

The Use And Impact Of Online Resources On Higher Education In Covid 19

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ABSTRACT

Technology is a very important, useful and indispensable part of our lives. This research presents. The way college students collect course project requirements in the process of project inspiration Phase, how do they access the Internet and other resources and their trends in the literature review use the Internet. In addition, the diversity of Internet resources used for homework and course project research, and the reliability and accessibility of these resources after 7 investigation and evaluation. In addition, the results obtained from the research are Discussion and evaluation.

Key words: Online resources, E-resources, E-Services

1 INTRODUCTION

In today's situation, the world is facing the same problems in terms of economy and sources of income. COVID 19 has changed everyone's life in different low-end ways. Not only teachers and students, but all workers have online resources for support. They are closer to people's lives than ever

1.1 Online resources:

Generally, web pages and documents on the Internet provide useful information. Although online resources are usually data and educational resources, supporting software available online can also be considered resources.

METHODOLOGY

This research is descriptive and is a case study of "The Use and Impact of Online Resources in Higher Education in Covid 19". Researchers and students chose an online research design using email and smartphone surveys. From the perspective of collecting detailed information on the use of Web-based information resources by UG&PG students, research scholars, faculty, and staff, the survey is also analytical. Data has been collected using structured questionnaires. According to the pilot study conducted by students, researchers and faculty in consultation with experts, the questionnaire was refined and revised.

2. STATEMENT OF THE PROBLEM

Online users are also gradually and appropriately using network technology so that they can access their user community not only within the college but also throughout the campus. Just like the evaluation of regular and physical online resources in Covid 19, the use and relevance of educational websites, electronic content, and the use of information resources and services enabled through the network need to be checked to understand their impact on the user community. Therefore, this study "Usage and Impact of Online Resources in Higher Education in Covid 19" is selected to evaluate the advantages and limitations of using information resources and services (especially online resources).

3. OBJECTIVES OF THE STUDY

- Determine the electronic resources and services provided in a selected number of UG and PG students, research scholars, faculty and staff.
- Find information sources and services provided in a selected number of UG and PG students, research scholars, faculty and staff, as well as web-based access functions.
- Understand the extent to which the surveyed users develop and use information services.
- In a selected number of UG and PG students, research scholars, faculty and staff, research the information access and web resource usage among users.
- Understand the work efficiency of the surveyed UG and PG students, research scholars, faculty and staff.
- Identify restrictions on access to common ICT facilities, web-based services and electronic resources.

4. HYPOTHESES

Make the following hypotheses based on the framework objectives and test them by using appropriate statistical tools.

- There is no significant difference between the faculty and some research scholars and faculty students in their dependence on the library for research and teaching.
- There are no significant differences in the use of browsers and search engines among university teachers and some UG and PG students, research scholars, faculty and staff.
- Among selected UG and PG students, research scholars, faculty and staff, there is no significant difference between the purpose of using electronic resources.
- Selected UG and PG students, research scholars, faculty and staff interviewees have no significant differences in the frequency of access to electronic resources.

5. SAMPLE SIZE

The online questionnaire has been personally distributed to UG and PG students, research scholars, faculty and staff respondents via email and smartphones. Regarding users, 150 questionnaires were distributed to selected users of UG and PG students, research scholars, faculty and staff. Among them, 135 people were filled out and received, so the response rate was 15%.

STATISTICAL TOOL

SPSS software package is used for tabulation, correlation analysis and other related data analysis. Simple percentile analysis is used to analyze data. In addition, other optional and appropriate statistical tools (such as chi-square test and analysis of variance) are used to Test hypothesis.

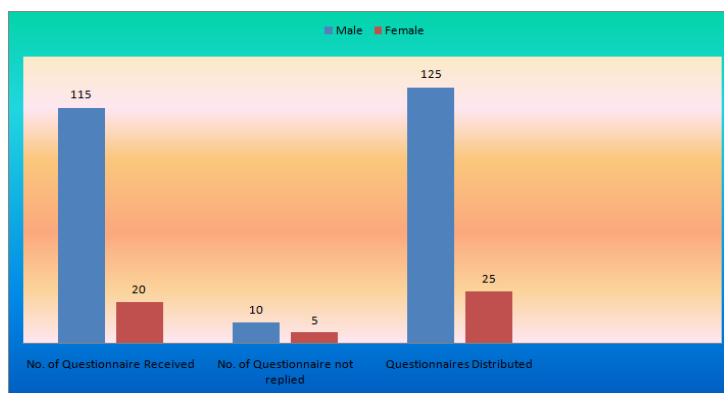
6. LIMITATIONS OF THE STUDY

The research is limited to online selection. The results of the research may not be applicable to institutions or universities. There may be response deviation. Time and other resource constraints limit the choices of more UG and PG students, research scholars, faculty and staff. The survey method used to collect data in this study has its limitations. Therefore, the generalization of research results is subject to the above conditions. The study is limited to the data collection period from November 1 to November 25.

