

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

---

October 2022

## Perception Of The Users Of The Dhanvantri Library Of University Of Jammu Regarding The E-Learning In The Current Time Of Pandemic: A Case Study

Meghabat Singh  
meghavat135@gmail.com

Avinash Singh Charak  
University of Jammu, avicharak.ac@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Scholarly Communication Commons](#)

---

Singh, Meghabat and Charak, Avinash Singh, "Perception Of The Users Of The Dhanvantri Library Of University Of Jammu Regarding The E-Learning In The Current Time Of Pandemic: A Case Study" (2022). *Library Philosophy and Practice (e-journal)*. 7367.  
<https://digitalcommons.unl.edu/libphilprac/7367>

# PERCEPTION OF THE USERS OF THE DHANVANTRI LIBRARY OF UNIVERSITY OF JAMMU REGARDING THE E-LEARNING IN THE CURRENT TIME OF PANDEMIC: A CASE STUDY

**Meghabat Singh**, MLIS Student, Department of Library and Information Science, University of Jammu, Jammu- 180006 (India), E-mail: [meghavat135@gmail.com](mailto:meghavat135@gmail.com)

**Avinash Singh Charak**, MLIS Student, Department of Library and Information Science, University of Jammu, Jammu, 180006 (India), E-mail: [avicharak.ac@gmail.com](mailto:avicharak.ac@gmail.com)

**Abstract:** The paper highlights the perception of the users of the Dhanvantri library of the University of Jammu regarding e-learning in the current time of the pandemic. The role of e-learning is to extend learning effectively in addition to the technological tools and devices to the existing learning. A total of 278 respondents responded with complete information regarding the survey. The majority of (56.47%) of the respondents were male and most of the respondents were between age group 26-29 years. Most of the students were moderately interested in the online classes. Laptops and Tablet are the most used devices for attending the online classes in the current pandemic. Respondents prefer the online classes above 60 minutes as detailed classes are required for proper understanding of the concepts.

**Keywords:** E-learning, Online Resources, COVID-19, University of Jammu

## 1. INTRODUCTION

With the sudden penetration of the Covid-19 pandemic, the education sector was one of the most thoroughly affected sectors of the globe. The orthodox and traditional system and method of the student and the teacher turned away drastically. It became the need of the hour to convert the methods of teaching so that education should not lack at any cost. So, this fact gave rise to the concept of e-learning. E-learning methods are quite virtual, flexible, speedy, efficient, and involved face-to-face contact between the teacher and the student. E-learning paved its path in the education world by the virtue of various technological tools, techniques, and entities which included Virtual Classrooms, video modules, social media training, mobile learning, computer-managed learning, computer-assisted instruction, synchronous online learning, interactive and individual online learning, etc. due to which the learning process became very efficient if done correctly.

E-learning is an efficient technique for providing education to people living the remote and rural areas. It can be provided to the learners through various means such as computers, tablets, mobiles, TV, etc. The role of e-learning is to extend learning effectively in addition to the technological tools and devices to the existing learning/education curriculum. The E-learning system has been mainly divided into three main areas: (i) Increasing and improving the access to e-learning in the field of education and training, (ii) Helping in enhancing the quality of e-learning in education and training, (iii) Higher need for educational institutions to maintain standards in e-learning to improve the quality of education as well as students.

### Characteristics of E-learning

1. It refers to technology-based learning.

2. It can be accessed by users anytime and anywhere to cater to their information needs.
3. Wider area of the audience can be benefited from e-learning.
4. It is a great step towards the effective and efficient learning of people, especially students.
5. It is facilitated and supported with the web-based latest technologies.
6. Users as per their needs can take the usage of e-learning irrespective of the place, time, etc.

## **2. UNIVERSITY OF JAMMU**

The University of Jammu was established in the year 1969 and is situated beside the river Tawi. The University of Jammu has been accredited with an A+ grade by the NAAC (National Assessment and Accreditation Council). Currently, 155 affiliated colleges from various streams are administrated by the University of Jammu. The university has set up a total of seven off-site campuses (Bhaderwah, Kathua, Kishtwar, Poonch, Ramnagar, Reasi, and Udhampur) has been set up by the university. The Department of Economics is one of the oldest departments of the University of Jammu. Programmes undergoing in the department are M.A. Economics, M.Phil. and Ph.D. programmes. The Department is currently having 6 Professors, 1 Sr. Assistant Professor, 1 Associate Professor, and 2 Assistant Professors. The Intake capacity of the students in the Department of Economics is 60. The Department of History is currently having three programmes: M.A. History, M.Phil. and Ph.D. programme. The Department is currently having 2 Professors and 5 Assistant Professors. The Intake capacity of the students in the Department of History is 64.

## **3. REVIEW OF LITERATURE**

**Sawhney (2022)** conducted a study titled “Challenges Faced by Students in Online Classes during Covid-19”. COVID-19 has affected the education systems and teaching process all over the world. The survey method was adopted to examine the opinions of the students at PSPS College, Gandhi Nagar. An online questionnaire was designed to collect the data from the respondents. The maximum number of respondents in the study were between the age group of 19-20 years and (36%) of the respondents were from the 3<sup>rd</sup> year of graduation. (58.5%) of the respondents were not familiar with and easy in the usage of e-learning platforms. Teachers are using various types of learning platforms such as Zoom (29.3%), Google meets (31.4%), and (37.1%) wise app. (61.4%) of the respondents were affected by the lack of internet connectivity while using the e-learning platforms. Most of the respondents i.e. (93.5%) prefer smartphones for studying their respective courses during the current COVID-19 pandemic.

