

# Online Teaching during the Covid-19 Pandemic: A Study of Faculty Perspectives

**Dr. Nirmala K.D**

Assistant Professor, Business Administration,  
Government First Grade College, Madikeri, Kodagu District, Karnataka State, India  
Email: nirmala123.msn@gmail.com

**Abstract:** *The Covid-19 pandemic which led to lockdowns has caused lot of negative impacts on all sectors of the economy. The education sector too has suffered drastically causing disruptions in the learning pattern of the students worldwide. This pandemic has ushered in a revolutionary change in the teaching and learning process. Online mode of teaching became the new norm. It was a new experience for most of the teachers as well as the students. Since it was the only viable option, the stakeholders in the teaching-learning process gradually adapted to this new system. This study was aimed at understanding the faculty perspectives towards online teaching in Kodagu(Coorg) district of Karnataka. The data was collected using Google Forms. The study found that the faculty had a favorable perception to this mode of teaching though they also highlighted certain challenges. The study also included an analysis of certain demographic factors on the perception and it was found that the variables such as gender, age, experience and course taught, type and location of institution have no impact on the perception.*

**Key Words:** *Covid-19 Pandemic, Online Learning, Faculty Perception, Challenges.*

## 1. INTRODUCTION:

The Covid pandemic has influenced all spheres of life, all sectors of the economy, education being one of the highly disrupted sectors. Since March 2020 due to this public health emergency, educational institutions have been forced to close down. The traditional and conventional mode of teaching had come to a standstill temporarily. But thanks to technology, the student-teacher connect remains intact, while ensuring the wellbeing of the academic fraternity. The pandemic has led to academic institutions world over shifting to new ways of creating an unprecedented and productive teaching-learning environment. The crisis in the education sector has led to creation and use of digital learning platforms and this trend will continue post-pandemic and blended or hybrid learning concept will be inculcated in the education system. Online teaching and learning, an outcome of the Covid crisis has helped mitigate the crisis in the education sector to some extent but in a country like India with a huge digital divide and economic divide, the challenges and inadequacies are many. The teaching fraternity as well as the students gradually began adapting to a virtual academic environment. The faculty members used tools and apps to create e-content (power points, videos etc.), delivered the content through various online modes (both real-time and recorded), ensured continuous online interaction with the students, conducted online assessment and evaluation of students. Initially there was a lot of apprehension and hesitation in shifting to a new pedagogical concept which required ICT competencies. This paradigm shift from classroom to online teaching without prior preparation caused concerns to all the stakeholders –faculty, students & parents. But the inevitableness of the crisis and the creation of user friendly, economical teaching apps and platforms eased the fears of the teaching fraternity. Some faculty required training and institutions had to invest in digital technologies to facilitate the process. Students faced different type of challenges such as affordability of smart gadgets, network and bandwidth issues. Students from the marginalized sections suffered the most.

Online teaching is imparting knowledge to students through some means of technology. It refers to creation of learning experiences supported by technology. During the lockdown induced by the Covid pandemic online learning is that teachers and students teach and learn respectively from the confines of their homes. Many learning platforms such as Whatsapp, Google Classroom, Google Meet, Zoom, Teachmint etc. are available which can be integrated through technological devices such as smart phones, laptops, desktops, tablets etc. to create fruitful teaching-learning experiences. Online learning offers many benefits which include flexibility in time and place, cost-effectiveness, convenience, asynchronous online learning leading to 24/7 access to learning materials, synchronous online learning leading to real-time interactions between students and teachers. As with any technology, the disadvantages too are inherent which make it less effective when compared to the traditional mode such as internet connectivity issues, bandwidth issues and so on.

