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Factors Influencing the Preference of Distance Learners to Study Through Online During COVID-19 Pandemic

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Abstract: The teaching-learning system in India changed significantly during the COVID 19 pandemic situation. Educational institutions adopted blended learning approaches for effective teaching and used digital technologies to deliver academic programs. Online learning during pandemic situations helps learners learn the necessary skills to meet the need for future jobs conveniently and quickly. Graduates of vocational programs will have to play a crucial role in economic recovery. The study's objectives were to examine to what extent the open and distance learning students of IGNOU had prior digital skills, preferred, used digital platforms for study through online mode during the lockdown. A survey of vocational students studying through distance mode from Indira Gandhi National Open University (IGNOU), India was conducted to identify the reasons for their preferences to study through online mode rather than traditional distance learning mode during the lockdown. Researchers identified nine reasons based on the literature review for students' preferences to learn through online mode. The responses to nine sub-questions were on a five-point scale, i.e., Strongly agree (1), agree (2), can't say (3), disagree (4), and strongly disagree (5). The study was limited to vocational distance learners. Descriptive statistical methods like ANOVA, Chi-square, and t-test were applied to test the hypothesis. The results of ANOVA and Chi-square revealed that they value all the reasons equally, thereby rejecting the null hypothesis. The implication of the study is to adopt a blended learning approach for offering future distance learning programs.

Keywords: Distance learning, online learning, learning during covid-19, preferences of distance learners, factor of learning

Highlights

What is already know about this topic

- COVID-19 crisis had affected the global educational system. As a result, education institutions across the globe adopted an alternative strategy for the delivery of educational programs.
- Higher education institutions can't offer online programs without prior knowledge of learners' socioeconomic background and accessibility to digital technology.
- They use technology, which suits them in terms of cost and other factors like the availability of necessary infrastructure.
- Higher educational institutions adopt the online education system as an alternative for delivering an education program during the COVID-19 crisis.

What this paper contributes

- Previous research has not confirmed the factors that influence learners' preference to study online, particularly in unprecedented crises, i.e., COVID 19.
- The present research adds new insights into what needs to be considered from learners' perspectives during an unprecedented crisis.
- The study reveals that students preferred to learn through online mode, and their views on factors that influence them to study online during the lockdown period were homogeneous. Thus, the research contributes significantly to adopt the digital platform to offer skill-based programs through online delivery mechanisms during unforeseen circumstances.

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Implications for theory, practice and/ or policy

- Policymakers should ensure that students have accessibility to an Internet connection and their willingness to learn through online learning mode. On the other hand, higher education institutions assured that the faculty is ready to use digital media for effective teaching.
- The student's learning experience during the pandemic situation may help policymakers to adopt discipline-wise teaching models for ODL institutions.

Introduction

The present unprecedented crisis due to COVID 19 affected teaching and learning activities at all disciplines, including vocational education and training. The situation also disturbed the teaching, learning, and examination system across all educational institutions in affected countries across the globe and India as well (Bozkurt & Sharma, 2020b). It had become unsettled when India declared a complete lockdown in the country during March 2020. Since then, the number of Corona cases has been increasing ily, leading to uncertainty about returning to the usual schedule before lockdown. It has also affected the examination schedule already planned by the respective institutions. Due to delays in examination and assessment, the academic calendar has also shifted, affecting employment prospects and further studies of millions of students.

To continue the teaching-learning schedule, the government encouraged the use of online methods. The New Education Policy (NEP)-2020, recently approved by the Government of India, also focused on **the** digital and online education system, specifically during the present crises. While the classroom-based conventional system was also affected, it created opportunities for Open and Distance Learning (ODL) Institutions, which specialize in delivering quality education to millions of learners by adopting digital technology and online methods. To adopt digital technology for a pedagogy of ODL, we can't ignore students' awareness of the digital platforms, their prior digital skills, preference, and abilities to learn using the online mode of education. Most educational institutions adopt technology for the teaching-learning process, which suits them in terms of cost and other factors like the availability of necessary infrastructure. We mean here, the delivery of educational programs through the digital platform by the educational institutions is supply-side rather than the demand side. However, the learners are never asked as to what type of digital media they prefer while studying their respective programs or courses from the ODL institutions. Closed educational institutions during the lockdown period forced policymakers to adopt an alternative education system. Scholars referred to it as an online emergency remote education (ERE) system adopted by most educational institutions worldwide during the COVID-19 crises. They differentiate between ERE and distance education (Bozkurt & Sharma,2020a; Bozkurt et al., 2020; Hodges et al., 2020). Slechtova (2015) stated that 'students' willingness to use ICT for studying and attitudes to e-learning was not homogenous.' It may vary from learner to learner and course to course. In other words, we can say that the kind of digital tools used in the teaching-learning process may affect learning. Nevertheless, during the pandemic situation, students don't have the option to choose the mode of education for learning.