**Singh, Kaushal & Devi (2022)** examined the students’ attitudes toward e-learning. E-learning refers to technology-based learning. The study is focused on the undergraduate graduate of Himachal Pradesh. A total of 400 students were selected for the study using conscience and purposive sampling. COVID-19 has given rise to various virtual learning platforms such as google meet, google meet, zoom, etc. Various tests such as Kolmogorov- Smirnov, Croanbach’s Alpha test are applied for the analysis. (61.8%) of respondents were male while the rest (38.3%) were female in the study. Most of the respondents i.e. (53.3%) agree with having familiarity with using the different electronic devices. Respondents were efficient in

using various electronic devices such as mobile (76.6%), desktop computers (12%), and laptops (4.6%). The study results show that the majority of the respondents were satisfied with the teachers and their teaching online mode in the current time of the pandemic.

**Khan et al. (2021)** analyzed the students' perception of e-learning during the COVID-19 pandemic in India. The questionnaire was used as the method for the collection of quantitative data from the 184 respondents. With the current pandemic, e-learning has emerged as the best way to enhance the learning system among students. Among the respondents in the study (48.37%) were male and (51.63%) were female. Most of the respondents i.e. (73.4%) benefit from the ease and quick share of the educational material which helps them in their respective studies. (73.4%) of respondents highlighted that e-learning helps them to continue their studies irrespective of their geographical disparities. (52.2%) of respondents feel that using e-learning platforms for their studies is an easy and friendly process. (50%) of the respondents were in the favor of the web-based learning system as it increases the learning process. In the current time of the pandemic, more students are opting for e-learning as it is a flexible and easy way for respondents to get study materials, connect with teachers, and access information.

**Zalat, Hamed & Bolbol (2021)** studied the experiences, challenges, and acceptance of e-learning as a tool for teaching during the COVID-19 pandemic among university medical staff. An electronic questionnaire was used from collecting the data from the respondents with a validated Technology Acceptance Model (TAM). E-learning in the current time has made learning flexible, creative, and more focused. (40%) and (32%) of the respondents feel that unstable internet connectivity and technological problems respectively is the major barrier faced while accessing e-learning. (56.1%) and (32.1%) of the respondents agree and strongly agree respectively that technical skills in using the online programs help in increasing the experience of the members.

**Kumar (2019)** analyzed the awareness, benefits, and challenges of e-learning among the students of Kurukshetra University. The questionnaire was used as the method for the collection of quantitative data from the respondents. The study was conducted over 300 respondents belonging to various disciplines such as PG, M.Phil., Ph.D. Out of the total respondents, the majority of them were male i.e. (78.12%), and the remaining (21.86%) were female. (99.1%) of the respondents were fully aware of e-learning and the majority of them came to know about e-learning through the internet (45.53%). The responses of the students were very positive regarding the awareness of ICT skills. (54%) of respondents agreed with the statement that sharing information through e-learning is easy. The study highlights the various challenges faced by the respondents and the majority of respondents i.e. (31%) strongly agreed that the lack of internet access in the University is a major barrier faced them.

**Mishra et. al. (2019)** examined the awareness and use of e-learning open courseware among the students at Tripura University. The study aims to find awareness of e-learning among respondents. A structured questionnaire was designed to collect data from the respondents. A total of 200 questionnaires were distributed among the respondents out of which 166 were received back for the analysis. The analysis of the obtained data was done by using the MS-Excel software. After the analysis, it was found that the highest (52.41%) of respondents were male and the rest (47.59%) were female. (85.54%) of respondents were Postgraduate students.

A maximum of (85.75%) of respondents were aware of the e-learning while (44.58%) of respondents had registered in some of the e-learning courses. The study discussed the various barriers the respondents faced while accessing e-resources and (38.01%) of respondents felt that slow internet speed was the main hurdle to accessing the e-resources.

#### **4. OBJECTIVES**

The objectives of the study are:

1. To identify the awareness of E-learning among the respondents.
2. To analyze the benefits of using the E-learning sites.
3. To recognize the challenges faced by the students in using E-learning sites.
4. To identify the frequency of using the E-learning resources by the respondents.
5. To identify various E-learning platforms used by the respondents to study during the lockdown period.
6. To examine the student's opinion about the regular training programs in using the E-learning sites.

#### **5. METHODOLOGY**

The study is designed to analyze the perception of the users of the Dhanvantri library of the University of Jammu regarding e-learning in the current time of the pandemic. An online questionnaire was designed using a google form to collect the data from the respondents of the University of Jammu. The study is conducted on the users of the Dhanvantri library of the University of Jammu. A total of 278 students responded to the questions and provided complete information regarding the survey. The Google form remained open for submission for the respondents for 15 days. The data collected from the respondents in the study were presented in the form of tables, charts, and explanations.

#### **6. DATA ANALYSIS**

##### **Characteristics of the respondents**

Table 1 describes the characteristics of the respondents of the University of Jammu. The gender, age group, and courses constitute the characteristics of the respondents. The results from the gender-wise distribution of the respondents show that 157 (56.47%) and 121 (43.53%) of the respondents were male and female respectively in the study. In the age group-wise distribution of the respondents, the maximum 98 (35.25%) of the respondents were between the 26-29 years age group, followed by 73 (26.26%) of the respondents between the 23-26 years age group, 56 (20.14%) of the respondents were above the 29 years age group while the remaining 51 (18.35%) of the respondents were between the 20-23 years, age group. In the course-wise classification of the respondents, most of the respondents i.e., 148 (53.24%) were pursuing the PG course, followed by 87(31.29%) of the respondents were pursuing M.Phil./Ph.D. course and the rest 43(15.47%) of the respondents were pursuing UG course in the University of Jammu.