## 2. LITERATURE REVIEW:

The Covid-19 induced lockdown and its effect on the education sector is now being researched intensively and many researchers are conducting studies to understand the attitude of the faculty, students and parents towards online learning, as also the challenges and constraints faced by the students and teachers. Colleen et.al (2014) in a study of Faculty Attitudes towards Integrating Technology and Innovation opined that faculty is fearful of the fact that technology caused a loss of the humanistic perspective in education. Dumford and Miller (2018) in their study on the advantages and disadvantages of online learning for student engagement mentioned that sustaining students' retention during online classes is a huge challenge. Babita & Shivendra (2020) in a study on the perception of teachers towards online teaching during Covid lockdown observed that online teaching has enhanced the technical knowledge of the teachers and though it has increased the working hours, it has reduced the communication gap between students and teachers as they stay connected throughout the day. Joshi and Vinay (2020) in a study on the impact of the Covid pandemic on the Indian education sector identified four barriers faced by university teachers teaching online- home environment barriers which include lack of basic facilities and family interruptions; institution support barriers such as lack of training, insufficient budget for purchasing new technology; technical barriers faced by teachers such as lack of technical infrastructure, not being well versed with online teaching platforms and security issues; finally teacher barriers such as low motivation to teach online, lack of technical knowledge and negative attitudes. Hindocha J (2020) in an article mentions that the workload of teachers engaged in online classes has increased due to the necessity of preparing power point presentations, videos and notes. Also internet bandwidth issues pose challenges. Also both students and teachers feel physically exhausted. Technological and network issues, lack of emotional connect between teachers and students and difficulty in conducting practical classes online were some of the challenges put forth in a study in Sri Lanka by Priyadarshine and Jesuiya (2021). Similar observations were made by Abhinandan & Anupama (2020) in a study in Udupi and Dakshina Kannada districts of Karnataka.

The attitude of teachers towards online teaching is influenced by certain demographic variables such as age, gender, experience and location. Krishna Kumar & Rajesh Kumar (2011) concluded in their study on the attitude of teachers of higher education in Tamil Nadu towards e learning that overall, teachers have a favorable attitude. There were significant differences in the attitude among teachers who are familiar with computer technology and those who are not. In a study by Alenezi (2012) females had a more positive perception to e-learning when compared to males. In this study he found significant age based, experience based and education based differences in the perception towards e-learning. Babita & Shivendra (2020) studied the impact of certain demographic variables on the perception of teachers and it was found that age and designation had no significant impact on the teachers' perceptions towards online teaching. Sankar Kar (2020) concluded in his study on teacher attitudes to online teaching during the lockdown as not satisfactory. Moreover, male teachers develop a more favourable attitude toward online teaching than female teachers though the differences were not significant. In a similar study by Gururaja (2021), male teachers were found to have a more positive attitude toward online teaching than female teachers and urban teachers showed more interest towards online teaching than the rural teachers and more experienced teachers showed less interest when compared to less experienced ones.

Sanjay Chandwani et.al (2021) in their study showed that institution level and gender of teachers do not make any significant difference in their attitude towards online teaching. Similar studies by Suri and Sharma (2017), Manhajan (2016), Nachimuthu (2020) and Rana (2012) also did not find any significant differences of teachers' attitude towards e-learning based on their gender.

## 3. RATIONALE FOR THE STUDY:

The sudden change in the pedagogy necessitated by the lockdown imposed by the Covid pandemic took the teaching community unawares. The only alternative available was to switch to the total online mode. This created ripples among the fraternity as this was the first time most of them were introduced to this pedagogy. The apprehensions were many and doubts about the effectiveness were voiced. The success of online teaching- learning depends on many factors including the technological infrastructure as well as the attitude of the partners in the process. Hence the perceptions and attitude of the faculty members towards online mode of teaching influences the success. Many studies to understand the attitude of the learners was conducted; few studies too on the attitude of teachers. No study was conducted in Kodagu (Coorg) District of Karnataka where there are around twenty five institutions offering undergraduate programs and few offering post-graduate programs too.

## 4. OBJECTIVES:

- To understand the perception and attitude of faculty towards online teaching.
- To understand the challenges faced when teaching online.

- To examine the relationship of certain demographic variables on the perception and attitude of faculty towards online teaching.

