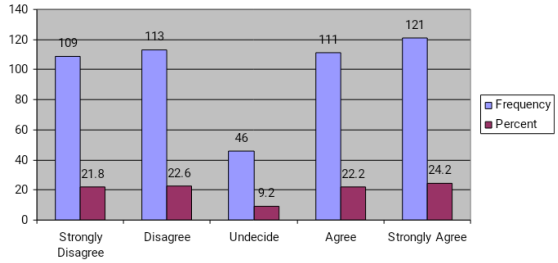
Response from learners (Chart 1A)



Response from faculties and administrators(Chart 1B)



Combined response (Chart 1C)



Mean and Standard Deviation (Table 1)

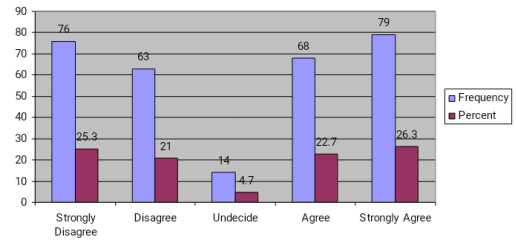
		Lack of motivations towards e-Learning		
N	Valid	300	200	500
	Missing	0	0	0
Mean		3.0033	3.105	3.044

As seen from chart 1A above, that 300 learners responded to the questionnaire and among them, a total of 59 learners (19.7%) agreed, and a total of 70 learners (23.3%) strongly agreed that "**Lack of motivations towards e-Learning**" is one of the key problems associated with e-Learning in higher education in India. Similarly, as referred at Chart 1B above, out of 200 faculties and administrators 44 respondents (22%) agrees and 52 respondents (26%) strongly agrees that it is a key problem. Putting it together, overall, 46.4% of respondents comprising of 111 respondents (representing 22.2%) having agreed, and 121 respondents (representing 24.2%) having strongly agreed and believe that this to be a key problem associated with e-Learning in higher education in India. The associated mean value of 3.044 (as shown in table 1) is also indicative of the same.

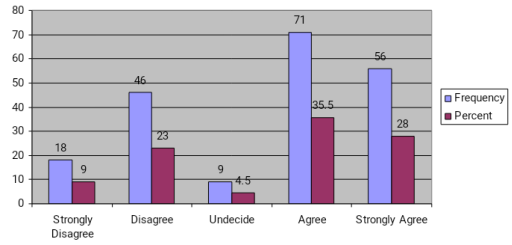
B. e-Learning will not add value to my performance

The responses collected from the sample respondents including learners and faculties and administrators have been exhibited in charts below:

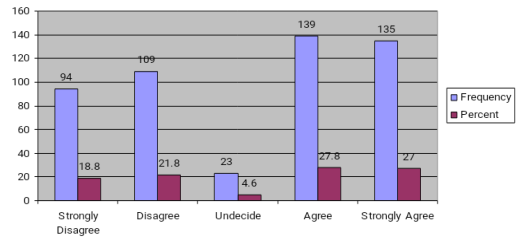
Response from learners (Chart 2A)



Response from faculties and administrators(Chart 2B)



Combined response (Chart 2C)



Mean and Standard Deviation (Table 2)

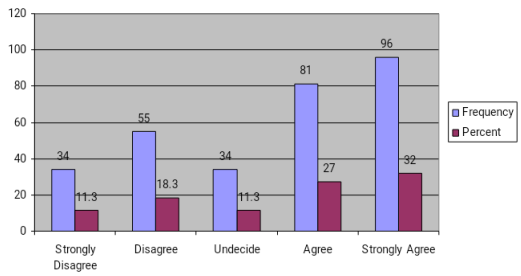
		e-Learning will not add value to my performance		
N	Valid	300	200	500
	Missing	0	0	0
Mean		3.0367	3.505	3.224
Std. Deviation		1.58441	1.34873	1.51076

As seen from chart 2A above, out of 300 learners responded to the question and majority of the learners agreed that "**e-Learning will not add value to my performance**" is one of the key problems associated with e-Learning in Indian education system. Similarly, as seen at Chart 2B above, out of 200 faculties and administrators 71 respondents (35.5%) agrees and 56 respondents (28%) strongly agrees that it is a key problem. Putting it together, overall, 54.8% of respondents comprising of 139 respondents (representing 27.8%) having agreed, and 135 respondents (representing 27%) having strongly agreed believe that this to be a key problem associated with e-Learning in higher education in India. The associated mean value of 3.224 (as shown in table 2) indicates that learners / faculties/administrators believe that e-Learning adds no value to their performance.

