AN EMPIRICAL STUDY ON LEARNERS' PERCEPTION TOWARDS ELEARNING TOOLS

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ABSTRACT
Online teaching-learnings have perceived exponential growth due to sudden imposed lockdown to contain the spread of pandemic. The time was perceived as a golden opportunity for Open and Distance Learning (ODL) institutions to make the eLearning components as an essential part of teaching-learning process. The IGNOU has also adopted web-enabled measures to continue its teaching-learning. The present study insights the perception of ODL learners towards the abrupt change shift from face to face, ODL, blended learning to completely online learning without any preparation and planning. Though the eTools were appreciated by learners, there is still a need for greater awareness of these tools, particularly among freshly enrolled learners, in the context of IGNOU. Further in-depth study in this area is inevitable to better understand the concept and improve the practices of open, distance, and online learning.
Keywords: ODL, eLearning, eTools

Introduction

At the end of year 2019, a novel corona virus known as COVID-19 was discovered in a seafood market in Wuhan (Huang *et. al.* 2020). And with this the flurry of corona virus and the disease caused by it started world-wide. Clinical investigation of the virus demonstrated that it was passed from person to person (Li *et. al.*, 2020; Paules *et. al.*, 2020; Wang, Cheng, *et. al.*, 2020). In March 2020, the Director General of the World Health Organization (WHO) declared COVID-19 a pandemic after assessing the deadly virus's rapid spread and enormity over the world (WHO, 2020). Accordingly, WHO issued guidelines such as maintaining social distance, washing hands, and wearing masks to help restrict the virus's spread. The pandemic has forced physical closures of businesses, sporting activities, and educational institutions all around the world by forcing everyone to switch to internet channels. Online learning is the process of creating educational information, providing training, and managing a curriculum using the internet and other important tools (Fry, 2001). Corona virus forced educational institutions to move from an offline to an online teaching-learning mode (Dhawan 2020). This COVID-19 pandemic has brought out the best use of technology in education as well as new pedagogical strategies for future concerns (Amir *et. al.* 2020).

During difficult pandemic time, the Indira Gandhi National Open University (IGNOU) too, extensively utilised social media platforms such as Facebook, YouTube, Twitter, telegram and meetings apps, such as google meet, google classroom and zoom for teaching-learning process.

In light of the above facts, it was proposed to study the IGNOU learners' attitudes on the usage of various digital teaching-learning activities. The goal of this study is to assess how learners understand and use the tech-mediated services provided to them during the lockdown. Also, the effect of demographic features on perception of eLearning has been studied.

Methodology

In this study, a e-questionnaire through developed using Google tool was shared with all those learners who were in first year of their Degree Program. Respondents were asked to rate the statement "*Have you attended/used the following web-based items for study during the period*" as *Always, Sometimes, or Never*. The eLearning tools which were provided to learners have been classified as -

i. Student support through ICT based techniques (Gyandhara (GyD), Gyandarshan (GD), Gyanvani (GV) through Web-portal, Interactive Radio and Televisions),
ii. Digital study material available for learners' (eGyankosh a National Digital Repository), and IGNOU eContent app (Mobile app),
iii. Virtual or online classes (eAcademic Counselling sessions using meeting apps), and through social media (FB live, YouTube streaming),
iv. iGRAM (Grievance Redress and Management web-based Grievance redressal portal).

There were two hypothesis which were tested in this study, were -

H_0: Learners perceived the eLearning tools uniformly. There is no exist significant difference in magnitude of eTools.
H_1: there exist no significant difference in users of eTools with respect to the different demographic features.

An online structured questionnaire consisting of series of questions covering various eLearning aspects of study and demographic features was used as research tool. Student *t* test and analysis of variance (ANOVA) was applied to test the significance of the database.

Result and discussion
The open and distance learning system offers a lot of flexibility in terms of educational access. Learners at Indira Gandhi National Open University were asked to participate in this web-based survey by filling out an eQuestionnaire. The findings of the data analysis are shown in tables 1 to 3.

The majority of respondents (>82 percent of all those who responded) were between the ages of 18 to 24, whereas 17.46 percent of learners were above the age of 24. It indicates that open and distance learning is either the youths' preferred mode of pursuing higher education, or it is their only choice for continuing their studies. Male learners constituted 61.90% of the total respondents, whereas female learners comprised 38.10% of the total 63 respondents, indicates the higher involvement of males.

As far as social category is concerned, majority of learners were from General (61.90%) category and 38.10% belonged to other categories. The majority of learners who participated in this survey were belonged to urban locality. Out of 63 respondents, there was 69.84% learners were from urban localities, whereas 30.16% of total 63 learners were having their residence in rural areas. Also, there has been higher proportion of unemployed learners (74%). Only 14.29% (9) respondents were reported that they are married (Table 1).