**Table 1: Characteristics of the respondents**

<b>Gender-wise distribution of respondent</b>
---

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	157	56.47%
Female	121	43.53%
<b>Total</b>	<b>278</b>	<b>100%</b>
<b>Age group-wise distribution of respondents</b>		
<b>Age Group</b>	<b>Frequency</b>	<b>Percentage</b>
20-23 years	51	18.35%
23-26 years	73	26.26%
26-29 years	98	35.25%
Above 29 years	56	20.14%
<b>Total</b>	<b>278</b>	<b>100%</b>
<b>Course-wise classification of the respondents</b>		
<b>Courses</b>	<b>Frequency</b>	<b>Percentage</b>
UG	43	15.47%
PG	148	53.24%
M.Phil./ Ph.D. Scholars	87	31.29%
<b>Total</b>	<b>278</b>	<b>100%</b>

### **Familiarity with the concept of the E-Learning**

Table 2 highlights the familiarity of the respondents with the concept of e-learning. The data from the study shows that 239 (85.97%) of the respondents were familiar with the concept of e-learning and the remaining 39 (14.03%) of the respondents were not familiar with the concept of e-learning. Out of the total respondents in the study, 239 (85.97%) of the respondents were familiar with the concept of e-learning and respondents came to know about e-learning from various options. A maximum of 119 (41.90%) of the respondents became aware of e-learning from the internet, followed by 84 (29.58%) of the respondents who became aware of e-learning from their teachers, while 67 (23.59%) and 14 (4.93%) of the respondents became aware of e-learning from their friends and magazines/newspapers respectively. It was found from the study that the maximum number of respondents were familiar with the concept of e-learning and came to know about e-learning from the internet.

**Table 2: Familiarity with the concept of the E-Learning**

<b>Familiarity</b>	<b>Frequency</b>	<b>Percentage</b>
Familiar	239	85.97%
Not Familiar	39	14.03%
<b>Total</b>	<b>278</b>	<b>100%</b>
<b>If yes, from where did you come to know about E-learning</b>		
<b>Options</b>	<b>Frequency</b>	<b>Percentage</b>
Internet	119	41.90%
Teachers	84	29.58%
Friends	67	23.59%
Magazines/Newspapers	14	4.93%

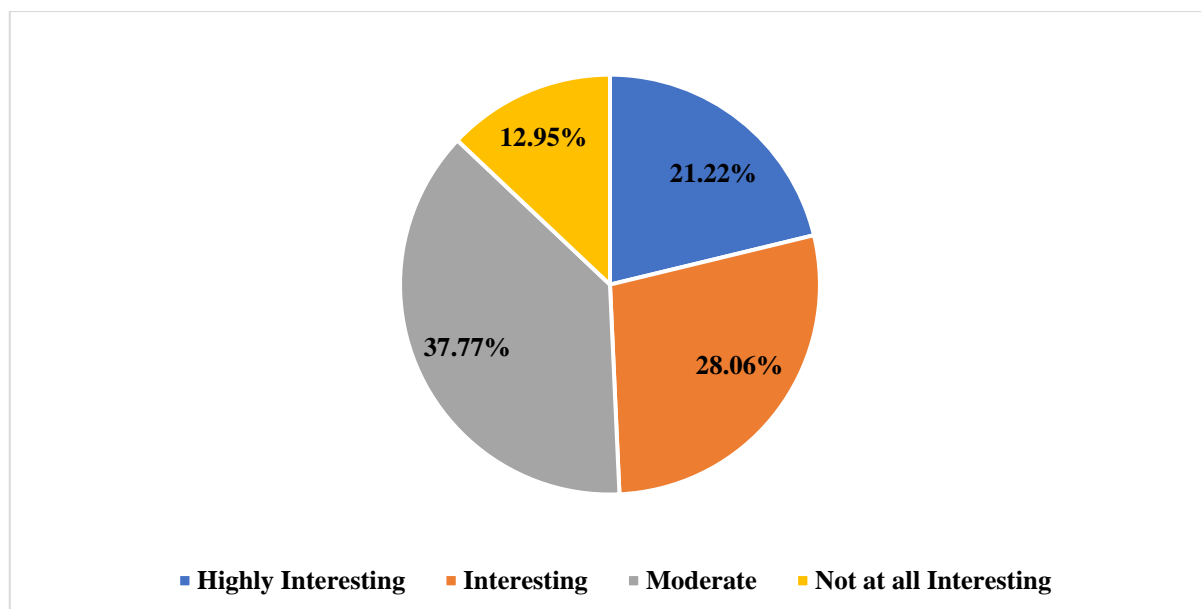
<b>Total</b>	<b>289</b>	<b>100%</b>
--------------	------------	-------------

### Perception of the respondents regarding the online classes

Table 3 and Figure 1 reveal the perception of the respondents regarding the online classes in the current pandemic. The data collected from the respondents were on the 4 levels such as highly interesting, interesting, moderate, and not at all interesting. Out of the total 278 respondents in the study, the majority 105 (37.77%) of the respondents felt online classes during the pandemic were moderate, followed by 78 (28.06%) of the respondents feel online classes during the pandemic were interesting, while 59 (21.22%) of the respondents feel online classes in the pandemic were highly interesting and the remaining 36 (12.95%) of the respondents feel online classes in the pandemic were not at all interesting. It was found from the study that the maximum number of respondents feel online classes during the pandemic were moderate and they were more interested in the physical classroom study as online studies have many barriers such as proper internet connectivity, devices, less digital comfort, etc.