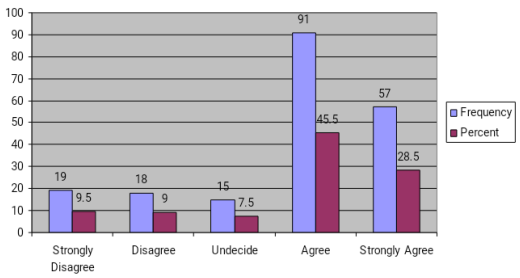
C. Difficulty to adopt e-Learning

The responses collected from the sample respondents including learners and faculties and administrators have been exhibited in charts below:

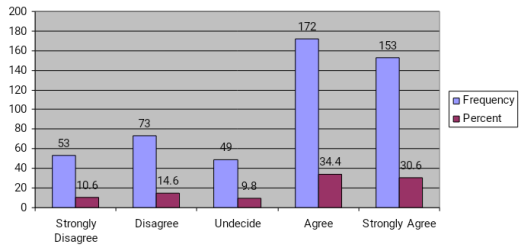
Response from learners (Chart 3A)



Response from faculties and administrators (Chart 3B)



Combined response (Chart 3C)



Mean and Standard Deviation (Table 3)

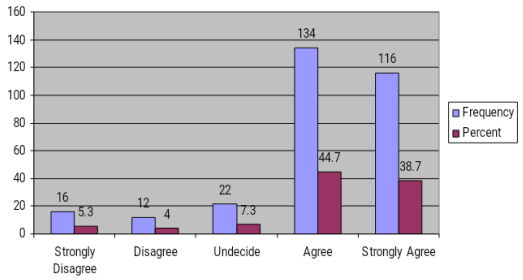
N		Difficulty to adopt e-Learning		
	Valid	300	200	500
	Missing	0	0	0
Mean		3.5	3.745	3.598
Std. Deviation		1.39397	1.23189	1.33565

As seen from chart 3A above, out of 300 learners, a total of 81 learners (27%) agreed, and a total of 96 learners (32%) strongly agreed that "**Difficulty to adopt e-Learning**" is one of the key problems associated with e-Learning in higher education in India. Similarly, as depicted in the table 3B above, out of 200 faculties and administrators 91 respondents (45.5%) agrees and 57 respondents (28.5%) strongly agrees that it is a key problem. Putting it together, overall, 65% of respondents comprising of 172 respondents (representing 34.4%) having agreed, and 153 respondents (representing 30.6%) having strongly agreed believe that this to be a key problem associated with e-Learning in higher education in India. The associated mean value of 3.598 (as shown in table 3) is also indicative of the same.

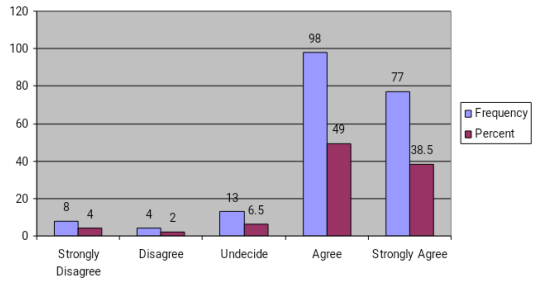
D. Lack of interest to use e-Learning

The responses collected from the sample respondents including learners and faculties and administrators have been exhibited in charts below:

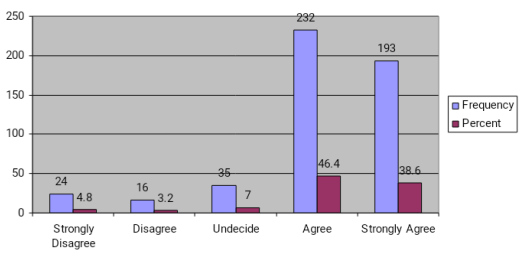
Response from learners (Chart 4A)



Response from faculties and administrators(Chart 4B)



Combined response (Chart 4C)



Mean and Standard Deviation (Table 4)

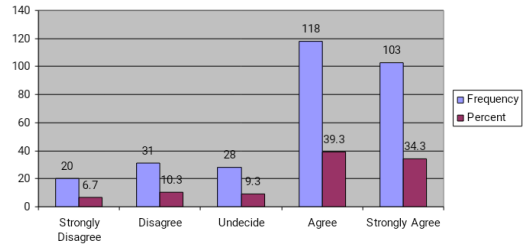
N		Lack of Interest to use e-Learning		
	Valid	300	200	500
	Missing	0	0	0
Mean		4.0733	4.16	4.108
Std. Deviation		1.04799	0.93206	1.00317

As seen from chart 4A above, out of 300 learners, majority of the learners (83.4%) agreed that "**Lack of Interest to use e-Learning**" is one of the key problems associated with e-Learning in higher education in India. Similarly, as shown at Chart 4B above, out of 200 faculties and administrators 98 respondents (49%) agrees and 77 respondents (38.5%) strongly agrees that it is a key problem. Putting it together, overall, 85% of respondents comprising of 232 respondents (representing 46.4%) having agreed, and 193 respondents (representing 38.6%) having strongly agreed that this to be a key problem associated with e-Learning in higher education in India. The associated mean value of 4.108 (as shown in table 4) is also indicative of the same.