Learners of the twenty-first century are well-versed in a variety of web-based tools and techniques. During lockdown, eLearning has shown to be an effective and valuable phenomenon for learners. Table 2 presents the learners' responses in uses of various eLearning tools. Values in paratheses describe the percentage of total respondents. An interesting trend has been seen that tech-mediated academic programs and iGRAM were the tools which were minimally used by the learners. This account for nearly 40% of total. Majority of learners perceived the digital study materials and academic activities facilitated by virtual and social media platforms to be beneficial, which is been accounted for 60% of total respondents. Nevertheless, the results of the *t* test revealed that there is no substantial difference between those who use eTools for their studies on a regular basis and those who have never used them.

The analysis of variance has been applied in order to assess the following hypothesis that -
H_0: Learners perceived the eLearning tools uniformly. There is no exist significant difference in magnitude of eTools.

Since the p-value for the various eTools was greater than the 0.05, the null hypothesis has been accepted, and so at the 95% level of confidence it is concluded magnitude of uses of various eTools no significantly different with respect to its uses.
H_1: there exist no significant difference in users of eTools with respect to the different demographic features.

Since the p-value for the columns = 0.00<0.05 for we reject the null hypothesis, and so at 95% level of confidence it concludes there exists significant difference according to the age, social category, locality of residence, marital and employment status of learners. However, males and females both responded to the eTools equally.

Distance learning courses offers significant differences from the classic classroom environment (Totaro *et. al.* 2005). Student support services are very critical in distance education. Efficient support services are strongly and positively linked to academic success (Farajollahi and Moenikia 2010). Despite the fact that teaching-learning aids such as Gyanvani, Gyandhara, Gyandarshan (Academic Program through radio and televisions), as well as digital grievance redressal portal (iGRAM) are already in place for learners. Learners in this study appeared to be less familiar with these programmes and did not much use them, nor did they understand their utility. The academic programmes sponsored by Gyandhara, Gyandarshan, or Gyanvani appear to be the least popular among learners. There is a need to boost student awareness of these programmes.

However, use of social media for academic activities and online classes were found to be remedial and substitute during the lockdown. This gets the support from the similar kind of study in which the use of ICT in student supports has been assumed a powerful strategy for providing learner-cantered services in ODL (Jung, 2007). It

has also accepted that with the development of ICT, ODL institutions can offer individualized and interactive student services faster and easier than ever such as telephone or email help desks, e-counselling, e-tutoring, and tutoring sessions via video-conferencing (Jung, 2007).

Nevertheless, there are some external and internal constraints which may influence the eLearning activities. The external factors such as interrupted internet connectivity, paid internet supply, and internal factors like time management, distraction while learning online for a longer period of time found to be challenges by the learners in online learning (Amir *et. al.* 2020).

Analysis of demographic factors are similar to the study in which the response of the girls was same as that of boys: wherein boys and girls believed that ODL has increased their confidence level (Paliwal 2019).

Higher participation of unemployed, urban, unmarried, youth demonstrates that open and distance education systems may be seen as avenues for educational empowerment by young people. New information and communication technologies have greatly improved it. and online peer learning techniques found to be boosting academic success (Razak and See 2010).

Learning behaviours of learners during COVID-19 may be compared with a study wherein numbers of hours of online learnings in day has increased during COVID-19 (Jamalpur *et. al.*; 2021). In another related study Bali and Liu (2018) observed that some the learners were very comfortable in online learning since it led them to the chance to being innovative by using computer technology, on the other hand perception of face-to-face learning was higher than online learning in term of social presence, social interaction, and satisfaction. Totaro *et. al.* (2005) found that in an online program, reading with a text book is more successful and integral to the learning experience than in a conventional course. Digitalization brought some challenges for learners support in online learning environment (Tait 2014).

Interest of learners towards online classes and uses of soft materials is in consistent with findings of study conducted by Amir *et. al.* (2020), in which authors explained that sudden closure of the university globally due to COVID-19 pandemic, albeit undesirable, presents an enormous opportunity for cultural transformation in the education system. This created the big opportunities for tech-savvy generations.

Educators have changed their entire pedagogical strategy to combat emerging business dynamics and adjust to shifting situations, resulting in an overnight transition of traditional classrooms into e-classrooms. The positive-side is that pandemic has brought paradigm shift in the process of teaching-learning process. Majority of face-to-face educational activities has been replaced by eLearning online methods for the benefit of everyone and society as a whole.

There is a need to motivate learners about the worth of eLearnings and to spread the word about these methods to a large number of learners. Web-enabled tools should be included judicially as an integral part of teaching and assessment activities. Though, various external and internal constraints may also be considered during the designing of eCurriculum. To arrive at further meaningful outcomes, additional research by programs, disciplines, and program structure needs to be carried out.