**HYPOTHESIS:**

Ho: There is no significant relationship between demographic variables (gender, age, experience, location of institution and courses/ programme taught) and perceptual attitudes of faculty towards online teaching.

**5. METHODOLOGY OF THE STUDY:**

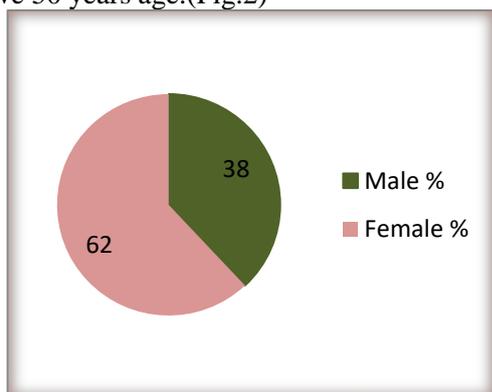
This paper examines the perceptual attitudes of the faculty in the higher education institutions of Kodagu district of Karnataka. Data has been collected online using Google Forms. The questionnaire was based on a 5-point Likert Scale ranging from Strongly Agree to Strongly Disagree.

The questions were categorized into three – demographic and institutional information (gender, age, programme and course taught, type of institution and its location and teaching experience); online platforms used, perceptual attitudes to online teaching and finally the challenges faced. A convenience sample of 90 faculty members covering various disciplines constituted the study. The data obtained from the online survey was organized and analyzed using Excel spreadsheet. Descriptive statistics such as frequencies, percentages and mean; and Independent T-test and ANOVA were the tools to test the perceptual relationships on the basis of certain demographic characteristics.

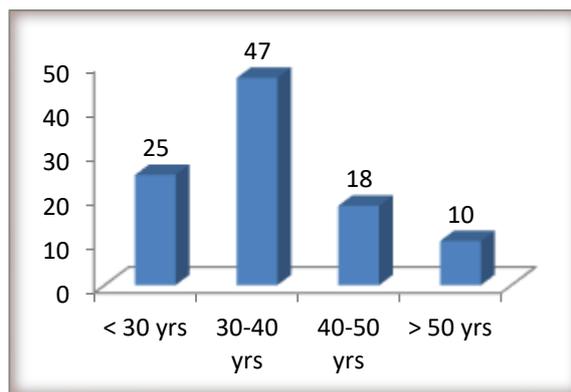
**6. RESULTS & DISCUSSION:**

**I Demographic and Institution Profile of the Respondents**

38% of the sample were male faculty members and 62 % were female.(Fig. 1) 25% of the respondents were below 25 years of age, 47% between the ages 30 and 40 years, 18% between 40 and 50 years and 10% of the sample were above 50 years age.(Fig.2)