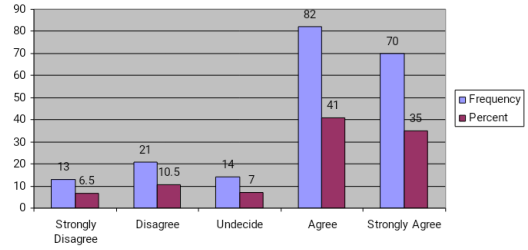
E. Poor previous experiences with e-Learning

The responses collected from the sample respondents including learners and faculties and administrators have been exhibited in charts below:

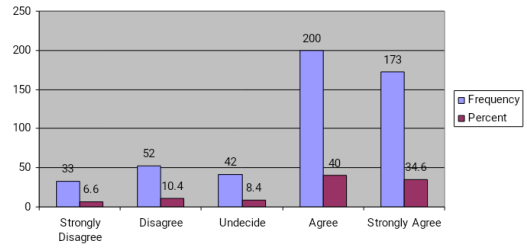
Response from learners (Chart 5A)



Response from faculties and administrators(Chart 5B)



Combined response (Chart 5C)



Mean and Standard Deviation (Table 5)

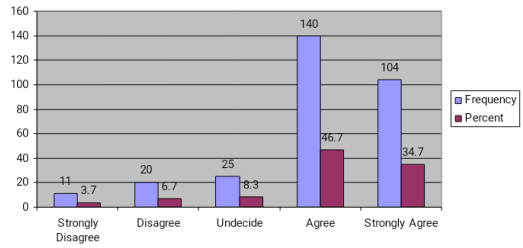
		Poor previous experiences with e-Learning		
N	Valid	300	200	500
	Missing	0	0	0
Mean		3.8433	3.875	3.856
Std. Deviation		1.19592	1.19015	1.19252

As seen from chart 5A above, out of 300 learners, significant number of learners (73.6%) agreed that "**Poor previous experiences with e-Learning**" is one of the important problems associated with e-Learning in Indian higher education scenario. Similarly, it can be seen at Chart 5B above that out of 200 faculties and administrators 82 respondents (41%) agrees and 70 respondents (35%) strongly agrees that it is a key problem. Putting it together, overall, 74.6% of respondents comprising of 200 respondents (representing 40%) having agreed, and 173 respondents (representing 34.6%) having strongly agreed believe that this to be a key problem associated with e-Learning in higher education in India. The associated mean value of 3.856 (as shown in table 5) is also indicative of the same.

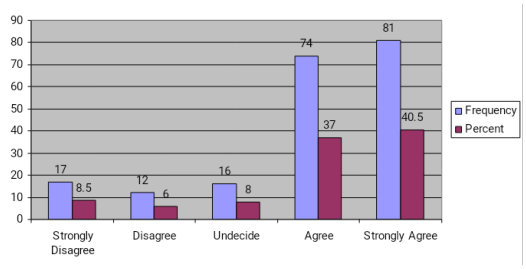
F. Complication and Frustration in using e-Learning

The responses collected from the sample respondents including learners and faculties and administrators have been exhibited in charts below:

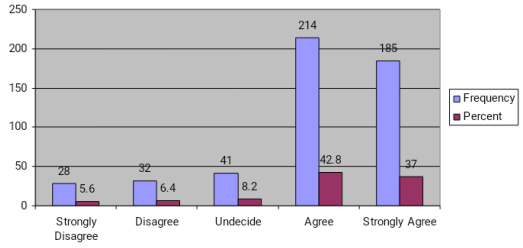
Response from learners (Chart 6A)



Response from faculties and administrators (Chart 6B)



Combined response (Chart 6C)



Mean and Standard Deviation (Table 6)

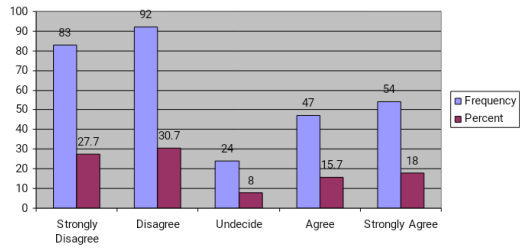
		Complication and Frustration in using e-Learning		
N	Valid	300	200	500
	Missing	0	0	0
Mean		4.02	3.95	3.992
Std. Deviation		1.01474	1.22269	1.10198

As seen from chart 6A above, out of 300 learners, significant number (81.4%) learners agreed/ strongly agreed that "Complication and Frustration in using e-Learning" is one of the key problems associated with e-Learning in higher education in India. Similarly, at Chart 6B above, it is clearly depicted that out of 200 faculties and administrators 74 respondents (37%) agrees and 81 respondents (40.5%) strongly agrees that it is a key problem. Putting it together, overall, 79.8% of respondents comprising of 214 respondents (representing 42.8%) having agreed, and 186 respondents (representing 37%) having strongly agreed believe that this to be a key problem associated with e-Learning in higher education in India. The associated mean value of 3.992 (as shown in table 6) is also indicative of the same.