**Table 3: Perception of the respondents regarding the online classes**

<b>Perception</b>	<b>Frequency</b>	<b>Percentage</b>
Highly Interesting	59	21.22%
Interesting	78	28.06%
Moderate	105	37.77%
Not at all Interesting	36	12.95%
<b>Total</b>	<b>278</b>	<b>100%</b>



**Figure 1: Perception of the respondents regarding the online classes**

### Preferred Devices by the respondents to use the E-learning sites

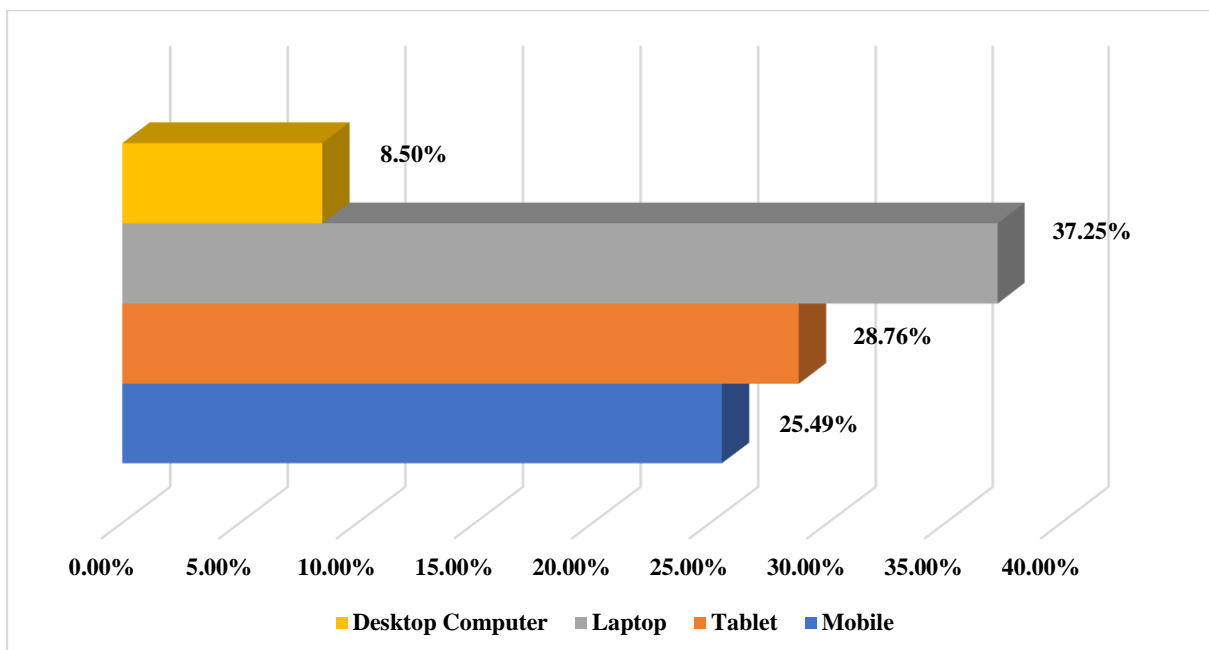
Table 4 and Figure 2 represent the preferred devices of the respondents to use the e-learning sites. The respondents were using various types of technological devices to use the e-learning

sites such as mobile, tablets, laptops, desktop computers, etc. The analysis of the data shows that most of the respondents 114 (37.25%) prefer to use laptops to use the e-learning sites, followed by 88 (28.765) of the respondents who prefer to use a tablet to use the e-learning sites, 78 (25.49%) of the respondents prefer to use mobile to use the e-learning sites and the remaining 26 (8.50%) of the respondents prefer to use a desktop computer to use the e-learning sites. It was found from the study that the maximum number of respondents prefer to use laptops to use the e-learning sites as it is more convenient to use as compared to other devices with a widescreen of the laptop, webcam, handy in nature, etc.

**Table 4: Preferred Devices by the respondents to use the E-learning sites**

Devices	Frequency	Percentage
Mobile	78	25.49%
Tablet	88	28.76%
Laptop	114	37.25%
Desktop Computer	26	8.50%
<b>Total</b>	<b>306</b>	<b>100%</b>

*(Frequency exceeded because respondents choose more than one option)*



**Figure 2: Preferred Devices by the respondents to use the E-learning sites**

### Frequency of using the E-learning sites by the respondents

Table 5 illustrates the frequency of using the E-learning sites by the respondents. Out of the total 278 respondents, a maximum of 139 (50%) respondents were using the e-learning site whenever required by them, followed by 118 (42.45%) of the respondents who were using the e-learning sites on the daily basis, and the rest 21 (7.55%) of the respondents were using the e-learning sites occasionally purpose. It was found from the study that the maximum number of respondents were using the e-learning sites whenever it required them to study and consult the documents to get the desired information regarding their course or program.



**Table 5: Frequency of using the E-learning sites by the respondents**

<b>Frequency of using E-learning sites</b>	<b>Frequency</b>	<b>Percentage</b>
Daily	118	42.45%
Whenever Required	139	50%
Occasionally	21	7.55%
<b>Total</b>	<b>278</b>	<b>100%</b>

