



PERCEPTION OF TEACHERS ON ONLINE TEACHING IN HIGHER EDUCATION DURING COVID-19 LOCKDOWN

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Abstract: COVID-19 lockdown has made really a challenging situations for everyone and in every sector of the economy. In the same way, education sector is also not untouched from the effect of covid-19 lockdown. Lockdown has made education of the students a great challenge in front of the teachers. Although, teachers are making efforts to educate the students from home during lockdown by using various online methods. The paper was conducted to know the perception of teachers and their experiences of teaching students online during the lockdown. A questionnaire is prepared to find out how the teachers are managing the students and what the challenges they are facing during online teaching? To conduct the investigation 200 questionnaires were sent online to teachers of different public and private universities and colleges of Uttarakhand and out of that 161 responses were analyzed.

The analysis represents the impact of online education on the perception of teachers on the basis of various factors (Diversifying Knowledge, Technical Knowledge, Comfortability, Communication Gap, Teacher's Burden and Working Hour). The analysis was carried out with One Way ANOVA test in SPSS 20. The t-test was used to know the perception of teacher's on online education through demographics. From the analysis it was revealed that teachers believe that online education is actually diversifying knowledge of the teachers and increasing their technical knowledge but it also has increases the working hours of the teachers as the online connection has reduced the communication gap between the students & teachers throughout the day. The study also concludes that young teachers are more actively participating in the online education to teach the students. This may be due to the reason of their familiarity with the technology. Overall study says that the teachers are taking online education positively and they are actively participating in shaping the future of students during COVID-19 lockdown.

Index Terms - Online education, COVID-19 Lockdown and Teachers' perception.

I. INTRODUCTION

Online accessibility to higher education has permitted working experts, military faculty in secluded areas and those living in rural areas to acquire degrees that were completely difficult to reach only a couple of years back (Grenzky and Maitland, 2001; Li, 2007). Besides various traditional organizations report that residential students, looking to expand their course load, or exploit the adaptable planning and accommodation of online projects, represent a huge segment of their online areas (Carnevale and Olsen, 2003; ungtusanatham, et al., 2004). Online teaching is not a new concept, it is in existence from the last decade around the world after digitalization. Various teachers and professionals are working on online teaching on YouTube, and other social media platforms since a decade. The new thing about online teaching and the reason for conducting this research was online teaching during lockdown in the country due to corona virus pandemic.

Corona virus is one of the virus from the family of corona. It was spread during December 2019 in Wuhan market China. It was believed that this disease was spread due to carelessness of the staff during laboratory testing and few rumour has said that this was spread due to the reaction in meat market of Wuhan China. None of the rumour is completely confirmed, however whatever the truth behind the spread of this virus around the world but one thing is sure this virus has lead the world in a big and horrific trouble. As there is no such medicine available to prevent this disease the whole world has gone into a silence and has been lockdown. India is also not untouched by this virus and Govt. of India has also decided to lockdown the whole country. This virus is not only affecting human kind but because of the Lockdown the whole country is suffering almost in every aspects of life. The whole country's economy has shaken and people are suffering mentally & physically during lockdown. To tackle the situation, every sector has decided to work from home so that there could be less impact of covid-19 lockdown on people as well as the economy.

One of the important sector that is education system is also suffering because of the lockdown in the country due to COVID-19 pandemic. The studies of students are stalled and their future is in dark. Therefore, to avoid this situation various universities and colleges have decided to teach the students online through different available social media apps. Online teaching has taken a trendy faze during lockdown as there is no other option to teach students and complete their syllabus. Not only this, the online teaching has also been initiated to make the students busy during quarantine and to keep their mind at ease by providing different assignments and other works.

The paper is conducted to know the perception of teachers on online teaching during lockdown as to know what they think about working from home and interacting with students online and what the students' reaction towards online teaching during lockdown are?

II. LITERATURE REVIEW

This section deals with the literature available on the online teaching and different perspectives of academicians and experts on online teaching. Though there is hardly any literature available on teacher's online teaching during Covid-19 Lockdown still we tried to give a background to our study on the basis of previous literature available on online teaching.

Anna Sun and Xiufang Chen (2016): Using a qualitative content analysis approach, this investigation inspected 47 published studies and research on internet educating and learning since 2008, essentially concentrating on how hypotheses, practices and evaluations apply to the web based learning condition. The motivation behind this paper is to give functional proposals to the individuals who are intending to create online courses with the goal that they can settle on educated choices in the implementation process.