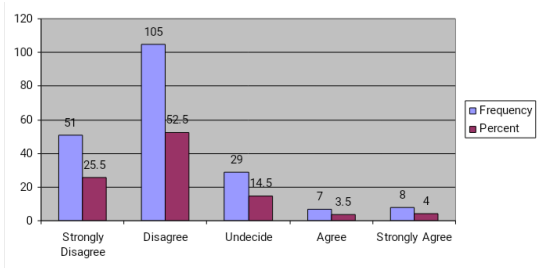
G. e-Learning is not engaging enough

The responses collected from the sample respondents including learners and faculties and administrators have been exhibited in charts below:

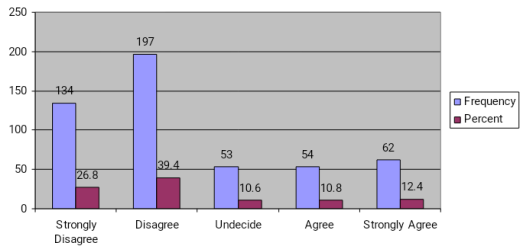
Response from learners (Chart 7A)



Response from faculties and administrators (Chart 7B)



Combined response (Chart 7C)



Mean and Standard Deviation (Table 7)

		e-Learning is not engaging enough		
N	Valid	300	200	500
	Missing	0	0	0
Mean		2.6567	2.08	2.426
Std. Deviation		1.47627	0.94768	1.32061

As seen from chart 7A above, out of 300 learners, a total 53.8 % agreed/ strongly agreed that "**e-Learning is not engaging enough**" is one of the key problems associated with e-Learning in higher education in India. Similarly, it is seen clearly at Chart 7B that out of 200 faculties and administrators 7 respondents (3.5%) agrees and 8 respondents (4%) strongly agrees that it is a key problem. Putting it together, overall, 23.2% of respondents comprising of 54 respondents (representing 10.8%) having agreed, and 62 respondents (representing 12.4%) having strongly agreed believe that this to be a key problem associated with e-Learning in higher education in India. The associated mean value of 2.426 (as shown in table 7) indicates that learners/faculties/ administrators believe that e-Learning is engaging enough.

Findings and Discussion

The study revealed that the biggest impediment in successful implementation of e-Learning in India is the **lack of interest in its use**, and this exploration is reflected not only on overall basis including all the learners, faculties and administrator respondents, but individually also, as reflected by highest overall mean score of 4.10, mean score of 4.07 for learners', and mean score of 4.16 for faculties and administrators. Researchers have reported that "HEIs are constantly facing problems of user dissatisfaction with newly introduced systems, mismatches between a new technology and the existing work practices, underestimating the technological complexity for employees, and inefficient end-user support (see Bondarouk, 2006)." On the similar lines, it was observed by Sitlani and Jain (2020) that "as e-learning does not accommodate all kinds of teaching pedagogies, it is very difficult to integrate e-learning systems with other systems". Further, Researchers have also reported that "teachers don't find e-Learning environments matching with their teaching styles". (see Mehra & Mital, 2007).

This finding was reinforced as respondents perceiving '**using e-learning to be complicated and frustrating'** was found to be the second most critical barrier with mean scores of 4.02, 3.95 and 3.99 respectively for learners, faculties and administrators and overall basis. Researchers have concluded in course of their studies that "e-learning systems can make the users frustrated, confused and reduce their interest in learning" (see Juutinen and Saariluoma; 2006). Further, it was observed by Sitlani and Jain (2020) that learner respondents perceived that "education through e-learning mode will be a hard nut to crack as it is difficult for them

to adopt e-learning". On the similar lines, Klamma *et al.* (2007) reported that "individual satisfaction is closely related with the commitment of the individual to participate and contribute.

The probable reason behind this seems to be the previous poor experience of respondents of the study as **poor previous experience with e-learning** has been revealed to be the third most crucial barrier in successful implementation of e-Learning in India. One of the probable reasons behind this seems lack of required skill-set by learners, faculties and other key stakeholders. In course of their study, Ahmad Al-adwan *et al.* (2012) observed that "instructors and students must possess specific skills to successfully use various e-Learning tools. Lack of training hampers growth of e-Learning therefore intensive training is required". Further, as respondents have reported lack of interest in use of e-learning, one of the major concerns of HEIs shall be development of "learner-centric content" that is suitable for online learning.

Conclusion

The e-Learning initiatives has lead to the globalisation of academic learning and helped to overcome the barriers related to age, place, time and socio-economic status. The technological revolution has added a whole new dimension to the prospects of higher education.

The biggest problem in the growth of e-Learning in Higher Education of India happens to be Intrinsic/ perceptional problem. Learning technologies have the potential to enhance educational innovation, but the eLearning adoption rate of faculty in universities is so far disappointing. The motivation and capability of faculty to use information and communication technologies (ICT) in teaching and learning is influenced by competence development measures and wider institutional incentives that universities offer.