Educational institutions have been using various tools for effective teaching. For example, Batanero et al. (2019) highlighted the best practices of web 2.0 tools and the use of social networks for the teaching-learning process, which encouraged interaction between classmates and improved their learning process. Hence, for an enhanced teaching-learning process, there was a need for ODL institutions to place effective support service systems, training of faculty, appropriate selection of digital technology before using digital technology to deliver respective programs.

Review of Literature

Prior studies reported that a mixed mode of content delivery and an effective support system enhanced learning. For instance, Jowseya et al. (2020) stated that blended learning could positively influence and impact students' achievements when managing and supporting distance education. As we know, distance learner prefers more support services than the former learner. Most of the time, ODL institutions

are forced to offer an online program without proper support services. Therefore, there is a need to focus on the re-structure of ODL institutions for effective student support services (Bothel, 2001). In contrast, Brown & Jakson (2001) and Hughes (2001) cited that technology should not be the motivational factor for organizational change initiatives. The present situation needs a re-structured institutional setup for diversified geographically scattered students in a country like India due to the rapid digital technology transformation.

Another issue is the *accessibility* of digital technology to the learner in developing countries like India. Policymakers have apprehension that online education programs will not help rural students because of low broadband speed. In contrast, most of the population in India belongs to rural areas. In addition to internet speed, accessibility to devices like a computer with a camera was an obstacle for students to study their respective programs. Saavedra (2020) reported that access to remote learning devices like computers had been a challenge for students as schools shift to online distance learning in the middle of a global health emergency. Halili and Sulaiman (2018) also recommended developing the appropriate technical equipment for rural students. For introducing suitable technology, we should have information regarding the accessibility of digital technology to students. Before introducing digital technology, there is a need for strategic planning to deliver ODL programs/courses to ODL learners. Levy (2003) suggested that a 'strategic plan is essential to avoid unnecessary cost, waste of time, confusion, frustration, and stress for those involved with ODL. 'Online learning program can't succeed without having the learner's background for the accessibility to digital technology. Rabin et al. (2020) objected that they would open education with digital innovation to replace traditional higher education? Hence, it becomes necessary for policymakers to understand the impact of digital design on conventional higher education in the ODL system. It will be better to seek students' views on this issue. Maloney & Kotsanas (2013) reported that health professional students appreciated the benefits of online learning resources. In the digital era, for better employability, there is a need for developing higher-order skills among students and faculty through a study using digital platforms. Bates (1997) stated that higher-order skills are essential in developing computer-based distance education courses. For this, we should know the learners' attitudes towards preference mode of learning. Katz (2002) confirmed the critical relationship between students' psychological perspectives and ICT use in distance learning in the learning process at the tertiary level. The author reported that students preferred the interactive synchronous video-conferencing approach significantly and the internet-type distance learning approach as an independent learning process.

To adopt multiple digital media, there is a general perception among the head of educational institutions that it may be very costly if we integrate present technology with ODL programs/courses today. Tomorrow new technology will create new demand for the digital transformation of the ODL institutions and demand for new learner skills for using it. For example, Souca and Rocha (2019) analysed individuals' perceptions of an organization's challenges for significant digital transformation. New skills would be required for the use of future technology, i.e., artificial intelligence, nanotechnology, robotics, and augmented reality for the digital process in an organization. To some extent, the existing digital skills will be adequate to handle new technology. As the cost is concerned, digital innovation and its use in the higher education sector may further reduce the marginal costs. Rifkin (2014) predicted a future in which there would be zero marginal cost of digital educational products. It means, fixed cost of the Internet today will reduce its marginal cost tomorrow. It needs further investigation to support Rifkin's statement. In the present era, various factors are responsible for lowering internet infrastructure/equipment maintenance costs, like frequent innovation of digital technology and student's (private) costs. It also depends on the unit cost of a particular program, i.e., the kind of digital equipment being adopted by the educational institutions to deliver their respective programs and the number of students enrolled in these programs. Research also reported on the challenges faced by faculty in online teaching during the lockdown.