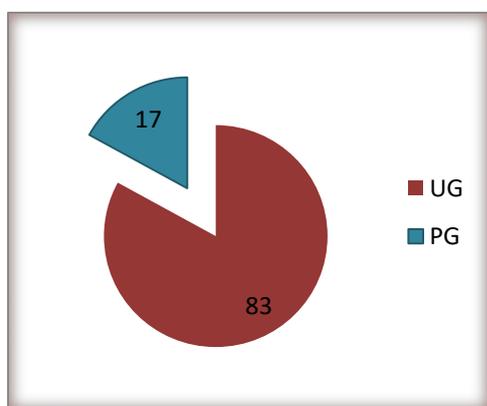


**Figure 1:** Gender of Respondents

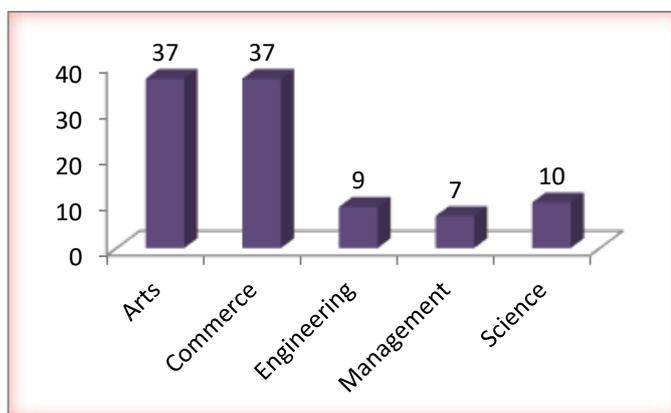


**Figure 2:** Age of Respondents

17% of the respondents are the faculty from the PG departments and 83% handle UG classes. (Fig.3). Of the sample, 37% each belong to the Arts and Commerce streams, 9% are the faculty from the engineering stream, 7% from the management stream and 10 % from the Science stream.



**Figure 3:** Programme Taught



**Figure 4:** Course/ Discipline

67% of the respondents belong to government institutions, 9% to Aided institutions and 24 % of the respondents are from the private colleges. (Fig.5) 46% of the respondents are from the colleges located in rural region and 54% are the faculty members whose colleges are located in the urban areas. (Fig.6)

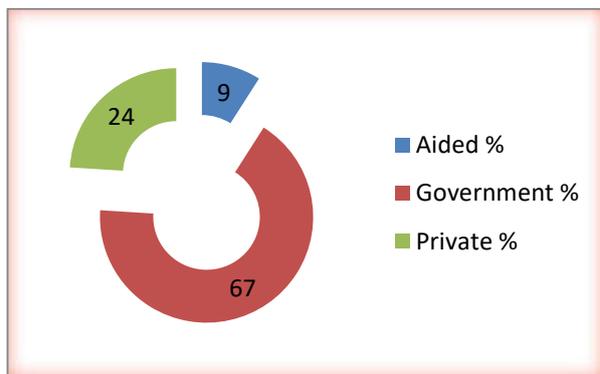


Figure 5: Type of Institution

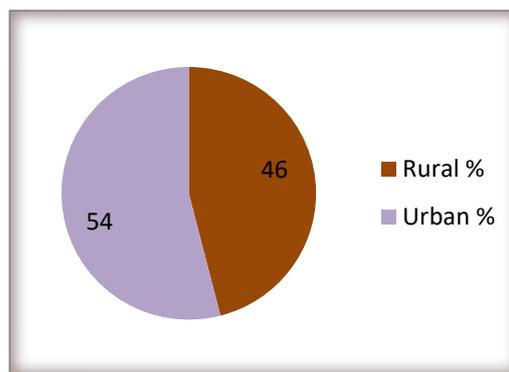


Figure 6: Location of Institution

62 % of the sample has a teaching experience of less than ten years, 22% has experience between ten and fifteen years, 8% between fifteen and 20 years and 3 % of the sample have more than 25 years of teaching experience (Fig.7). 98% of the respondents had prior knowledge of computers (Fig. 8)