Based on the findings, the authors argued that effective online instruction is dependent upon 1) well-designed course content, motivated interaction between the instructor and learners, well-prepared and fully-supported instructors; 2) creation of a sense of online learning community; and 3) rapid advancement of technology. In doing this, it was hoped that this will stimulate an on-going discussion of effective strategies that can enhance universities and faculty success in transitioning to teach online. Throughout the entire review study, they found that one of the primary challenges in online education is to develop a sense of community in the online environment.

Harandi (2015): has likewise examined the quality of the relationship between e-learning and students' inspiration among students in Tehran Alzahra University. They found that e-learning is a component which influences student's inspiration. Their exploration is relied upon to be useful in developing nations for educational scholars who need to comprehend the impact of e-learning on students' inspiration. However, their investigation is constrained by the reality speculation of the results can't be made to different nations.

Parviz Ghandforoush (2013): In this paper we look into the views of experts towards the adequacy of online degree programs in their work calling. In this paper we endeavour to comprehend the purposes for the absence of adequacy and set future bearings for helping a portion of the antagonistic discernments. We create and look into a methodology for estimating background, online technology familiarity, characteristics of instruction and distance as essential drivers that would influence online instruction adequacy and its subsequent perception.

Another paper by Lumadi et al (2013) addresses the effect of e-learning on the academic performance of students & teachers. They directed an investigation to decide whether teacher showed utilizing technique for e-learning performed better than teacher showed utilizing the traditional strategy for instructing and learning. Their discoveries proposes that e-learning affects the presentation of students as teachers taught using e-learning consistently perform better than student-teachers taught using the conventional technique. In their decision, e-learning was found to significantly affect student-teachers. They bolstered an underlying expert improvement of student-teachers dependent on e-learning advancements, change in preparing approaches, systems and exercises so as to address the educational difficulties. Their examination was centred in South Africa and could be helpful to creating nations, for example, Philippines. This examination anyway doesn't address the issue of unintended results of e-learning.

The paper by Thaket et al (2012) has tended to the issue of viability and helpfulness of e-learning approach in showing the maths course at level 5 in Yemen. The presentation of an experimental group of 30 students contemplating utilizing e-learning approach was analysed and compared with the performance of 30 students a similar course utilizing a traditional learning package. It was inferred that there was a huge increase in Delayed Achievement of experimental group utilizing e-learning approach when compared with one utilizing traditional learning strategy. The outcomes recommends that e-learning has accomplished a more prominent productivity than conventional technique.

III. OBJECTIVES

To know the perception of teachers in higher education on online teaching during COVID-19 Lockdown.

To know the demographics impact on the perception of teachers' online education.

IV. RESEARCH METHODOLOGY

This empirical research was conducted in the Govt. and private universities and colleges of Utrakhand. An online questionnaire was prepared and distributed to 200 teaching professionals in higher education through online and out of 200 only 161 respondents were analysed. The analysis represents the impact on perception of teacher online education with various factors (Diversifying Knowledge, Technical Knowledge, Comfortability, Communication Gap, Teacher's Burden and Working Hour). The analysis was carried out with One Way ANOVA test in SPSS 20. The t-test was used to know the perception of teacher's in online education through demographics. Though, age, and designation as independent variables and perception as a dependent variables in analysis.

V. ANALYSIS OF DATA

The Cronbach's coefficient alpha is used to measure the reliability of numerous statements in the present study. The value of the Cronbach's Alpha is between 0 and 1 and the proposed threshold value above 0.7 is considered good representing high internal consistency (Hair & Black, 2013). Further, the alpha coefficient for the nine items is .751 given below in table, suggesting that the items have relatively high internal consistency. (Note that a reliability coefficient of .70 or higher is considered "acceptable" in most social science research situations (Cronbach 1951).

Table 1: Cronbach's Alpha

Case Processing Summary			
		N	%
Cases	Valid	161	100.0
	Excluded ^a	0	.0
	Total	161	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.751	9

Demographic Analysis

From the tables below we can see that the male respondents were 67.1% and female were 32.9%, young age people are more (66.5%) participating, assistant professor and Guest/contractual teachers participating is higher 55.9 and 33.1% respectively. All most every faculty is in contact with the students during lockdown. Most of the teachers are using WhatsApp, skype, zoom app etc. to teach the students. Mostly teachers take more than 4 times and 4 times online classes during lockdown. Most of the teachers believe that poor net connectivity and unavailability of devices are major influencing factor in online teaching.