Faculty who are early adopters of the technology have to play a significant role in influencing both, i.e., students and other teachers, to transform online learning. Online learning helps teachers continue

teaching students with various online tools (Almaiah, et al., 2020). Scholars suggested that It should have been made to transition online before unforeseen situations arise (Bozkurt & Sharma, 2020b & Rapanta, et al., 2020). In addition to faculty challenges, scholars also reported the university students' difficulties during the COVID-19 crises. (Henaku, 2020; Bao, 2020; Entsie, 2020; Wisconsin, 2020; and Baticulon et al., 2020). They reported that poor internet connectivity is one of the main difficulties students faced during the practice of remote learning. Frequently disconnection of the network is a significant problem for developing countries (Aboagye et al., 2020). It implies that students cannot be benefited from remote learning.

Several researchers worldwide reported studies on various aspects of the COVID-19 pandemic crisis and the teaching-learning process during the emergency duration, particularly its consequences for health, the economy, society, and the environment. For the teaching-learning process, they identified socio-demographic and geographic differences in students' perceptions, which are not necessarily reflections of the COVID-19 pandemic but also of some other factors (e.g., differences in the digital transformation of higher education, economic development, cultural and religious background, political circumstances, etc.). For example, Aristovnik et al. (2020) reported that students with specific socio-demographic characteristics (male, part-time, first-level, applied sciences, a lower living standard, from Africa or Asia) were significantly less satisfied with their academic work/life during the crisis, whereas female, full-time, first-level students and students faced with financial problems were generally affected more by the pandemic in terms of their emotional life and personal circumstances. Key factors influencing students' satisfaction with the role of their University are also identified. Researchers have attempted to determine the factors that influence students to learn online during emergency situations rather than evaluation users' experience or satisfaction.

Nevertheless, the use of digital technology in education is an essential factor for economic growth with social equity. It can create opportunities not only for enhancing knowledge and skills but also for employment as well. Therefore, policymakers need to use the appropriate technology in educational institutions before any new technology is introduced for distance learners. Research on attitudes and perceptions of learners on ICT in the ODL system shows that ODL students generally have a positive attitude and strong inclination towards the ODL system compared to traditional or virtual classroom systems (Ojo & Olakulchin, 2006). Students were also having a predisposition that their academic achievement may affect while studying through online methods. Several studies reported comparing online versus regular face-to-face courses. Research also noted no significant difference in the students' exam results in online and traditional methods (Stack, 2015).

The online method and its' flexibility require different characteristics of students, such as knowledge of technology use, time management, and interaction while using online technologies (Joosten, et al. (2020). Existing research reveals that minimal studies have been conducted in India. Bond (2020) reviewed research studies on emergency remote education during the COVID-19 and reported that scholars conducted research studies in Europe and Asia, predominantly focused on teachers. In addition, more studies were undertaken in high schools. She further stated (p191) that 'online surveys were the most used method, although future research must include all study design information.'

The present literature review reveals that online education mode mainly focuses on satisfaction evaluation results, willingness for continuous use, and learning influencing factors. It n indicates that scholars reported various issues for adopting online methods by educational institutions. But not much literature reported the students' critical factor for learning through the online mode. The present study, thus, is an attempt in this direction.

Online Education in India during COVID 19

Most of the educational institutions in India adopted different approaches at their respective educational institutions during the lockdown. They were encouraged to adopt national and global digital resources to continue studying learners during this unprecedented situation. The Ministry of Education (formerly

known as the MHRD), Government of India, and University Grants Commission (UGC) also put a strong focus on various schemes for the use of ICT for online learning in the country during COVID 19, like 'Study Webs of Active Learning for Young Aspiring Minds (SWAYAM)' for online Courses, UG/PG MOOCs, E-PG Pathshala, e-Content courseware in UG subjects, Swaymprabha, CEC-UGC YouTube channel, National Digital Library, e-ShodhSindhu, and Vidwan (UGC, 2020). National Programme on Technology Enhanced Learning (http://nptel.ac.in) initiated by seven Indian Institutes of Technology (IITs) along with the Indian Institute of Science (IISc), Bangalore, to provide quality education to anyone. The primary goal of this project was to create web and video courses in engineering and physical sciences at undergraduate (UG) and postgraduate (PG) levels and management courses at the postgraduate level. Under this project, the Ministry of Education appointed nine National Coordinators for different programs, IGNOU being one among them for certificate and diploma level programs.