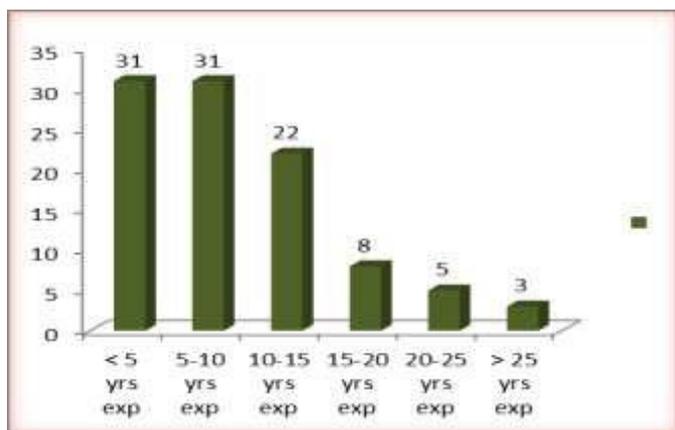


Figure 7: Teaching Experience

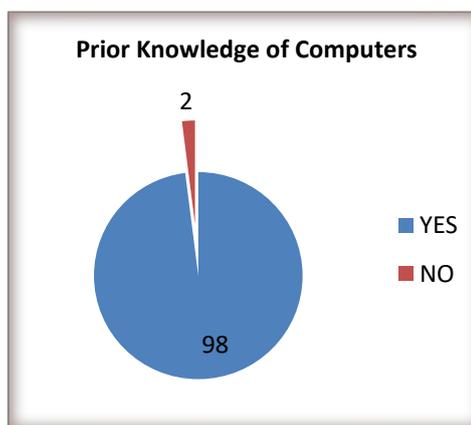


Figure 8: Prior knowledge of computers

Google Meet, Emails, Zoom App are the platforms used for online teaching by most of the respondents in the study, followed by Google classroom, Whatsapp, Cisco Webex, Teachmint, Microsoft Teams(Fig.9)

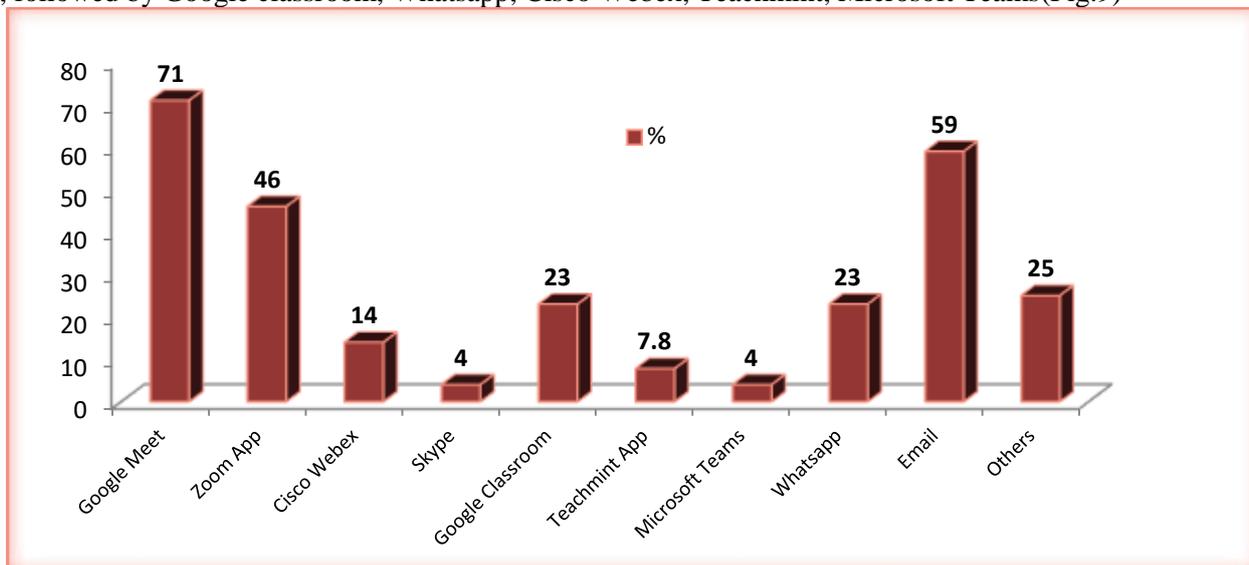
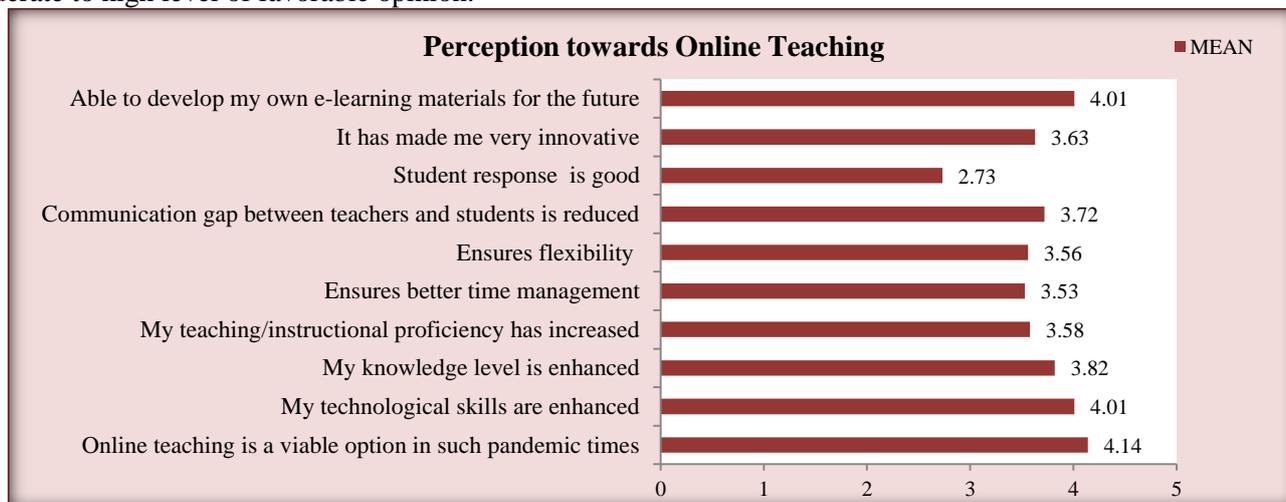