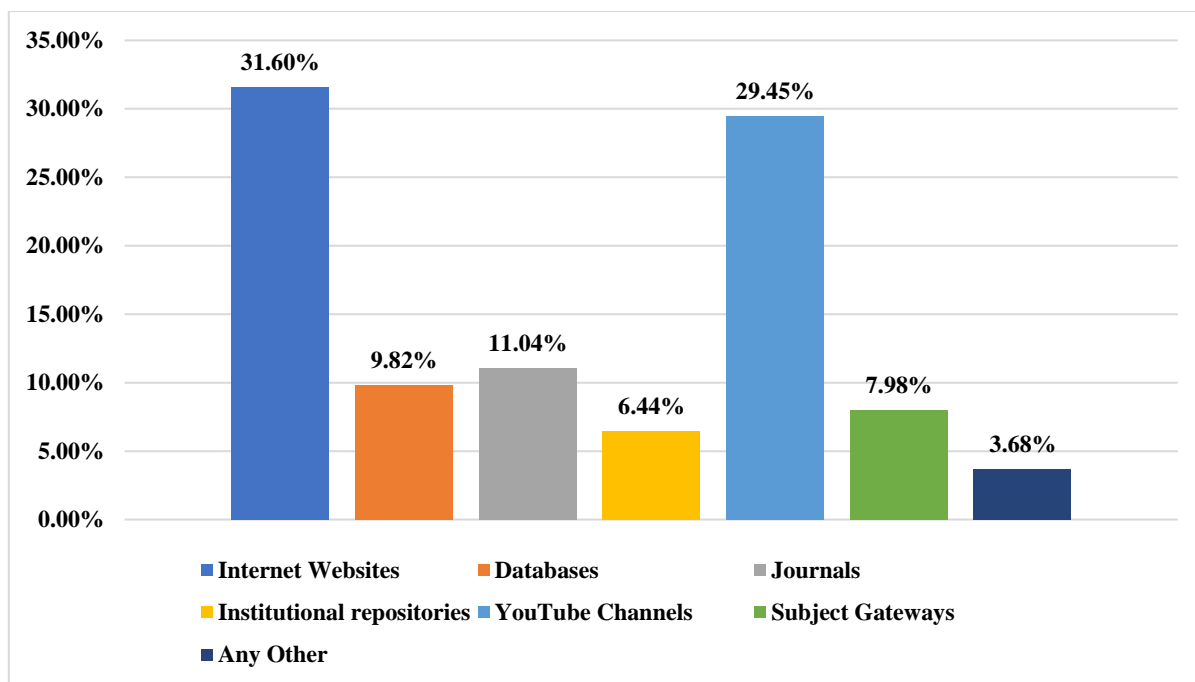
### **Efficient resources consulted by the respondents to find out the Information**

Table 6 and Figure 3 discussed the various efficient resources consulted by the respondents to find out the information. The current digital environment highlights the importance and immense use of web resources by the users in their respective fields of study. The result from the study shows that the majority 103 (31.60%) of the respondents consult internet websites to find out information as an abundance of information is available on the internet, followed by 96 (29.45%) of the respondents who consult YouTube channels find out the information as many free cost of study channels available on it, 36 (11.04%) of the respondents consult the journals to find out the information as journal includes the latest and current information related to its respective fields, while 32 (9.82%), 26 (7.98%) and 21 (6.44%) of the respondents consult the databases, subject gateways, and institutional repositories respectively to find out the information and the remaining 12 (3.68%) of the respondents consult the other resources such as study channels, research articles, discussion list/forum, etc. It was found from the study that the maximum number of respondents prefer internet websites to find information as an abundance of information is available on the internet websites and it is an easy and simple way to find the desired information in the current technological world.

**Table 6: Efficient resources consulted by the respondents to find out the Information**

<b>Resources</b>	<b>Frequency</b>	<b>Percentage</b>
Internet Websites	103	31.60%
Databases	32	9.82%
Journals	36	11.04%
Institutional repositories	21	6.44%
YouTube Channels	96	29.45%
Subject Gateways	26	7.98%
Any Other	12	3.68%
<b>Total</b>	<b>326</b>	<b>100%</b>

*(Frequency exceeded because respondents choose more than one option)*



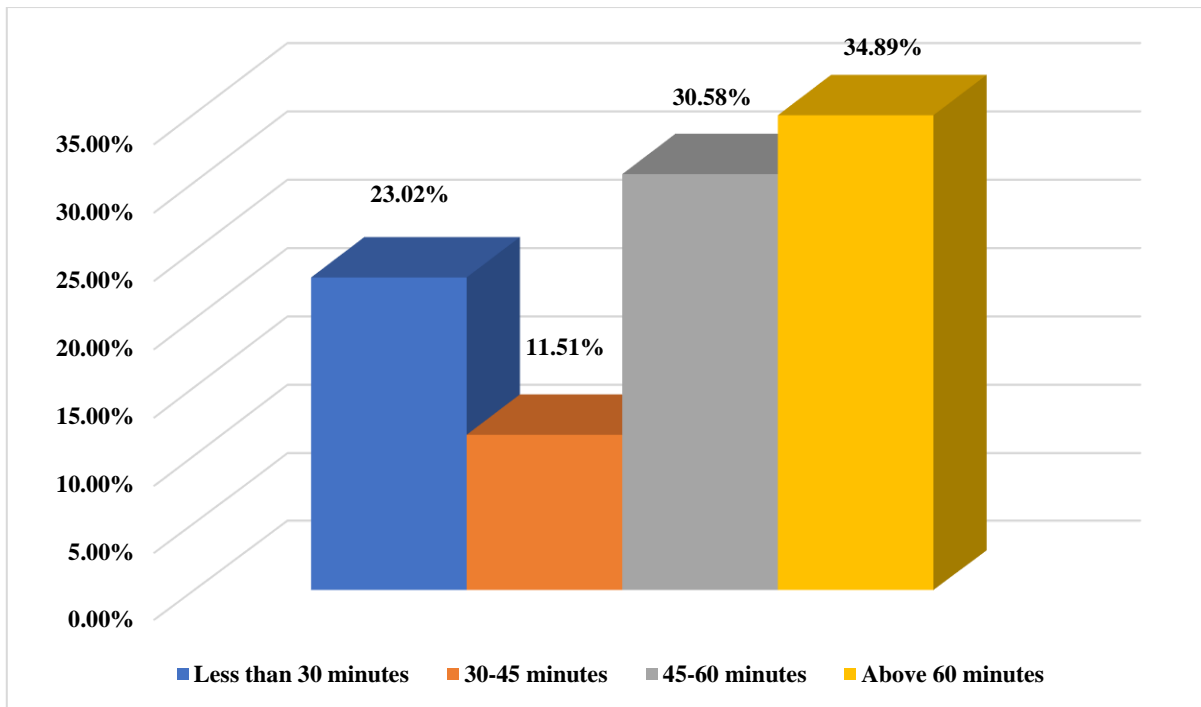
**Figure 3: Efficient resources consulted by the respondents to find out the Information**