ICT initiatives of IGNOU during COVID 19

The IGNOU adopted multiple ICT approaches to deliver its programs (184), learner support system, and official meetings during the COVID 19 pandemic. It provided support services to three million students and academic counselling using social media like Twitter, Facebook, Emails, WhatsApp, Gyanvani (FM Radio), and Gyan Darshan (TV). The University launched 59 courses/programs on the digital platform during the current pandemic period. Faculty and academic staff of this University at Headquarters, as well as Regional Centres (56) across the country, used extensive technology for online counselling sessions, submission and evaluation of assignments, practical's through virtual labs, and using Web Enabled Academic Support (WEAS) system and social media platforms like Facebook live, WhatsApp, emails, chat groups, etc. for interacting with learners. The faculty and academic counselors used cloud platforms like Google Meet, Zoom, CISCO, Microsoft Teams, etc., for conducting live online counselling sessions, continue assessment for theory and practical courses, and official meetings. Self-learning materials were uploaded at http://www.egyankosh.ac.in, the knowledge repository to store, index, preserve, distribute, and share the digital learning resources developed by ODL institutions in the country. IGNOU developed this portal in collaboration with MHRD (presently Ministry of Education), GOI, in 2005. About three thousand academic counselling sessions (Live and recorded) were broadcasted through Gyanvani (radio) and Gyan Darshan (TV) during the lockdown. Regional Centres and Schools of studies (21) organized more than thirty-three thousand counselling sessions using digital means up to July 2020. IGNOU also uploaded two thousand eight hundred and fifteen blocks of seven hundred and sixty-eight courses on IGNOU mobile app (IGNOU e-content) during this period.

The University had made a remarkable effort for students to study comfortably during the COVID 19 pandemic situation. These efforts were made for an effective teaching-learning process as well learner support system for the students. The present higher education learning environment demands a similar more commitment to learning from students. Do we know about the learners' preference for learning as well as acceptability to technology for learning? Are they aware of the availability of various platforms to study their respective programs/courses? What are the crucial reasons which influenced students to prefer to learn online than traditional distance teaching? These questions were raised on various platforms by policymakers and academia. Against this backdrop, an attempt has been made in the present study to seek students' views on the important reasons for their preference to study online because they are the end-user of digital technology. The task is vital in the present crisis because more evaluation studies help policymakers implement technology in emergencies.

Objectives

The School of Vocational Education and Training (SOVET) of IGNOU has been offering Certificate, Diploma, and PG Diploma programs in the area of financial accounting, communication and IT skills, parametrical sales management, information security, and fashion design through the ODL system. Most of these programs and courses consist of soft and job-specific skills. 'The needs of skills-based programs need special attention during the COVID-19 crisis because graduates of such programs will have a crucial role in economic recovery (Daniel, 2020). The present research study examined; to what extent open and distance learning students of vocational programs of IGNOU had accessibility of digital

media, were aware of it, preference between ODL and online mode, used digital platform, and having prior digital skills for learning through online methods of education during COVID 19. The study further sought to identify how much value students of vocational programs of IGNOU place on nine specific reasons for learning through online mode.

Methodology

A quantitative cross-sectional survey is adopted for the present study (Creswell, 2004). A questionnaire was developed on Google.doc, which included sixteen questions related to the objectives of the study. It consisted of multiple-choice, Yes/No, open-ended, and five Likert rating scale questions. Question number ten of the questionnaire was further categorized into nine sub-questions for generating reasons from responders for their preference to study through online mode rather than traditional open and distance mode of teaching-learning based on their experience while studying through various digital platforms. The responses to nine sub-questions were on a five-point scale, i.e., strongly agree (1), agree (2), can't say (3), disagree (4), and strongly disagree (5). This scale helped the researchers to calculate the mean responses for each of the nine sub-questions.