Figure 9: Online Platforms used for Online Teaching- Learning

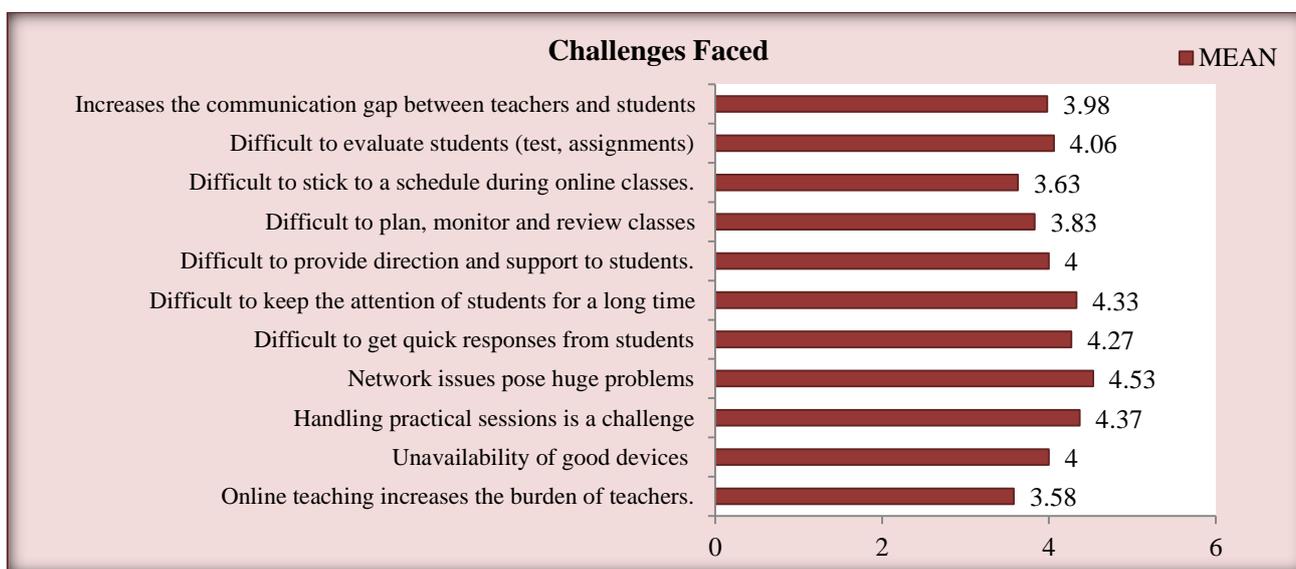
## II Faculty Perspectives to Online Teaching

The figure 10 below depicts the mean values of the variables to understand the perception of the faculty towards online teaching. Except for students’ response to online teaching (Mean= 2.73) all other factors have a moderate to high level of favorable opinion.