TABLE 1 STATISTICS FOR DISTRIBUTION OF QUESTIONNAIRES

S.No	Description	No. of Respondents				Total	%
		Male	%	Female	%		
1	No. of Questionnaire Received	115	76.67	20	13.33	135	90
2	No. of Questionnaire not replied	10	6.67	5	3.33	15	10
	Questionnaires Distributed	125	83.33	25.00	16.67	150	100

Table 1 shows that the Phase 1 distribution of questionnaires to the use and impact of assessing online resources in the Covid-19 situation by the UG & PG students, research scholars, faculty members, and working people. Out of 150 distributed questionnaires, 135 respondents with a response rate of 115 (76.67%) were male and the rest of the 20 were female i.e. (13.33%).



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Figure 1 Statistics for Distribution of Questionnaires

This rectangle shape figure shows that the statistics for the distribution of questionnaires. These figures are divided into two parts. One is the x-axis and another one the y axis. The X-axis mentions the number of respondents and not respondents person and the y-axis mentions the gender categories. Two rectangles mention the high and low level of respondents and not respondents of questionnaire methods.

Table 2 Online Class support to the Apps: Usage survey

Type of apps	UG &PG students	Research Scholars	Faculty Members	Working person	Total	Mean	S.D
Google meet	10		5	20	35(29.53)	8.75	7.40
Zoom	20	15	30	10	75(55.75)	18.75	7.40
Cisco WebEx.	5				5(3.70)	1.25	2.17
Whatsapp	5				5(3.70)	1.25	2.17
Gmail		5			5(3.70)	1.25	2.17
Youtube		5			5(3.70)	1.25	2.17
Apache OpenMeeting.				5	5(3.70)	1.25	2.17
Total	40(29.63)	25(18.51)	35(29.53)	35(29.53)	135(100)	33.75	5.45
Mean	5.71	3.57	5.00	5.00	19.29		

Table 2 reveals that the UG and PG Students who responded were 40 i.e. 29.63%, Research Scholars were 25 (18.51%), Faculty members were 35 (29.53%), and Working persons were 35 (29.53%).

It could be identified from the analysis that the highest respondents are from the Zoom App. Zoom meeting has the highest percentage of respondents (56%). Google meet has above 30 percent of respondents. Zoom meet has more than 50 percent of respondents.

TABLE 3 ANOVA: TWO FACTORS WITHOUT REPLICATIONS

ANOVA TABLE					
SUM OF VARIATIONS	SUM OF SQUARE	DEGREE OF FREEDOM	MEAN SQUARE	F-VALUE	P-VALUE
Between column	16.96	6.00	2.83	F=0.1	0.01
Between rows	1092.86	3.00	364.29	F=12.75	
Residual	514.29	18.00	28.57		
	1624.11	27.00			

The F value is greater than the tabulated value between rows, so there is a significant difference between the different types of online meet Respondent for users of known provides Assessing the online resources on covid-19. The F value is greater than the tabulated value between columns, so there is a

significant difference between category-level colleges.

Gender wise analysis of communication medium

The table reveals that the majority of male respondents come to know about the use and impact of online resources of higher education in covid 19. The respondents who came to know from Male respondents of 85.19 percent. The minimum numbers of respondents who know the female are 14.81 percent.

Table 4 Gender wise analysis of use and impact of online resources of higher education in covid 19

S.No	Type of apps	Gender		Total	Mean
		Male	Female		
1	Google meet	30	5	35	17.5
2	Zoom	65	10	75	37.5
3	Cisco WebEx.	5		5	2.5
4	Whatsapp	0	5	5	2.5
5	Gmail	5	0	5	2.5
6	Youtube	5	0	5	2.5
7	Apache OpenMeeting.	5	0	5	2.5
	Total	115	20	135	67.5
	Mean	16.43	2.86	19.29	
	Median	5	0	5	
	Mode	5	0	5	

Note: Respondents were permitted multiple answers

The majority of male respondents come to know about the use and impacts of online resources of higher education in covid-19. The respondents who came to know from the Zoom app are 55.29 percent. The Mean, Median, and Mode values of male respondents are 16.43, 5, and 5 respectively.

The above analysis shows the fact that the majority of the male and female respondents came to know about the use and impacts of online resources in higher education in covid-19.