The study was limited to distance learners of IGNOU registered for the vocational program only. Therefore, for administering the questionnaire, the students for the current session, i.e., January 2020, enrolled in the vocational program, were selected. The information for students' emails was procured from the student registration division of the University. Students were supposed to attend theory and practical sessions through physical presence at their respective study/regional centers as per the program's requirement. However, due to lockdown in the country, the counseling sessions and other support services were provided through virtual mode/digital platform in physical presence at study/regional centers. One thousand four hundred ten students got admission to vocational programs for the January 2020 session, out of which only 1302 students mentioned their correct email addresses at the time of registration. Therefore, researchers emailed the questionnaire to all the 1302 registered students on July 2, 2020, who were asked to complete it within two weeks; however, the response rate was not desirable. Therefore, the researcher sent a reminder again through email and received 131 (10.06%) filled-in questionnaires by July 31, 2020.

Hypothesis

The hypothesis, i.e., '*the students do confer equal value on all of the nine reason*s for learning at digital platforms during COVID 19. However, in this case, at least one of the mean responses to nine questions framed for knowing the reason should be different. Hence, the null hypothesis is:

H_0 = *the mean responses to the nine questions/reasons are equal*

The reliability test applied to all the statements, and the score of Cronbach's alpha was 0.857. It means that statements/items were closely related to the group. As the analysis of Variance (ANOVA), the descriptive statistical method was used for testing the hypothesis. To compensate for the non-normality, a non-parametric procedure like Chi-square was used for further testing the hypothesis. The results of the survey have been presented and discussed in this study.

Data Analysis

Profile of respondents: 40.31 percent of the respondents belonged to an urban area, followed by rural (30.23%), Metro (17.05%), Semi-urban (11.63%), and Hilly areas (0.78%). The majority of them were male (66.4%). They were employed in the public and private sector (31.3%) and self-employed (18.3%), while 44.3 percent were unemployed and fresh students (6.1%). 63.8% were in the age group between 21-30 years. However, a few of them (9.4%) were above 40 years. Regarding having prior digital skills for study online, about 78% of them informed that they had intermediate skills, got digital skills through experiences while working, and are ICT experts. The rest of them (22%) reported that they were a beginner.

Preference of having a hard copy or soft copy of the self-learning material (SLMs): 47.3% preferred having both, i.e., hard and soft copies of SLMs followed by hardcopy (27. 3%) and Soft Copy (24.4%) only.

Accessibility to digital technology: All respondents had a Smartphone with an internet connection. Three-fourth were having accessibility to TV with cable/DTH/Internet connection and desktop/laptop with internet facility. Sixty-five percent of respondents had accessibility to FM radio.

*Awareness about the digital platform's availabilit*y: One of the study's objectives was to know students' awareness about the IGNOU's digital platform for teaching, learning, and support services purposes. Respondents' views expressed were heterogeneous to this. Above three-fourth respondents were aware of the Gyan darshan (TV connected with DTH/Cable) programs; the online counseling session through Google Meet and Zoom; availability of the content of their respective courses on the IGNOU e-content app; online registration portal; and availability of the online assignment submission portal. Sixty-seven percent of the total were aware of the broadcasting of the Gyanvani (FM) programs. Fifty-eight percent were knowledgeable of the IGNOU's official Facebook webpage and online project submission portal. On the other hand, more than eighty percent of respondents were unaware of IGNOU's podcast freedom to learn platform for teaching-learning purposes. Of the total, fifty percent and above respondents were not aware of IGNOU's WEAS and attentive about IGNOU's SWAYAM programs, which launched during lockdown duration.

Uses of the digital platform: Of the total respondents who were having accessibility and awareness about the IGNOU's digital platform, three-fourth of them informed that they used IGNOU's digital platform, i.e., Gyan Darshan (TV), Gyan Vani/Gyan Dhara (FM Radio), social networking, i.e., Facebook, WhatsApp, and YouTube for counseling sessions and submission of assignments/project proposal of their respective programs/courses during COVID pandemic.

Preference to digital platforms for live or recorded counselling sessions: Among those who used IGNOU's digital platform for study purposes, sixty percent and above preferred both (live and recorded) counseling and practical sessions on digital media (Figure 1).