Table 2: Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	108	67.1	67.1	67.1
	Female	53	32.9	32.9	100.0
	Total	161	100.0	100.0	

Table 3: Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25-35	107	66.5	66.5	66.5
	36-45	43	26.7	26.7	93.2
	46-55	6	3.7	3.7	96.9
	Above 55	5	3.1	3.1	100.0
	Total	161	100.0	100.0	

Table 4: Type of University/college					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Government	117	72.7	72.7	72.7
	Private	44	27.3	27.3	100.0
	Total	161	100.0	100.0	

Table 5: Designation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Adhoc/Guest	50	31.1	31.1	31.1
	Assistant Professor	90	55.9	55.9	87.0
	Associate Professor	10	6.2	6.2	93.2
	Professor	11	6.8	6.8	100.0
	Total	161	100.0	100.0	

Table 6: Are you in contact with the students during Lockdown?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	152	94.4	94.4	94.4
	No	9	5.6	5.6	100.0
	Total	161	100.0	100.0	

Table 7: Mode of communication used by you to communicate with students.					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Phone	22	13.7	13.7	13.7
	Email	19	11.8	11.8	25.5
	WhatsApp	43	26.7	26.7	52.2
	Zoom App	10	6.2	6.2	58.4
	Skype	67	41.6	41.6	100.0
	Total	161	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	160	99.4	99.4	99.4
	No	1	.6	.6	100.0
	Total	161	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	University OER	6	3.7	3.7	3.7
	Email	30	18.6	18.6	22.4
	Phone	4	2.5	2.5	24.8
	Youtube	8	5.0	5.0	29.8
	WhatsApp	38	23.6	23.6	53.4
	Google Classroom	5	3.1	3.1	56.5
	Zoom App	38	23.6	23.6	80.1
	Skype	32	19.9	19.9	100.0
Total	161	100.0	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Once in a Week	11	6.8	6.8	6.8
	2 Times in a week	29	18.0	18.0	24.8
	4 Times in a week	33	20.5	20.5	45.3
	More than 4 times in a week	88	54.7	54.7	100.0
	Total	161	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	34	21.1	21.1	21.1
	Fair	78	48.4	48.4	69.6
	Good	39	24.2	24.2	93.8
	Excellent	10	6.2	6.2	100.0
	Total	161	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor Net Connectivity	58	36.0	36.0	36.0
	Lack of Technical Knowledge	14	8.7	8.7	44.7
	Unavailability of device	26	16.1	16.1	60.9
	Disinterest of students	7	4.3	4.3	65.2
	Times Constraints	2	1.2	1.2	66.5
	All of them	54	33.5	33.5	100.0
	Total	161	100.0	100.0	

VI. TEACHERS' PERCEPTION ON ONLINE EDUCATION

The present study was analyzed to know the perception of online education during the current situation. The study found that the online education is enhancing the technical knowledge of a teacher and diversifying teacher's knowledge. It is a good option of teaching during the lockdown period which will be more helpful in completing the syllabus of the current semester. However, it also creates the communication gap between the teachers and students.

Though, online teachings have increase the working hours of teacher's but still teachers are positively making themselves available to the students in this lockdown. The below table exhibits the descriptive statistics of overall perception of teacher's towards online education. The mean value of the statements should be equal or greater than 3.0 for the positive perception, the descriptive statistics was used on nine statements, out of which only one statement has mean value less than 3.0 i.e. 2.97. Therefore, the overall teacher's perception on online education during covid19 was found positive.

Table 13: Perception of Teachers' on Online Education

	N	Minimum	Maximum	Mean	Std. Deviation
A good option to teach students during lockdown.	161	1	5	3.90	1.125
Diversifying teachers' knowledge.	161	2	5	3.91	1.011
Increase in the technical knowledge of the teachers.	161	1	5	4.09	1.134
Online teaching helpful in completing the syllabus.	161	1	5	3.57	1.139
Online teaching reduces communication gap between teachers and students.	161	1	5	3.37	1.182
Online teaching is helpful in clearing the doubts of the students.	161	1	5	3.40	1.080
Online teaching is comfortable.	161	1	5	3.27	1.117
Online teaching increases teachers' burden.	161	1	5	2.97	1.267
Online teaching increases the working hour of the teachers.	161	1	5	3.22	1.304
Valid N (list wise)	161				

6.1. Demographics Impact on the Perception of Teacher's Online Education

The analysis represents the impact on perception of teacher online education with various factors (Diversifying Knowledge, Technical Knowledge, Comfortability, Communication Gap, Teacher's Burden and Working Hour). The analysis was carried out with One Way ANOVA test in SPSS 20. Where, age, designation as independent variables and perception as a dependent variables.

6.1.1. Age and Teacher's Online Education

The significance value of perception factors (Diversifying Knowledge, Technical Knowledge, Comfortability, Communication Gap, Teacher's Burden and Working Hour) was more than 0.05. It highlights that there is no significance difference between the age and teachers perception in respect to teacher's online education. Which means all the teachers have positive perception towards the online teaching factors where p-value is more than 0.05.