**Figure 10:** Mean Values of the opinions towards Online Teaching

From the Fig 11, it can be inferred that all the respondents agree that there are some challenges faced during online delivery of lectures such as network issues (Mean= 4.58) and especially when handling practical classes (Mean=4.37) and it becomes very difficult when evaluating students. Time management, Class monitoring, student engagement are all serious challenges faced.



**Figure 11:** Challenges faced when teaching online (Mean Values)

## III Demographic Impact on the Perception of Faculty to Online Teaching

Descriptive Statistics				t-test for Equality of Means			
Gender	N	Mean	S.D	t value	df	Sig.(2-tailed)	Mean Difference
Male	34	3.874	0.412	0.1765	38	0.860	0.023
Female	56	3.851	0.3979				

From the above table, it can be inferred that there are no statistically significant differences between the perception of male and female faculty towards online teaching ( $t = 0.1765$ ,  $p = 0.860$ ,  $\alpha=0.05$ ). The mean difference is just 0.023.

Descriptive Statistics				ANOVA					
Age	N	Mean	S.D	Groups	Sum of Squares	df	Mean Square	F	Sig. (2-tailed)
< 30 years	23	3.874	0.426	Between Group	0.240	3	0.0800	0.446	0.721
30-40 years	42	3.882	0.403						
40-50 years	16	3.844	0.471	Within Group	13.63	76	0.1793		
> 50 years	9	3.744	0.388	Total	13.8699	79			

From the data depicted in Table 2, there is an indication that statistically there are no significant differences in the perception of the faculty towards online teaching on the basis of their age ( $F= 0.446$ ,  $p>0.05$ ); though the mean of people more than 50 years is the least but differences almost negligible.

Descriptive Statistics				ANOVA					
Type of Institution	N	Mean	S.D	Groups	Sum of Squares	df	Mean Square	F	Sig. (2-tailed)
Aided	8	3.838	0.530	Between Group	0.008236	2	0.0041	0.0179	0.9823
Government	60	3.861	0.348						
Private	22	3.864	0.537	Within Group	13.13105	57	0.23034		
				Total	13.13929	59			

From Table 3 it can be inferred that there are no statistically significant differences between the perception of respondents towards online teaching on the basis of the location of their institution ( $F= 0.0179$ ,  $p>0.05$ ). The differences in the mean values are very minimal.

Descriptive Statistics				ANOVA					
Teaching Experience	N	Mean	S.D	Groups	Sum of Squares	df	Mean Square	F	Sig. (2-tailed)
<5 Yrs	28	3.884	0.416	Between Groups	0.454182	5	0.0908	0.3968	0.8501
5-10 Yrs	28	3.896	0.407						
10-15Yrs	20	3.823	0.422						
15-20Yrs	7	3.829	0.509						
20-25Yrs	4	3.775	0.638	Within Groups	26.09464	114	0.2289		
>25Yrs	3	3.717	0.436	Total	26.54882	119			

From the data depicted in Table 4, there is an indication that statistically there are no significant differences in the perception of the faculty towards online teaching on the basis of their teaching experience ( $F= 0.3968$ ,  $p>0.05$ ); means of people with more than 20 years' experience is relatively lower but differences are too less to be statistically significant.

**Table 5: Location of Institution and Perception to Online Teaching**

Descriptive Statistics				t-test for Equality of Means			
Location	N	Mean	S.D	t value	df	Sig.(2-tailed)	Mean Difference
Rural	41	3.9037	0.373	0.6405	38	0.5256	0.0812
Urban	49	3.8224	0.427				

From the above table, it can be inferred that there are no statistically significant differences between the perception of faculty towards online teaching on the basis of their location ( $t = 0.6405, p = 0.5256, \alpha=0.05$ ). The mean difference is just 0.0812.