The results show that, mere introduction of ICT training courses does not sufficiently motivate faculty to acquire the required competences and to engage in eLearning. Universities have to create innovative portfolios for faculty development which extend both the scope and breadth of formal training with non-formal measures like communities of practice, peer groups and networks. Beyond these competence development measures, institutional incentives like eLearning rewards and career opportunities for eLearning champions increase the motivation of faculty to sustainably use learning technologies for their courses.

Incorporation of e-learning does not necessarily guarantee motivated student. Also, there is huge distance gap between pear groups leading to lack of socialisation. Therefore, it becomes important find out ways to motivate students in an online environment. It is essential for teachers to understand their students' motivation. There is a need for interactive e-learning methods to eradicate the barriers. There is a need for orientation and self motivation of teachers and learners for effective use of e-learning. Adequate support needs to be provided for enhanced digital learning to both faculties and students. Proper training, skill enhancement workshops and hands-on trainings to increase the level of their technological and communication skills to be able to benefit significantly from the opportunities offered by e-learning. The lack of confidence and experience in using technology might be extra obstacle for other students. In e-learning process, students work independently and some students might find it difficult to understand their contents, due to the lack face-to-face contact with instructors and other fellow students. All these factors indicate that these students will not be able to participate effectively and succeed in the e-Learning process. Consequently, in order to appropriately progress and successfully use all e-learning tools to effectively access online information, some students need orientation on the necessary some specific skills. Certainly, ELearning would increase the motivation and engagement of students for learning and help them to become self directed independent learners. Teachers also needs to develop and restructure their courses in way that they suit online requirement for which their soft skills need to be adequately trained and enhanced for mastering technical achievements and new advancements offered by e-learning.

To help instructors during the transition period will require management support together with resources and sufficient time allocation. It is evident that E-Learning success in higher education depends on effectiveness of delivery and adequate training of instructors in the adoption of E-Learning initiatives.

For successful implementation of e-learning, necessary measures to overcome the perceptional barriers are must. It can be concluded that, Student, Instructor, Infrastructure and Technology and Institutional Management dimensions are the most important dimensions to influences the usages of E-Learning systems. Thus, we recommend that institutions should provide more attention to above said barrier factors of E-Learning to ensure more successful implementation of an E-Learning system.

References

- A.R.Nadira Banu Kamal and A Thahira Banu, (2010), ICT in Higher Education – A Study, Canadian Journal on Data, Information and Knowledge Engineering Vol. 1, No. 1
- A. S. Sife, E. T. Lwoga, & C. Sanga 2007), New technologies for teaching and learning: Challenges for higher learning institutions in developing countries. International Journal of Education and Development using Information and Communication Technology (IJEDICT), 3(2), pp 57-67
- Aboderin, Olukayode Solomon & Kumuyi, Gbemisola Janet, (2013), The Problems and Prospects of E-Learning in Curriculum, Implementation in Secondary Schools in Ondo State, Nigeria, International Journal of Educational Research and Technology ISSN 0976-4089 IJERT: Volume 4