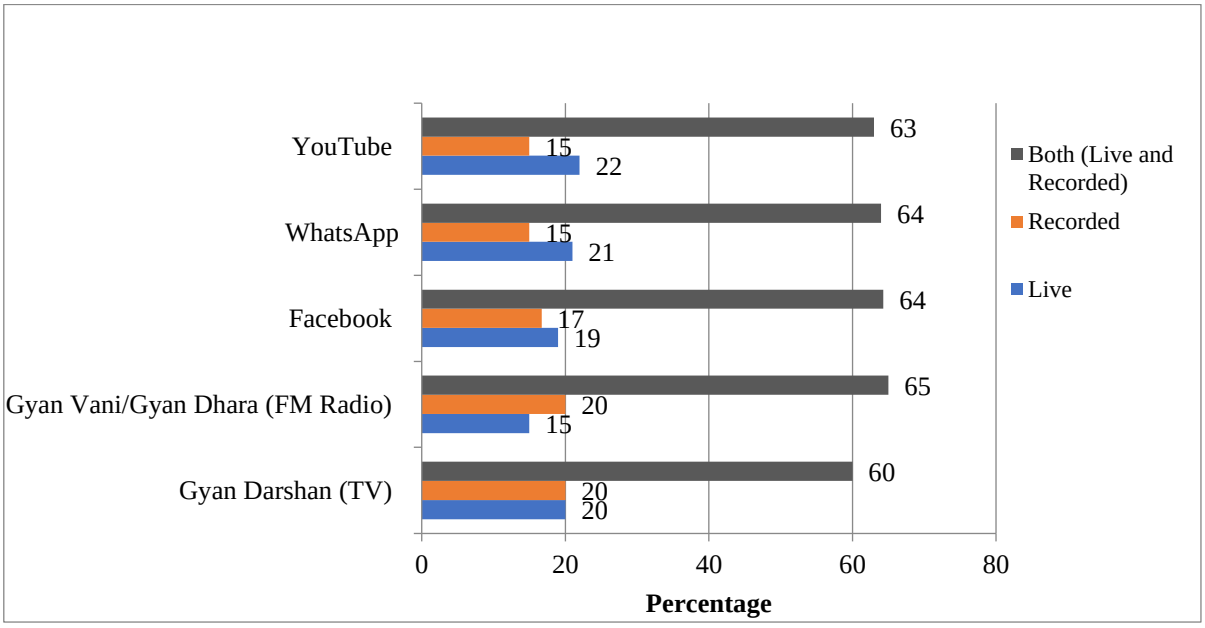

Figure 1: Respondents' preference of digital platform for counselling and practical sessions

Factors Influencing the preference of student's learning through online mode

Under normal situations, i.e., pre-COVID 19 situations, students were supposed to get a hard copy of the SLMs and attend counseling sessions (theory and practical) and submit assignments physically at

their respective study centers after confirmation of their admission in their programs and courses. However, post-Covid scenario, IGNOU delivered programs and courses through the online mode. SLMs were provided through IGNOU e-content apps, uploaded at http://egyankosh.ac.in, and by emails to the individual student. Counselling (tutoring) sessions were conducted through Google Meet, Zoom, YouTube, Facebook, GyanVani (Radio), GyanDarshan (TV). Assignments were submitted and evaluated through online mode. Student's views on the delivery of these programs have been presented in Table 1. The study revealed that not all 131 students responded to all the nine statements/items. Hence, responses to each statement/item varied. A total of 1108 responses were analyzed (on an average of 123 answers from 9 questions). The mean scores of all the nine 1108 responses were 1.93, meaning thereby that the average response was 'agree' and 'strongly agree.' Table 1 showed that students' responses with percentages and mean responses value to almost all the 'reasons' for study through online mode were better than traditional open and distance learning modes.