### The appropriate time for the online classes

Table 7 and Figure 4 describe the appropriate time for the online classes according to the respondents. Online classes are different from physical classroom classes and online classes have their barriers. Out of the total 278 respondents, the majority 97 (34.89%) of the respondents prefer the online classes should be above 60 minutes, followed by 85 (30.58%) of the respondents who prefer the online classes should be between 45-60 minutes, while 64 (23.02%) of the respondents prefer the online classes should be less than 30 minutes and the remaining 32 (11.51%) of the respondents prefer the online classes should be between 30-45 minutes. It was found from the study that the maximum number of respondents prefer the online classes should be above 60 minutes as detailed classes are required for proper understanding of the concepts.

**Table 7: The Appropriate time for the online classes**

Time-period	Frequency	Percentage
Less than 30 minutes	64	23.02%
30-45 minutes	32	11.51%
45-60 minutes	85	30.58%
Above 60 minutes	97	34.89%
<b>Total</b>	<b>278</b>	<b>100%</b>



**Figure 4: The Appropriate time for the online classes**

#### **Platforms accessed to attend the online classes during the lockdown period**

Table 8 represents the various platforms used by the respondents for attending and learning in online classes. Various platforms are available in the current technological world for online meetings such as Cisco Webex, Zoom, Google Meet, GoToWebinar, Cisco Webex, Google Classroom, etc. The results from the data show that a maximum of 165 (43.31%) of the respondents prefer using the Zoom app for attending the online classes during the lockdown period, followed by 87 (22.83%) of the respondents who prefer using the Google Meet app for attending the online classes in the lockdown period, while 42 (11.02%), 40 (10.50%) and 31 (8.14%) of the respondents prefer using the GoToWebinar, Cisco Webex, and Google Classroom apps respectively for attending the online classes in the lockdown period and the rest 16 (4.20%) of the respondents prefer using the WhatsApp, Google Duo, Skype apps for attending the online classes in the lockdown period. It was found from the study that the maximum number of respondents prefer the Zoom app for attending online classes as it is easy to use and operate apps with a simple interface.

**Table 8: Various platforms accessed to attend the online classes in the lockdown period**

<b>Platforms</b>	<b>Frequency</b>	<b>Percentage</b>
Zoom	165	43.31%
Google Meet	87	22.83%
Cisco Webex	40	10.50%
GoToWebinar	42	11.02%
Google Classroom	31	8.14%
Any Other	16	4.20%
<b>Total</b>	<b>381</b>	<b>100%</b>

*(Frequency exceeded because respondents choose more than one option)*

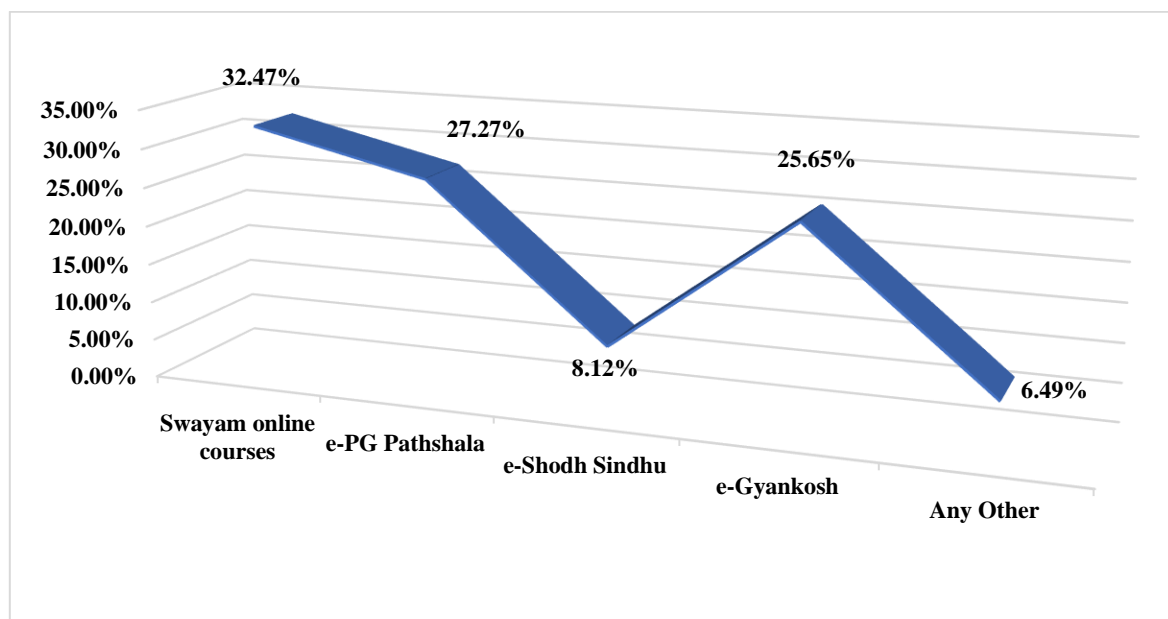
## Various E-learning platforms were used by the respondents to study during the lockdown period

Table 9 and Figure 5 depict the various e-learning platforms used by the respondents to study during the lockdown period. With the Covid-19 pandemic, the physical classroom studies were affected the most and the students shifted towards the e-learning platforms for fulfilling their information requirements. A maximum of 100 (32.47%) of the respondents were using the Swayam online course for fulfilling the information requirements, followed by 84 (27.27%) of the respondents were using the e-PG Pathshala modules for fulfilling the information requirements, while 79 (25.65%) and 25 (8.12%) of the respondents were using the e-Gyankosh modules and e-Shodhsindhu respectively for fulfilling the information requirements and the remaining 20 (6.49%) of the respondents were using others platforms such as MOOCs, subject gateways, databases, etc. for fulfilling the information requirements. It was found from the study that the maximum number of respondents were using Swayam online courses for fulfilling the information requirements as the contents available are prepared by the subject experts with video lectures which helps in a proper understanding of the concepts.