Whereas, p-value of Working Hour can be seem less than 0.05. It reveals that there is significance difference between Working Hour and teacher's perception which means teachers have different perception regarding increase in working hours, few believe online teaching has increases the working hours during lockdown and few does not think so.

Table 14: Age* Online Education

		Sum of Squares	df	Mean Square	F	Sig.
A good option to teach students during lockdown.	Between Groups	1.684	3	.561	.439	.725
	Within Groups	200.726	157	1.279		
	Total	202.410	160			
Diversifying teacher's knowledge.	Between Groups	6.772	3	2.257	2.260	.084
	Within Groups	156.831	157	.999		
	Total	163.602	160			
Increase in the technical knowledge of the teachers.	Between Groups	9.562	3	3.187	2.553	.058
	Within Groups	196.040	157	1.249		
	Total	205.602	160			
Online teaching helpful in completing the syllabus.	Between Groups	4.080	3	1.360	1.050	.372
	Within Groups	203.348	157	1.295		
	Total	207.429	160			
Online teaching reduces communication gap between teachers and students.	Between Groups	8.496	3	2.832	2.067	.107
	Within Groups	215.143	157	1.370		
	Total	223.640	160			
Online teaching is helpful in clearing the doubts of the students.	Between Groups	7.760	3	2.587	2.271	.082
	Within Groups	178.799	157	1.139		
	Total	186.559	160			
Online teaching is comfortable.	Between Groups	3.208	3	1.069	.855	.466
	Within Groups	196.308	157	1.250		
	Total	199.516	160			
Online teaching increases teacher's burden.	Between Groups	6.671	3	2.224	1.396	.246
	Within Groups	250.174	157	1.593		
	Total	256.845	160			
Online teaching increases the working hour of the teachers.	Between Groups	20.401	3	6.800	4.244	.006
	Within Groups	251.550	157	1.602		
	Total	271.950	160			

6.1.2. Designation and Teacher's Online Education

The significance value of perception factors (Technical Knowledge, Comfortability, and Communication Gap) was less than 0.05. It highlights that there is significance difference between the perceptions of teachers on online education as per their designation. Whereas, p-value of (Diversifying Knowledge, Teacher's Burden and Working Hour) can be seen more than 0.05. It reveals that there is no significance difference between the perception of teacher's online education during covid19 lockdown and the designation.

Table 15: Designation* Online Education

		Sum of Squares	df	Mean Square	F	Sig.
A good option to teach students during lockdown.	Between Groups	3.263	3	1.088	.857	.465
	Within Groups	199.147	157	1.268		
	Total	202.410	160			
Diversifying teacher's knowledge.	Between Groups	2.633	3	.878	.856	.465
	Within Groups	160.969	157	1.025		
	Total	163.602	160			
Increase in the technical knowledge of the teachers.	Between Groups	12.381	3	4.127	3.353	.021
	Within Groups	193.221	157	1.231		
	Total	205.602	160			
Online teaching helpful in completing the syllabus.	Between Groups	22.117	3	7.372	6.246	.000
	Within Groups	185.311	157	1.180		
	Total	207.429	160			
Online teaching reduces communication gap between teachers and students.	Between Groups	12.434	3	4.145	3.081	.029
	Within Groups	211.205	157	1.345		
	Total	223.640	160			
Online teaching is helpful in clearing the doubts of the students.	Between Groups	11.490	3	3.830	3.435	.018
	Within Groups	175.069	157	1.115		
	Total	186.559	160			
Online teaching is comfortable.	Between Groups	18.390	3	6.130	5.314	.002
	Within Groups	181.125	157	1.154		
	Total	199.516	160			
Online teaching increases teacher's burden.	Between Groups	11.467	3	3.822	2.446	.066
	Within Groups	245.378	157	1.563		
	Total	256.845	160			
Online teaching increases the working hour of the teachers.	Between Groups	7.143	3	2.381	1.412	.241
	Within Groups	264.807	157	1.687		
	Total	271.950	160			

VII. CONCLUSIONS

As the above analysis explains that teachers of any type of institution whether government or private have positive perception towards online teaching during covid-19 lockdown. Teachers of every age is taking it as good step during lockdown. Only difference we found when perception was compared with the designation. Teachers believe that though, the online teaching is increasing teachers' technical knowledge and helpful in knowledge diversification, still online teaching increases the working hours of teachers as there is no time limit as in classroom teaching.

As institutions transition to online instruction in the face of COVID-19, academicians are struggling with what it means to teach subjects online. High-quality online teaching is more difficult and demanding than its face-to-face counterpart. It requires more upfront planning and preparation and more individualized feedback and assistance.

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