Table 5 Hypothesis T- test with Age group wise respondents from selected online resources

S.No	Types of apps	Gender		Total	(X-MeanX) ²	(Y-MeanY) ²
		Male (X)	Female (Y)			
1	Google meet	30	5	35	173.45	4.54
2	Zoom	65	10	75	2320.35	50.85
3	Cisco WebEx.	5		5	139.95	8.23
4	WhatsApp	0	5	5	283.25	4.54
5	Gmail	5	0	5	139.95	8.23
6	Youtube	5	0	5	139.95	8.23

7	Apache OpenMeeting.	5	0	5	139.95	8.23
	Total	115	20	135	3336.84	92.86

Note: Respondents were permitted multiple answers

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{s^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

$$s^2 = \frac{\sum_{i=1}^{n_1} (x_i - \bar{x}_1)^2 + \sum_{j=1}^{n_2} (x_j - \bar{x}_2)^2}{n_1 + n_2 - 2}$$

T-test=0.00097

A t test is any statistical hypothesis test in which the test statistics follow the t distribution of online respondents under the null hypothesis. It can be used to determine whether two sets of data are significantly different from each other. If the value of the proportional termin the test statistic is known, the data set is most commonly used when the test statistic obeys anormal distribution. The T-test value is greater than the list value, so it is known that the differences between the different types of communication media provided by the electronic

resources have great differences in the use and impact of higher education online resources incovid-19.

Age group wise analysis of communication medium

Among respondents 46 and older, most people in the age group know how to evaluate Internet-based information services in the Chennai University Library. Followed by 40 respondents who learned about resources through librarians.

Table 6 Age wise analysis of N-List Consortium is known through communication medium

Age Group	25-30	31-35	36-40	41-45	46 & above	Total	Mean
Google meet	5	5	5	15	5	35	7
Zoom	5		10	20	40	75	15
Cisco WebEx.			5			5	1
WhatsApp			5			5	1
Gmail		5				5	1
Youtube					5	5	1
Apache OpenMeeting				5		5	1
Total	10	10	25	40	50	135	27
Mean	1.43	1.43	3.57	5.71	7.14	19.29	

Note: Respondents were permitted multiple answers

The Use And Impact Of Online Resources On Higher Education In Covid 19

During Covid-19, most of the 50 respondents who were 46 years of age and older were aware of online information services. Followed by 20 respondents who used Zoom to learn about resources. The average of 46 years old and above was 7.14.

Most of the 40 respondents in the 41-45 age group are aware of the use and impact of online resources for higher education in COVID-19. Followed by 20 respondents who used Zoom to learn about resources.

The average of respondents in the 41-45 age group was 5.71. From the above analysis, it can be concluded that among the respondents of all the above age groups, with the help of online facilities, they are aware of the use and impact of online resources for higher education in COVID-19.

Table 7 Analysis of required E-resources

E-resources	Yes	No	Total	Mean
Books	30	0	30	15.00
E-Journals	80	0	80	40.00
E-Newspaper	5	0	5	2.50
E-Magazine	5	0	5	2.50
E-Patents	0	5	5	2.50
E-Clipping	0	5	5	2.50
E-Thesis	5		5	67.50
Total	125	10	135	
Mean	20.83	1.67	22.50	

Under the maximum of 80 respondents said yes to the E-Resources. The majority of 30 respondents used E-resources in E-journals and the rest as follows. It is concluded from the above analysis that the majority of respondents from all the seven categories of colleges prefer to use Online Information services.

CURRENT NEWS USAGE OF INTERNET

Table 8 Distribution of Respondents Based On Current News Usage of Internet Based Information Services in higher education

Current News	Frequency	Percent	Cumulative Percent
No	84	61.8	61.8
Yes	51	38.2	100.0
Total	135	100.0	

The table reveals the Current News users about online information resources and services in higher education found from the study are 38.2% of Faculty, Students, and Research scholars responded "Yes" and the remaining 61.8 % responded "No".

Table 9 Pearson Chi-Square Tests with Current News Usage Respondents from Selected Institutions

Current News	Chi-square	7.684
	df	1
	Sig.	.002*
Current News	Chi-square	3.430
	df	1
	Sig.	.053

At the 5% significance level, the table value X^2 of one degree of freedom is 7.684 and

3.430. The calculated value of X^2 is higher than the value in this table, so the null hypothesis is accepted and the alternative hypothesis is rejected. There is no correlation between yes or no respondents and their entertainment frequency of accessing online information services. **SOCIAL WEBSITES USAGE OF INTERNET**

Table 10 Distribution of Respondents Based On Social Websites Usage of Internet Based Information Services in higher education

Social Websites	Frequency	Percent	Cumulative Percent
No	79	58.5	58.5
Yes	56	41.5	100.0
Total	135	100.0	

The table reveals the users of the Social website about online information resources and services in higher education found from the study is 41.5% of Faculty, Students, and Research scholars responded "Yes" and 58.5 % responded "No".