- Aggarwal Deepshikha, (2009), Role of e-Learning in A Developing Country Like India, Proceedings of the 3rd National Conference; INDIACom-2009 Computing For Nation Development
- Ahmad Al-adwan, Jo Smedley, (2012), Implementing e-Learning in the Jordanian Higher Education System: Factors affecting impact, International Journal of Education and Development using Information and Communication Technology (IJEDICT)
- Ali Tizro *et al.,* (2014), Identification and Classification of E-Learning Barriers in Universities: Confirmatory Factor Analysis (Cfa), APJEM Arth Prabhand: A Journal of Economics and Management Vol. 3 ssue
- Annika Andersson, (2008), Seven major challenges for e-Learning in developing countries: Case study eBIT, Sri Lanka, International Journal of Education and Development using Information and Communication Technology (IJEDICT)
- Ashok K. Gaba and S.S. Ssthy, (2010), "Learners' Perception towards Information and Communication Technologies: A Case Study of Indira Gandhi National Open University, Indian Journal of Open Learning, 19(3), 143-157 ISSN 0971-2690.
- Asian Development Bank. (2011). Higher education across Asia. An overview of issues and strategies. Retrieved from https://www.adb.org/sites/default/files/publication/29931/regional-cooperation-higher-education-asia.pdf
- Bandalaria, M. D.P. (2018). Open and Distance eLearning in Asia: Country Initiatives and Instructional Cooperation for the Transformation of Higher education in the Region. Journal of Learning for Development, 5(2), Pp.116-132.
- Bhattacharya. B., (2000), A New Model for Off-campus Distance Education, Conference Proceedings - International Conference on "Distance Education -an open question ?" University of South Australia.
- Bondarouk, T. V. (2006). Action-oriented group learning in the implementation of information technologies: results from three case studies. European Journal of Information Systems
- Burbules N.C., & Callister T.A., (2000), Universities in transition: the promise and the challenge of new technologies, Teachers College Road¸ 102 (2), 271-293
- Cawson, P. A. (2005), ICTs in Teacher Education: What do teachers need to learn? International Conference on Teacher Education, "Quality Teacher Education: The Challenges of the 21st Century" University of Cape Coast, Ghana, 17-20 August 2005.
- Connecting Students to Advanced Courses Online Innovations in Education, (2007), U.S. Department of Education Office of Innovation and Improvement, http://www.ed.gov/ admins/lead/ academic/ advanced/ index.html.
- Cosmas B. F. Mnyanyi, Jabiri Bakari and Tolly S. A. Mbwette, Implementing E-learning in Higher Open and Distance Learning Institutions in Developing Countries: The Experience of The Open University of Tanzania, E-Learning%20Project/session6Mnyanyi.pdf
- De Verneil, M., & Berge, Z.L., (2000), Going online: guidelines for faculty in higher education, International Journal of Educational Telecommunication, 6 (3), 227-242
- Denzil Chetty, (2012), challenges and prospects: ICT-enhanced teaching and learning in the college of human sciences (UNISA),
- Devajit Mahanta, Majidul Ahmed (2012), E-Learning Objectives, Methodologies, Tools and its Limitation, International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-2, Issue-1
- Dr. Uma Kanjilal and Dr. S.B. Ghosh, (2003), "developing e-Learning prototype for library management – a case study" (http://www.unige.ch/biblio/ses/IFLA/sat1-Ghosh.pdf).
- Ghulam Muhammad, Kundi Allah Nawaz Shadiullah Khan, (2010), the predictors of success for e-Learning in higher education institutions (heis) in n-w.f.p, pakistan
- Gurmak Singh, John O'Donoghue, Harvey Worton, (2005), A Study Into The Effects of e-Learning on Higher Education, Journal of University Teaching and Learning Practice
- Hassan M. Selim, (2005), E-Learning Critical Success Factors: An Exploratory Investigation of Student Perceptions, Managing Modern Organizations Through Information Technology, Proceedings of the 2005 Information Resources Management Association International Conference
- Jagnoop Kaur, (2013), emerging issues and challenges in e-Learning, International Journal of Research in Education Methodology, Volume .2 No.3, ISSN:2278-7690, www.cirworld.com
- Jaiswal, V. (2013). Current Status of ELearning in Indian Higher Education: A Case Study of U.P., available at SSRN: http://ssrn.com/abstract=2231910
- Jo Shan Fu, (2013), ICT in Education: A Critical Literature Review and Its Implications, International Journal of Education and Development using Information and Communication Technology (IJEDICT
- K. D. Gunawardana 2005), An empirical study of potential challenges and benefits of implementing e-learning in Sri Lanka, Proceedings of the Second International Conference on eLearning for knowledge-Based Society, August 4-7, Bangkok, Thailand
- Kalaivani, A. (2014), Role of ELearning in the Quality Improvement of Higher Education, IOSR Journal Of Humanities And Social Science (IOSR-JHSS) p-ISSN: 2279-0845 e-ISSN: 2279-0837 Vol 19, No. 11, PP 15-17, www.iosrjournals.org
- Kayte O'Neill, Gurmak Singh, and John O'Donoghue, (2004), Implementing e-Learning Programmes for Higher Education: A Review of the Literature, Journal of Information Technology Education Volume 3,
- Lin Y. Muilenburg et all, (2005), Student Barriers to Online Learning: A factor analytic study, Distance Education, Vol. 26, No. 1, pp. 29–48
- Loing, B. (2005). ICT and Higher Education. General delegate of ICDE at UNESCO. 9th UNESCO/NGO Collective Consultation on Higher Education (6-8 April 2005).
- Mahboub E. Hashem, (2009), Perceptions of E-Learning and Social Readiness to Accept Virtual Degrees in the Middle East: A Case Study, First Kuwait Conf. on E-Services and E-Systems
- Majid Amouzad Khalili1 et all, (2014), Factors Influencing Student's Intention to Adopt ICT: A Case from India, International Journal of Modern Management Sciences, 3(1): 1-7
- Mehra, P., & Mital, M. (2007). Integrating technology into the teaching-learning transaction: Pedagogical and technological perceptions of management faculty. International Journal of Education and Development using ICT, 3(1).
- Meng-Jung Tsai, (2009), The Model of Strategic e-Learning: Understanding and Evaluating Student e-Learning from Metacognitive Perspectives, Educational Technology & Society, 12 (1), 34–48, Tsai, M.-J.
- Mohammed M. Aman, (2010), E-Learning: Issues and Challenges, Presented at the First International Conference on E-Management, Tripoli, Libya
- Mukta Goyal, Divakar Yadav , Alka Choubey, (2012), E-Learning: Current State of Art and Future Prospects, IJCSI International Journal of Computer Science Issues, Vol. 9, Issue 3, No 2
- National Programme on Technology Enhanced Learning (NPTEL), Project Document, July 2003 – June 2007
- Pallavi, Abhishek Kumar, Archana Thakur, (2013), e-Learning: Initiatives in India, 9th International CALIBER - 2013, INFLIBNET Centre, Gandhinagar, Gujarat
- Qamar Afaq Qureshi, Allah Nawaz and Najeebullah Khan, (2011), Prediction of the problems, user-satisfaction and prospects of e-Learning in HEIs of KPK, Pakistan, International Journal of Science and Technology Education Research Vol. 2(2).