**Table 9: Various E-learning platforms used by the respondents to study during the lockdown period**

Platforms	Frequency	Percentage
Swayam online courses	100	32.47%
e-PG Pathshala	84	27.27%
e-Shodh Sindhu	25	8.12%
e-Gyankosh	79	25.65%
Any Other	20	6.49%
<b>Total</b>	<b>308</b>	<b>100%</b>

*(Frequency exceeded because respondents choose more than one option)*



**Figure 5: Various E-learning platforms used by the respondents to study during the lockdown period**

## Major benefits of using the E-learning sites by the respondents

Table 10 depicts the major benefits of using the e-learning sites by the respondents. Out of the total respondents in the study, the majority 115 (34.64%) of the respondents feel the e-learning sites are an effective and efficient way of learning, followed by 97 (29.22%) of the respondents who feel the e-learning sites are easy to access way of acquiring information, while 62 (18.67%) of the respondents feel the e-learning sites are faster access to required information, 43 (12.95%) of the respondents feel the e-learning sites are an attractive learning environment and the rest 15 (4.52%) of the respondents name the other benefits of using the e-learning sites. It was found from the study that the maximum number of respondents feel the e-learning sites are an effective and efficient way of learning in the current time of the pandemic.

**Table 10: Major benefits of using the E-learning sites by the respondents**

Benefits	Frequency	Percentage
Easy Access to information	97	29.22%
An attractive learning environment	43	12.95%
Effective and Efficient way of learning	115	34.64%
Faster access to required information	62	18.67%
Any Other	15	4.52%
<b>Total</b>	<b>332</b>	<b>100%</b>

*(Frequency exceeded because respondents choose more than one option)*

## Major Barriers faced by the respondents in the E-learning

Table 11 takes into consideration all those major types of barriers that the respondents experienced during their e-learning process. This table got 339 total responses in which most of the responses given by the respondents 118 (34.81%), were those pupils who were in the category of 'Lack of comfort with the digital technology which means most of them were not convenient and aware about the various digital technology skills and techniques. The next set of responses 85 (25.07%), comprises those respondents who lack resources and technology. This was followed by 'Slow Access Speed' 51 (15.04%), lack of internet access 39 (11.50%), 'Lack of training and awareness 33 (9.73%), and the last category with the least responses was 'Any Other' with 13 (3.83%) responses. It was found from the study that the maximum number of respondents feel a lack of comfort with the digital technology is the major barrier faced by them as the respondents are coming from different areas and environments.

**Table 11: Major Barriers faced by the respondents in the E-learning**

Troubles	Frequency	Percentage
Lack of internet access	39	11.50%
Lack of resources and technology	85	25.07%

Lack of training and awareness	33	9.73%
Lack of comfort with the digital technology	118	34.81%
Slow Access Speed	51	15.04%
Any Other	13	3.83%
<b>Total</b>	<b>339</b>	<b>100%</b>

*(Frequency exceeded because respondents choose more than one option)*

### **Requirements of the Orientation/ Training program on the utilization of Library Sources and Services**

Table 12 gives the data regarding the various orientation/ training programs required for the utilization of library sources and services in the covid-19 pandemic era. Out of the 278 respondents in the study, 210 (75.54%) of the respondents were in the favour of orientation programs while 68 (24.46%) of the respondents were not in the favour of orientation programs. The majority of the respondents 95 (34.67%) require orientation in information retrieval training, followed by 66 (24.09%) require orientation in using the open access resources, 48 (17.52%), and 46 (16.79%) respondents require orientation in the usage of the MOOCs and online resources searching skills, and while the remaining 19 (6.93%) of the respondents require orientation in the other areas. It was found from the study that the maximum number of respondents feel that they require orientation in information retrieval training as in the current time majority of information is available on the internet and users require a correct and faster way of retrieving the information.

**Table 12: Requirements of the Orientation/ Training program on the utilization of Library Sources and Services**

<b>Need for the Orientation/ Training program on the utilization of Library Sources and Services</b>		
<b>Options</b>	<b>Frequency</b>	<b>Percentage</b>
Yes	210	75.54%
No	68	24.46%
<b>Total</b>	<b>278</b>	<b>100%</b>
<b>Different areas for the Orientation/ Training program related to E-learning</b>		
<b>Areas</b>	<b>Frequency</b>	<b>Percentage</b>
Online resources searching skills	46	16.79%
Using Open Access resources	66	24.09%
Information retrieval training	95	34.67%
Usage of MOOCs	48	17.52%
Any Other	19	6.93%
<b>Total</b>	<b>274</b>	<b>100%</b>

## 7. CONCLUSION

In our empirical study, we tried to extract various perceptions and viewpoints of the users of the Dhanvantri library of Jammu University regarding the various methods, mediums, and sources involved in the dispensing of E-learning in the Covid-19 pandemic era. The users and respondents gave satisfying responses regarding the various framed queries and questions in this aspect. A majority of the users were familiar with the concept of E-learning. Most of the users were having moderate perceptions regarding e-learning programs. Most of the students were those who used the e-learning sites daily to cater to and fulfill their information needs. The websites on the internet were the most efficient resources consulted by the users to discover information. The Zoom application and the Swayam online courses were one of the most used digital platforms to attend online classes during the covid era. The major barrier found among the respondents to retrieving and using information was a deficiency of comfort with the digital technology. So, we can conclude by quoting that in the covid-19 pandemic era, various e-learning platforms were widely available and utilized sources to cope with the challenges of providing quality education to the most important education pupils in the whole world.