Table 1: Mean Responses to the Reasons for Study through Online was better than Traditional ODL

Sr. No	Statements	N	Agree	Strongly Agree	Can't say	Disagree	Strongly Disagree	Mean Responses	SD
			1	2	3	4	5		
1	It was easy to communicate between teacher/counsellors/peer groups through email/mobiles/virtual mode	126	59 (46.8)	23 (18.3)	27 (21.4)	14 (11.1)	3 (2.4)	2.01	1.18
2	Asking questions related to SLMs/content during study though online was easy	122	55 (45.1)	16 (13.1)	24 (19.7)	20 (16.4)	7 (5.7)	2.11	1.31
3	Submission of assignments and getting feedback was helpful and accountable	125	57 (45.6)	29 (23.2)	22 (17.6)	15 (12.0)	2 (1.6)	1.91	1.11
4	I got updated information related to my programme/courses	124	66 (53.2)	32 (25.8)	18 (14.5)	6 (4.8)	2 (1.7)	1.72	1.00
5	Will be helpful in job performance	123	61 (49.6)	33 (26.8)	20 (16.3)	7 (5.7)	2 (5.6)	1.80	1.01
6	Quality of the content is better	121	64 (52.9)	24 (19.8)	21 (17.4)	10 (8.3)	2 (1.6)	1.76	1.10
7	I am able to learn my mistake	124	57 (46.0)	19 (15.3)	30 (24.2)	12 (9.7)	6 (4.8)	2.01	1.21
8	Participation in learning activities and discussion groups helped in writing assignments.	121	62 (51.2)	27 (22.3)	18 (14.9)	8 (6.6)	6 (5.0)	1.76	1.12
9	I am able to perform practical activities	122	47 (38.5)	17 (13.9)	32 (26.2)	18 (14.8)	8 (6.6)	2.31	1.34

Hypothesis testing

An analysis of variance (ANOVA) was conducted to test the null hypothesis, i.e., the mean responses to the nine questions were equal. Table 2 shows that the value of 'F' was 10.26473, which is significant with a p-value of 0.54. Hence, we failed to reject the 'null hypothesis,' meaning responses were equal. For ANOVA, we obtained views from the respondents on the nine reasons mentioned above that the online mode was better.

- Number of observations: 1108
- Dependent Variable: Prior digital skills
- Null hypothesis: Mean response to the nine questions was equal.

Table 2: ANOVA results

	Sum of squares	df	Mean Square	F Value	P-value
Between Groups	53.40981016	36	13.35245	10.26473	0.54
Within Groups	1523.134856	1087	12.62417		
Total	1576.544667	1123			
Score Mean	1.932222222				

A further hypothesis test was conducted to see which of the nine questions' mean responses were not equal to 1.93 (The mean of all 1108 responses). A one-sample t-test was applied to determine those reasons with a mean response of greater or less than 1.93. It was assumed that if the greater or lesser value was placed on a 'reason,' then the mean response should be greater or less than the mean response for all 1108 responses. The null hypothesis was that the mean answer for each reason is equal to 1.93. The results of the t-test presented in table 3 reveal that the mean response of the reasons' accessible communication' easy to ask questions, submission of assignments, able to learn mistakes, and able to perform practical activities was higher than 1.93. Hence, we reject the null hypothesis. Table 4 shows that the results of the Chi-Square test of independence to test the null hypothesis, i.e., the distributions across the five Likert rating scales for the nine questions were equal. Hence, we failed to reject the null hypothesis.

Table 3: Results of Hypothesis Tests (t-statistics) that Mean Responses to the Nine Questions are Equal to 1.93(Mean Response of all 1108 Responses).

#	Reasons for study through Online mode than F2F	Mean Response	Std. Error Mean	t –statistics	Df	p-value
1	Easy Communication	2.0397	.10353	19.702	125	.000
2	Easy to ask questions	2.2097	.12134	18.211	123	.000
3	Submission of Assignments	2.0080	.10064	19.952	124	.000
4	Got updated information	1.7440	.08865	19.673	124	.000
5	Helpful in job performance	1.8293	.09069	20.171	122	.000
6	Quality of content was better	1.8595	.09841	18.896	120	.000
7	Able to learn mistakes	2.1210	.11078	19.145	123	.000
8	Participation in learning activities	1.9174	.10666	17.977	120	.000
9	Able to perform practical activities	2.3802	.11868	20.055	120	.000

Table 4: Results of the Chi-Square test of independence to test the null hypothesis that the distributions across the 5 Likert rating scales for the nine questions are equal.