- Rakesh H M, (2014), www.iosrjournals.org 98 | Page, Contextual Factors in using E-Learning Systems for Higher Education in India, IOSR Journal of Business and Management (IOSR-JBM) e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 16, Issue 2. Ver. I
- Ramesh Sharma, (2001), Online Delivery Of Programmes: A Case Study Of IGNOU, International Review of Research in Open and Distance Learning
- Ravi N. R. (2015), Structure and Organisation of Higher Education in India : A Macro-Perspective, Indian Journal of Educational Studies : An Interdisciplinary Journal (ISSN No. 2349-6908) Vol.2, No.1,Pp. 24-29
- Rebecca Clothey, (2010), Current Trends in Higher Education: Expanding access in Asia Pacific through technology, Comparative & International Higher Education
- S. Kigundu, (2014), Engaging e-Learning in Higher Education: Issues and Challenges, Int J Edu Sci, 6(1): 125-132
- Sánchez, J. J. C., & Alemán, E. C. (2011). Teachers' opinion survey on the use of ICT tools to support attendance-based teaching. Computers & Education, 56(3), 911-915.
- Sanjay Rajpal, Member, Sanjay Singh, Awadhesh Bhardwaj, Alok Mittal (2008), E-Learning Revolution: Status of Educational Programs in India, Proceedings of the International Multi Conference of Engineers and Computer Scientists 2008 Vol I IMECS, Hong Kong
- Sanjaya Mishra and Santosh Panda, (2007), "Development and Factor Analysis of an Instrument to measure Faculty Attitude towards e-Learning" Asian Journal of Distance Education http://www.AsianJDE.org Asian J D E, vol 5, no 1, pp 27 – 33
- Sanna Juutinen, (2010), Emotional obstacles for e-Learning – a user psychological analysis, European Journal of Open, Distance and E-Learning, http://www.eurodl.org/?article=402
- Sasseville, B. (2004). Integrating Information and Communication Technology in the Classroom: A Comparative Discourse Analysis. Canadian Journal of Learning and Technology, 30(2), Spring.
- Shalni Gulati, (2008), Technology-Enhanced Learning in Developing Nations: A review, International Review of Research in Open and Distance Learning
- Sharma, R.C., (1999), Networked distance education in India. Indian Journal of Open Learning, 8(2), 147-156
- Sheikh Mohd Imran, (2012), trends and issues of e-Learning in lis-education in india: a pragmatic perspective, BJIS, Marília (SP), v.6, n.2, p.26-45, Available in: http://www2.marilia.Unesp.br/revistas/index.php/ bjis/index
- Sitlani and Jain (2020), E-Learning in Open and Distance Education; A Comprehensive Study of Universities of Madhya Pradesh, UGC Major Research Project (Unpublished)
- Soni R.K. (2015), A Study of Problems and Prospects of e-Learning in India, Unpublished Ph.D. Dissertation.
- Soumitra Chandra, (2014), e–Learning in India" its prospects and challenges, IJRFM Volume 4, Issue 10
- Sharma Sunil Kumar, Javed Wasim, Dr. Jamshed Siddiqui, (2014), E-Learning in India, International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume No. 3, Issue No. 1
- T. Wilson (2008), "New ways of mediating learning: Investigating the implications of adopting open educational resources for tertiary education at an institution in the United Kingdom as compared to one in South Africa". International Review of Research in Open and Distance learning, 9(1).
- Thomas Connolly and Mark Stansfield, (2006), Using Games-Based eLearning Technologies in Overcoming Difficulties in Teaching Information Systems, Journal of Information Technology Education Volume 5
- Tyagi S., (2012), Adoption of Web 2.0 technology in higher education: A case study of universities in National Capital Region, India, International Journal of Education and Development using Information and Communication Technology (IJEDICT)
- V. Ndume, F. N. Tilya, & H. Twaakyondo (2008), Challenges of adaptive e-learning at higher learning institutions: A case of Tanzania, International Journal of Computing and ICT Research, 2(1), pp.47-59.
- **Umesh Sharma, (2005),** Integrated Education in India: Challenges and Prospects, Disability Studies Quarterly Winter, Volume 25, No. 1 <www.dsq-sds.org>
- Venkatesan Ravichandran, (2005), e –Learning or Virtual Learning or Virtual Learning Through VSAT, WSVA 2 – Virtual Academy and the Surveying/Geoinformatics Community – Virtual Academy II