## 8. FINDINGS AND SUGGESTIONS

The major suggestions concerned this study are as follows:

- Various technological irregularities and leggings should be identified so that most of the students should be highly interested in using and harnessing knowledge from various e-learning programs.
- Timings and schedules of the e-learning classes and courses should be managed adequately so that there is no pressure and discomfort applicable to the users.
- More e-learning platforms should be discovered and made available to the domain of the students so that the students and users can have some sort of variety of choices to cater to their information needs.
- There should be various guidance, orientation, and training programs regarding the e-learning courses by the virtue of which most education-seeking persons are made aware of this dynamic change of education required in the pandemic era.

## REFERENCES

- Anand, R., Saxena, S., & Saxena, S. (2012). E-Learning and its impact on rural areas. *I.J. Modern Education and Computer Science*, 5, 46-52. doi: <https://doi.org/10.5815/IJMECS.2012.05.07>
- Khan, M. A., Vivek, Nabi, M. K., Khojah, M., & Tahir, M. (2021). Students' perception towards e-learning during COVID-19 pandemic in India: An empirical study. *Sustainability*, 13(1), 1-14. Retrieved from <https://www.mdpi.com/2071-1050/13/1/57>
- Khan, M. A., Vivek, Nabi, M. K., Khojah, M., & Tahir, M. (2021). Students' perception towards e-learning during COVID-19 pandemic in India: An empirical study. *Sustainability*, 13(1), 1-14. Retrieved from <https://www.mdpi.com/2071-1050/13/1/57>

- Konwar, I.H. (2017). A Study on attitude of college students towards e-learning with special reference to North Lakhimpur of Lakhimpur District, Assam. *International Journal of Information Science and Education*, 4(1), 1-9. Retrieved from <https://www.semanticscholar.org/paper/A-Study-on-Attitude-of-College-Students-towards-to-Konwar/0219fb9b4be885a83011da7e1482e66300ed9bda>
- Kumar, D. N. S. (2020). Impact of Covid-19 on higher education. *Higher Education Digest*. Retrieved from <https://www.highereducationdigest.com/impact-of-covid-19-on-higher-education/>
- Kumar, S. (2019). Awareness, Benefits, and Challenges of e-learning among the students of Kurukshetra University Kurukshetra: A study. *International Journal of Information Dissemination and Technology*, 8(4) 227-230. Retrieved from [https://www.researchgate.net/publication/333353006\\_Awareness\\_Benefits\\_and\\_Challenges\\_of\\_e-Learning\\_among\\_the\\_Students\\_of\\_Kurukshetra\\_University\\_Kurukshetra\\_A\\_Study](https://www.researchgate.net/publication/333353006_Awareness_Benefits_and_Challenges_of_e-Learning_among_the_Students_of_Kurukshetra_University_Kurukshetra_A_Study)
- Mishra, V.K., Debbarma, R., Das, S. & Verma, M.K. (2019). Awareness and use of e-learning open courseware among the students of Tripura University, Agartala: A case study. *International Journal of Information Dissemination and Technology*, 9(4), 163-167. Retrieved from [https://www.researchgate.net/publication/339599757\\_Awareness\\_and\\_Use\\_of\\_E-Learning\\_Open\\_Courseware\\_among\\_the\\_Students\\_of\\_Tripura\\_University\\_Agartala\\_A\\_Case\\_Study](https://www.researchgate.net/publication/339599757_Awareness_and_Use_of_E-Learning_Open_Courseware_among_the_Students_of_Tripura_University_Agartala_A_Case_Study)
- Pokhrel, S., & Chettri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133-141. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/2347631120983481>
- Sawhney, S., & Sharma, I. (2022). Challenges faced by students in online classes during Covid-19. *International Journal of Research and Analytical Reviews (IJAR)*, 9(2), 83-90.
- Singh, B., Kaushal, V., & Devi, S. (2022). Students' attitude towards e-learning. *Juni Khayat*, 12(3), 1-7. Retrieved from [https://www.researchgate.net/publication/359320029\\_Students'\\_Attitude\\_Towards\\_E-Learning](https://www.researchgate.net/publication/359320029_Students'_Attitude_Towards_E-Learning)
- Suri, G., & Sharma, S. (2013). Impact of age on student's attitude towards e-learning: A study on Panjab University, India. *GIAN JYOTI E-JOURNAL*, 3(2), 73-80.
- Tari, S., & Amonkar, G. (2021). Impact of Covid on higher education in India. *Educational Resurgence Journal*. 2(5), 22-27. Retrieved from <https://coed.dypvp.edu.in/educational-resurgence-journal/jan-2021.aspx>
- Thapa, P., Bhandari, S. L., & Pathak, S. (2021). Nursing students' attitude on the practice of e-learning: A cross-sectional survey amid COVID-19 in Nepal. *PLOS ONE*, 16(6), 1-17. Retrieved from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0253651>



Zalat, M.M., Hamed, M.S., & Bolbol, S.A. (2021). The experiences, challenges, and acceptance of e-learning as a tool for teaching during the COVID-19 pandemic among university medical staff. *Plos one*, *16*(3). doi: <https://doi.org/10.1371/journal.pone.0248758>