Sample Size	DF	Value	P-Value
1108	15	18.4544	.366

Findings and Discussions

The analysis of Tables 2 and 4, i.e., the ANOVA and Chi-square test results, reveal that equal value was given to the nine reasons for study through online mode. Interestingly, the responses to nine items were similar in respondents' geographical background, gender, and prior digital skills. Our results contradict Slechtova (2015) that 'students' willingness to use ICT for studying and attitudes to e-learning are not homogenous.' Most of the respondents preferred having both hard and soft copies of the SLMs. All the students had smartphones with an internet connection. It may help the policymakers to select digital tools for the delivery of online programs. There is also a need to inform each student about the mixed digital mediums used by the University, particularly radio, social networking, SWAYAM platform, podcast, and WEAS. The curriculum should be linked with these platforms so that all the students can use the online mode for their study. The data analysis reveals that online learning is not perceived as

an alternative to the face-to-face interaction among vocational students during COVID 19 lockdown. Students expressed their views and suggested that

- Online classes were excellent and productive. Faculty dedication in imparting knowledge to the learner was highly appreciable (43%).
- All queries and problems were responded by faculty through mail/YouTube platform and online live sessions through Zoom/Google Meet (41%)
- Information regarding online classes schedule, assignments submission, and examination schedule mailed to each student by the SOVET faculty were better than just uploading the information on the website. Unfortunately, most of the students don't check the website regularly (41%).
- One of the female students informed that 'I am working, and it is quite difficult for me to study regular class.' Attended classes through WhatsApp/Google Meet helped for my study.
- PPT used during online/video lectures should be kept organized for each of the courses (19%).
- More motivational and debate sessions should have been organized rather than course lectures (17%)
- One of the students expressed his views that 'using digital platforms for studying is not good to gain knowledge.' But, due to the present circumstances, it is acceptable.
- Due to the low-speed connection, the sessions were not accurately understood. It would be better to be organized after office hours in the future (13%).

It has been observed from the student's views that study through online mode has an advantage in terms of flexibility in time, place, and getting up-to-date content, yet internet speed stills remain an issue. According to the 75th NSS survey (2017-18) of India, three-fourths of students in India didn't have access to the Internet at home. About eighty-nine percent didn't have a computer (GOI, 2019). Delivering all the educational programs through online methods will depend on access to devices and internet speed and the kind of programs that will be offered through this method. It will be more difficult for hardcore or soft skills-based programs to be provided through online forms. Access to computers and the Internet depends on household income. Recently, the number of Internet subscribers increased from 594.58 million in June-2019 to 625.42 million at the end of September 2019 (TARI, 2020). But, the majority of the students are still unable to access the Internet. Lack of internet access and internet data speed can create digital illiteracy. The recently announced New Education Policy (NEP)-2020 by the Government of India highlights reducing dropouts and enhancing the Gross Enrollment Ratio (GER). To achieve this goal, we will have to adopt all teaching methods, including online learning methods. It would be better to ensure that students have accessibility to an Internet connection and their willingness to learn through online learning methods. On the other hand, it should also be assured that the faculty is ready to use digital media for effective teaching.

The findings for the study are consistent with (Bao, 2020 and Amadora, 2020) that respondents raised the issue of low-speed internet connection. Although the telecommunications company is offering various high-speed packages, affordability is an issue among students. Despite this fact, most of the respondents highlighted the benefit of online education during lockdown rather than raising the issue. Researchers' objective was to determine the most crucial factor that influences students to study through online mode. The findings of the study reveal exciting results. Various online courses were being delivered before the COVID-19 crises in India, i.e., MOOC and SWAYAM. During the lockdown, online education has attracted the attention of policymakers due to its' advantages. The present study enhances the variable used in previous research, developed an evaluation system for online education mode, and finds student's focus to analyze the impact of the COVID-19 pandemic on their experience while study through online education, which is consistent with Chen et al. (2020).

Conclusion and Suggestions

During the COVID 19 pandemic situation presented in this study, the student's learning experience may help policymakers adopt discipline-wise teaching models for ODL institutions. It is acceptable during the

present case, but human interaction cannot be replaced during the teaching-learning process. Katz (2002, p.8) rightly remarks that a "*Distance learning system that is highly interactive and most closely resembles a regular college lecture hall is preferred by students with certain learning preferences and attitudes*." Our study recommends that a blending learning approach is preferred by most of the students. The results of this study are from survey data collected during the Corona period from one school of courses of IGNOU, and findings may not apply to distance learners as a whole. There is a need for further studies to be conducted at different schools of studies in the same University and other institutions across all disciplines to see if the findings are consistent.

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