Table 11 Pearson Chi-Square Tests with Social Websites Usage Respondents from Selected Institutions

Social Websites	Chi-square	9.460
	df	1
	Sig.	.002*
Social Websites	Chi-square	.058
	df	1
	Sig.	.810

At the 5% significance level, the table value X^2 of one degree of freedom is 9.460 and

0.058. The calculated value of X^2 is higher than the chi-square test, but lower than the Pearson chi-square test, so the table value is valid, so the null hypothesis is accepted and other hypotheses are rejected. There is no correlation between yes or no respondents and how often they use social networking sites to access online information services.

DUPLICATION USAGE OF INTERNET

Table 12 Distribution of Respondents based on Education Usage of Internet-Based Information Services in Higher Education

Education	Frequency	Percent	Cumulative Percent
No	45	33.2	33.2
Yes	90	66.8	100.0

Total	135	100.0	
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The table reveals the Education users in online information resources and services in Higher Education found from the study 66.8% of Faculty, Students and Research scholars responded "Yes" and 33.2 % responded "No".

Table 13 Pearson Chi-Square Tests with Education Usage Respondents

Education	Chi-square	13.211
	df	1
	Sig.	.000*
Education	Chi-square	1.041
	df	1
	Sig.	.307

At the 5% significance level, the table value X^2 of one degree of freedom is 13.211 and 1.041. In this table of values, the calculated value of X^2 is higher than the chi-square test, but lower than the Pearson chi-square test. Therefore, the Null hypothesis can be accepted but the Alternative hypothesis can be rejected. Yes or No There is no correlation between therespondents and their educational use frequency for accessing online information services.

RESEARCH WORK USAGE OF INTERNET

Table 14 Distribution of Respondents Based On Research Work Usage of Internet -Based Information Services in Higher Education

Research	Frequency	Percent	Cumulative Percent
No	78	58.1	58.1
Yes	57	41.9	100.0
Total	135	100.0	

The table reveals the Research work usage of internet-based information resources and services in Higher Education found from the study is 41.9% of Faculty, Students and Research scholars respondents "Yes" and 58.1 % respondents "No".

Table 15 Pearson Chi-Square Tests with Research Usage Respondents

Research	Chi-square	13.729
	df	1
	Sig.	.000*
Research	Chi-square	.523
	df	1
	Sig.	.426

At the 5% significance level, the table value X^2 of one degree of freedom is 13.729 and 0.523. The calculated value of X^2 is higher than the table value, so the null hypothesis is accepted, and the other hypotheses are therefore rejected. There is no correlation between yes or no respondents and their research frequency of access to online information services.

DESKTOP PC USAGE OF INTERNET

Table 16 Distribution of Respondents Based On Desktop PC Usage of Internet- Based Information Services in Higher Education

Desktop PC	Frequency	Percent	Cumulative Percent
No	69	51.0	51.0
Yes	66	49.0	100.0
Total	135	100.0	

The table reveals the Desktop PC users about online information resources and services in Higher Education found from the study is 49% of Faculty, Students and Research scholars responded "Yes" and 51.0 % responded "No".

Testing of Hypothesis

There are no Desktop PC users between the yes or no respondents and their frequency of accessing internet-based information services in Higher Education.

H1: Alternative Hypothesis

There is a Desktop PC user between the yes or no respondents and their frequency of assessing

internet-based information services in Higher Education.

Table 17 Pearson Chi-Square Tests with Desktop Pc Usage Respondents

		Age Group
Mobile / Tablet	Chi-square	15.347
	df	2
	Sig.	.000*
Desktop PC	Chi-square	28.794
	df	2
	Sig.	.000*

CONCLUSION

The present study was undertaken to assess the material available in well-established in use and the impact of access to online resources by the faculty members and research scholars of higher education.

The emergence of electronic information sources has provided the student community particularly professional students with wide opportunities to satisfy their information needs. Electronic sources have become an alternative tool to print media. The educational institutions should be equipped with required online resources to enable their students to fulfill their academic endeavors. It is suggested that the opinion of research scholars also should be taken into account while selecting online resources for the subscription. This would add the relevance and value of the source, make the users more responsible for the money spent on resources, and in turn promote the usage of e-publications to a large extent.

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