GJEIS Prevent Plagiarism in Publication

The Editorial Board had used the Urkund – a Swedish anti-plagiarism software tool which is a fully-automatic machine learning text-recognition system made for detecting, preventing and handling plagiarism and trusted by thousands of institutions across worldwide. Urkund is GDPR compliant with privacy by design and an uptime of 99.9% and have trust to be the partner in academic integrity. https://www.urkund.com] tool to check the originality and further affixed the similarity index which is {0%} in this case (See below Annexure-I). Thus, the reviewers and editors are of view to find it suitable to publish in this Volume-12, Issue-4, October-December, 2020

Annexure 1

Submission Date	Submission Id	Word Count	Character Count
13-Oct-2020	D94763492 (Urkund)	6915	47252

Urkund Analysis Result

Analysed Document: Paper-E-Barriers modified.docx (D94763492)
Submitted: 10/13/2020 8:55:00 AM
Submitted By: satishrrg@ignou.ac.in
Significance: 0 %

Sources included in the report:

Instances where selected sources appear: 1

Reviewers Comment

Reviewer's Comment 1: Perception barriers are considered as the biggest problem in the growth of e-learning in higher education in India. Taking that into consideration the study outlines the triangulation of the results related to the perceived barriers by faculty members, administrators and learners.

Reviewer's Comment 2: The study is empirical in nature based on the quantitative approach based on the data collected from 300 learners and 200 faculties and administrators from various Higher Education Institutes which improves the reliability of results. The findings of the study reveal the lack of interest in use as the biggest impediment in successful implementation of e-Learning in India.

Reviewer's Comment 3: A good and significant number of literatures are reviewed by the authors as well as mentioned In the references. Overall, the paper promises to provide a strong base for the further studies in the area.

Citation

R. K. Soni, Satish R. Gaikwad and Manish Sitlani "Perceptional Barriers of E-learning of Teachers and Learners in India" Volume-12, Issue-4, Oct-Dec 2020. (www.gjeis.com)

https://doi.org/10.18311/gjeis/2020
Volume-12, Issue-4, Oct-Dec 2020
Online iSSN : 0975-1432, **Print iSSN** : 0975-153X
Frequency : Quarterly, Published Since : 2009

Google Citations: Since 2009
H-Index = 96
i10-Index: 964

Source: https://scholar.google.co.in/citations?user=S47TtNkAAAAJ&hl=en

Conflict of Interest: Author of a Paper had no conflict neither financially nor academically.

Editorial Excerpt

The article has 0% of plagiarism which is the accepted percentage as per the norms and standards of the journal for the publication. As per the editorial board's observations and blind reviewers' remarks the paper had some minor revisions which were communicated on a timely basis to the authors (Soni, Gaikwad & Sitlani) and accordingly all the corrections had been incorporated as and when directed and required to do so. The comments related to this manuscript are noticeably related to the theme "**Perceptional barriers of E-learning of teachers and learners in India**" both subject-wise and research-wise. Globalisation has created the need for the development of education through e-learning. Whereas, there is dearth of qualified and trained teaching faculty to successfully implement the learning environment. To address the concerning issue the study tries to investigate technological/ pedagogical and perception barriers of e-learning of teachers and learners in formal higher education in India. Overall, the paper promises to provide a strong base for the further studies in the area. After comprehensive reviews and editorial board's remarks the manuscript has been categorised and decided to publish under "**Empirical Research Papers** (ERP)" category.

Acknowledgement

The acknowledgment section is an essential part of all academic research papers. It provides appropriate recognition to all contributors for their hard work and effort taken while writing a paper. The data presented and analyzed in this paper by (Soni, Gaikwad & Sitlani) were collected first handily and wherever it has been taken the proper acknowledgment and endorsement depicts. The author is highly indebted to others who had facilitated in accomplishing the research. Last but not least endorse all reviewers and editors of GJEIS in publishing in a present issue.

Disclaimer

All views expressed in this paper are my/our own. Some of the content is taken from open source websites & some are copyright free for the purpose of disseminating knowledge. Those some We/I had mentioned above in the references section and acknowledged/cited as when and where required. The author/s has cited their joint own work mostly, Tables/Data from other referenced sources in this particular paper with the narrative & endorsement has been presented within quotes and reference at the bottom of the article accordingly & appropriately. Finally, some of the contents which are taken or overlapped from open source websites for the knowledge purpose. Those some of i/we had mentioned above in the references section. On the other hand opinions expressed in this paper are those of the author and do not reflect the views of the GJEIS. The author has made every effort to ensure that the information in this paper is correct, any remaining errors and deficiencies is solely the responsibility of the author.

Scholastic Seed Inc.
www.scholasticseed.in