**Table 6: Type of Programme and Perception to Online Teaching**

Descriptive Statistics				ANOVA					
Type of Programme	N	Mean	S.D	Groups	Sum of Squares	df	Mean Square	F	Sig. (2-tailed)
UG	75	3.861333	0.406	Between Groups	0.001284	1	0.001284	0.0075	0.9316
PG	15	3.85	0.423	Within Groups	6.533076	38			
				Total	6.53436				

From Table 6 it can be inferred that there are no statistically significant differences between the perception of respondents towards online teaching on the basis of programme taught ( $F= 0.0075, p>0.05$ ).

**Table 7: Discipline and Perception to Online Teaching**

Descriptive Statistics				ANOVA					
Discipline	N	Mean	S.D	Groups	Sum of Squares	df	Mean Square	F	Sig. (2-tailed)
Arts	34	3.804		Between Groups	0.406245	3	0.135	0.5904	0.6231
Commerce	33	3.962							
Engineering	8	3.786		Between Groups	17.42865	76	0.229		
Management	6	3.806		Total	17.83489	79			

From the data depicted in Table 7, there is an indication that statistically there are no significant differences in the perception of the faculty towards online teaching on the basis of their teaching experience ( $F= 0.5904, p>0.05$ ).

**7. CONCLUSION:**

The Covid-19 pandemic brought about a shift in the teaching –learning pedagogy. In the initial days there was lot of skepticism but gradually with the introduction of teaching friendly, affordable apps and platforms, the teaching fraternity gained confidence and were able to deliver their teaching content more effectively. The students on their part too co-operated and extended their wholehearted support to the faculty and together created enriching teaching-learning experiences. This study explored the thoughts and opinions of faculty towards online teaching and it was found that overall the faculty had a favorable attitude towards online teaching, in spite of the many challenges posed by it such as network issues, student engagement, student evaluation, handling practical sessions to mention a few.

The study also found no significant influence of demographic variables such as gender, age, experience, courses taught as also Institution type and location on the perception of the faculty towards online teaching.

#### REFERENCES:

1. Abhinandan Kulal , Anupama Nayak (2020), A study on perception of teachers and students toward online classes in Dakshina Kannada and Udupi District, *Asian Association of Open Universities Journal*
2. Alenezi, A. M. ( May 2012). Faculty Members' Perception of E-learning in Higher Education in the Kingdom of Saudi Arabia (KSA). (Doctoral Dissertation, Graduate Faculty of Texas Tech University, Saudi Arabia).
3. Babita Dubey & Shivendra Singh, (2020), "Perception of Teachers on Online Teaching in higher Education during covid-19 Lockdown", *International Journal of Creative Research Thoughts*, Vol 8(5).
4. Chandwani, Sanjay; Singh, Nirmal; and Singh, Gurpreet, "Attitude of Faculty Towards Online Teaching and Learning in Relation to Certain Variables: A Study During Coronavirus (COVID-19) Pandemic in India" (2021). *Library Philosophy and Practice (e-journal)*. 5330
5. Gururaja C.S (2021) Teacher's Attitude towards Online Teaching Conference: National Virtual Conference "New Education Policy: A Quality Enhancer for Inculcation of Human Values in Higher Education Institutions" 2021 At: Chennai
6. Hermanto(2020), "Teachers' attitude towards Online Learning during covid-19 Pandemic in Indonesia", *Indonesian Journal of Development Studies*,
7. Krishna Kumar & Rajesh Kumar(2011), Attitude of Teachers' of Higher Education towards e-Learning, *Journal of Education and Practice*, Vol 2, No 4.
8. Marzilli, C., Delello, J., & Marmion, S. (2014), "Faculty Attitudes Towards Integrating Technology and Innovation", *International Journal on Integrating Technology in Education*, 3(1), 1–20.
9. Retno Puji & Yanty wirza (2020), "Teachers' Perception of Online Learning during Pandemic covid-19", e-ISSN 2541-4135
10. Sankar Kar (2020), "Teachers' Attitudes towards Online Teaching (E-learning) during Covid-19 Lockdown", *Journal of Information and Computational Science*, Volume 10 Issue 8 .