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References

Amir, L. R., Tanti, I., Maharani, D. A., Wimardhani, Y. S., Julia, V., Sulijaya, B., & Puspitawati, R. (2020). Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia. *BMC medical education*, *20*(1), 1-8.

Bali, S., and Liu, M. C. (2018, November). Learners' perceptions toward online learning and face-to-face learning courses. In *Journal of Physics: Conference Series* (Vol. 1108, No. 1, p. 012094). IOP Publishing.

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, *49*(1), 5-22.

Farajollahi, M., and Moenikia, M. (2010). The study of relation between learners support services and distance learners' academic achievement. *Procedia-Social and Behavioral Sciences*, *2*(2), 4451-4456.

Fry, K. (2001). E-learning markets and providers: Some issues and prospects. Education+ Training, 43(4/5), 233–239.https://doi.org/10.1108/EUM0000000005484

Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., and Cheng, Z. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. The Lancet, 395(10223), 497–506. https://doi.org/10. 1016/S0140-6736(20)30183-5

Jamalpur, B., Chythanya, K. R., and Kumar, K. S. (2021). A Comprehensive Overview of Online Education-Impact on Engineering Learners during COVID-19. *Materials Today: Proceedings*.

Jung, I. (2007). Innovative practices of distance education (including e-learning) in Asia and the Pacific. *International Journal for Educational Media and Technology*, *1*(1), 48-60.

Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., and Feng, Z. (2020). Early transmission dynamics in Wuhan, China, of novel coronavirus–infected pneumonia. *New England journal of medicine*.

Paliwal, D. (2019). Reaching the unreached through open and distance learning in India. *Asian Association of Open Universities Journal*. Vol. 14 No. 1, pp. 39-49.

Paules, C. I., Marston, H. D., and Fauci, A. S. (2020). Coronavirus infections – more than just the common cold. Jama, 323(8), 707–708. https://doi.org/10.1001/jama.2020.0757

Razak, R. A., and See, Y. C. (2010). Improving academic achievement and motivation through online peer learning. *Procedia-Social and Behavioral Sciences*, *9*, 358-362.

Tait, A. (2014). From place to virtual space: Reconfiguring student support for distance and e-learning in the digital age. *Open Praxis*, *6*(1), 5-16.

Totaro, M. W., Tanner, J. R., Noser, T., Fitzgerald, J. F., and Birch, R. (2005). Faculty perceptions of distance education courses: A survey. *Journal of College Teaching & Learning (TLC)*, *2*(7). Wang, C., Cheng, Z., Yue, X. G., and McAleer, M. (2020). Risk management of COVID-19 by universities in China.

WHO. (2020). Coronavirus disease (COVID-19) pandemic. World Health Organization. https://www.who.int/emergencies/ diseases/novel-coronavirus-2019

Table 1 Demographic profile of respondents

S. No.	Parameters	Scale	Frequency	%
	Age	18-24	52	82.54
		>24	11	17.46
		Total	63	100
	Gender	Male	39	61.90
		Female	24	38.10
		Total	63	100
	Social Category	General	39	61.90
		Others	24	38.10
		Total	63	100
1.	Area of residence	Rural	19	30.16
		Urban	44	69.84
		Total	63	100
2.	Employment Status	Working	16	25.40
		Not Working	47	74.60
		Total	63	100
3.	Marital Status	Married	9	14.29
		Unmarried	54	85.71
		Total	63	100

Table 2 Magnitude of uses of eTools for study

S. No.	eLearning tools	Regularly (%)	Never (%)	Total
1.	Academic Program through Radio & television	25 (39.68)	38 (61.90)	63
2.	eContents of SIM through website & mobile app	41 (65.07)	22 (34.92)	63
3.	App based and social media classes	42 (66.66)	21 (33.33)	63
4.	iGRAM	24 (38.10)	39 (61.90)	63
Mean		*33*	*30*	*t=0.432*
SD		*9.83*	*9.83*	**p=0.681*

*Not significant at p<0.05

Table 3 Demographic factors vs. magnitude of uses of eTools

S. no.	Demographic factor	Source of Variation	F	P-value	F crit	Significant at p<0.05
1.	Age	eTools	2.38	0.25	9.28	No
		Age group	47.61	0.01	10.13	Yes
2.	Gender	eTools	3.64	0.16	9.28	No
		Genders	6.45	0.08	10.13	No
3.	Social category	eTools	4.64	0.12	9.28	No
		Category	13.90	0.03	10.13	Yes
4.	Area of residence	eTools	2.90	0.20	9.28	No
		Locality	10.84	0.05	10.13	Yes
5.	Marital status	eTools	2.30	0.26	9.28	No
		Married-unmarried	54.86	0.01	10.13	Yes
6.	Employment status	eTools	1.95	0.30	9.28	No
		Working-not working	40.77	0.01	10.13	Yes

