# EXPERIENCE OF ONLINE EDUCATION DURING THE COVID 19 PERIOD: A STUDY AMONG DEGREE STUDENTS

A Dissertation Submitted to the University of Kerala in the Partial Fulfillment of the Requirements for the Master of Arts Degree Examination in Sociology

## **SUBMITTED BY**

Name : **SHIHANA F** 

Exam Code : 56018401

Candidate Code : 56021115024

Subject Code : SO 245

#### UNDER THE GUIDANCE OF

Dr. NISHA JOLLY NELSON



# DEPARTMENT OF SOCIOLOGY LOYOLA COLLEGE OF SOCIAL SCIENCES SREEKARIYAM, THIRUVANANTHAPURAM UNIVERSITY OF KERALA 2021-2023

## **DECLARATION**

I, SHIHANA F do hereby declare that the Dissertation Titled EXPERIENCE OF ONLINE EDUCATION DURING THE COVID 19 PERIOD: A STUDY AMONG DEGREE STUDENTS is based on the original work carried out by me and submitted to the University of Kerala during the year 2021-2023 towards partial fulfillment of the requirements for the Master of Arts Degree Examination in Sociology. It has not been submitted for the award of any degree, diploma, fellowship or other similar title of recognition before any University or anywhere else.

Thiruvananthapuram

18/08/2023 Ms. **SHIHANA F** 

## **CERTIFICATION OF APPROVAL**

This is to certify that this dissertation entitled **EXPERIENCE OF ONLINE EDUCATION DURING THE COVID 19 PERIOD: A STUDY AMONG DEGREE STUDENTS** is a record of genuine work done by Ms. **SHIHANA F** Fourth semester Master of Sociology student of this college under my supervision and guidance and that it is hereby approved for submission.

Dr. Nisha Jolly Nelson Research Guide Department of Sociology Loyola College of Social Sciences Sreekariyam

Recommended for forwarding to the University of Kerala

**Dr. Nisha Jolly Nelson**Head, Department of Sociology
Loyola College of Social sciences

Sreekariyam.

Forwarded to the University of Kerala

Dr. Saji P Jacob

Principal Loyola College of Social Sciences Sreekariyam.

18/08/2023 Sreekariyam

#### <u>ACKNOWLEDGMENT</u>

"Showing gratitude is one of the simplest yet most powerful things humans can do for each other."

I have not travelled in a vacuum in the journey of completion of this dissertation. This study has been kept on track and been seen through to completion with the support and encouragement of numerous people including my teachers, well-wishers, my friends, colleagues and God Almighty.

First and foremost, I take it as a privilege to thank my research guide **Dr. Nisha Jolly Nelson**, Assistant Professor and Head, Department of Sociology, Loyola College of Social Sciences, Thiruvananthapuram. The door to Prof. Nisha's room was always open whenever I ran into a trouble spot or had a question about my research or writing. She consistently allowed this work to be my own work, and steered me in the right direction whenever she thought I needed it. She was a great motivator and inspiration throughout the process of my dissertation.

I would also like to thank our Principal **Dr Saji P Jacob**, for providing the initial inputs and motivating us to critically think and analyze social issues. Thanks to other faculties of the Department of Sociology Dr. Hashim T, Prof. Andrew Michael and Faculties from other departments who were involved in the validation of the progress of my dissertation during department and college level presentations. Without their passionate participation and input, the validation of this study would not have been successfully done.

I also am indebted to my respondents who gave inputs to successfully complete this study. I am privileged to be a student of Loyola College for having provided me such a great learning experience which sparked my interest in research field. Thanks to our rich library resources and the two persons Mr. George and Dr. Sunil for assisting us in many ways in using the resources.

Finally, I must express my very profound gratitude to my parents and to my dear friends and many others for providing me with unfailing support and continuous encouragement throughout my study and through the process of researching and writing this dissertation. This accomplishment would not have been possible without them. Thank you.

18/08/2023

SHIHANA F MA SOCIOLOGY

# EXPERIENCE OF ONLINE EDUCATION DURING THE COVID-19 PERIOD

(A STUDY AMONG DEGREE STUDENTS)

**MA SOCIOLOGY** 

2021-2023

# TABLE OF CONTENTS

LIST OF TABLES ii

ABSTRACT v

CHAPTERS	TITLE	PAGE NUMBER
I	INTRODUCTION	1-3
II	LITERATURE REVIEW	4-24
III	RESEARCH METHODOLOGY	25-28
V	DATA ANALYSIS AND INTERPRETATION	29-52
VI	FINDINGS, CONCLUSION AND SUGGESTIONS	53-56
	BIBLIOGRAPHY	57-61
	APPENDIX-I	
	QUESTIONNAIRE	62-67

# LIST OF TABLES

TABLE NO	TITLE	PAGE NO
4.1	Respondents Gender	29
4.2	Year of study	29
4.3	Department of the respondents	30
4.4	Duration of having underwent online online class	30
4.5	Mode of class	31
4.6	Student's internet facility in their home	31
4.7	A) If yes, was it stable and economic	32
4.8	Students access of class without internet facility	32
4.9	Ability of parents to recharge	32
4.10	For students who are unable to recharge	33
4.11	Devices for attending classes	33
4.12	Ownership of student's devices for online classes	34
4.13	Learning of new technology	34
4.14	Ease of use	35
4.15	Difficulties in using new technology	35
4.16	Digital divide among students	36
4.17	Student's attendance in online education	36
4.18	Missed online classes	36
4.19	Parents response while students spending so much time before	37
	Computer/ mobile	
4.20	Criticisms of family members or neighbours	37
4.21	Criticisms of family members or neighbours about student's	38
	online education	
4.22	Support of parents	38
4.23	Peaceful environment	39
4.24	Issues of peaceful houses	39
4.25	Ability to focus on studying while staying at home	40

4.26	Opinion of students on real classroom	40
4.27	Opinion of students about their online classes	41
4.28	Better mode of education	41
4.29	Student's exams in online mode	42
4.30	Experiences in online exams	42
4.31	Student's opportunity to discuss lessons with their friends	43
	during Covid 19	
4.32	Ability to follow online classes as effective as classroom	43
	sessions	
4.33	Interaction between teachers and students in online classes	44
4.34	Opportunities to ask doubts in online education	44
4.35	Ability to follow taught	44
4.36	Mutual cooperation among students	45
4.37	Interaction facility with other students	45
4.38	Technical issues	46
4.39	Technical Problems in online classes	46
4.40	Cyber threats in online education	47
4.41	Health issues due to online education	47
4.42	Mood disorder/mental health issues due to online education	48
4.43	Acquiring of new knowledge due to online education	48
4.44	Advantages of online education	49
4.45	Disadvantages of online education	49
4.46	Reading habit of students	50
4.47	Effectiveness of online learning	50
4.48	Support from college	51
4.49	Support from teachers	51
4.50	Support from family	52
4.51	Changes in online education	52

#### **ABSTRACT**

The global education landscape underwent unprecedented transformation due to the COVID-19 pandemic, with over 1.2 billion students transitioning from traditional classrooms to online platforms. This shift prompted the exploration of innovative educational methods, particularly in regions where online education was relatively nascent. In Kerala the government introduced various initiatives to facilitate online learning during the pandemic. This study delves into the experiences of students as they routed the transition to online education in Kerala.

The research aims to record and analyse the perspectives of the online education paradigm on students' lives, learning styles, and academic outcomes. A quantitative approach was adopted, involving surveys conducted with degree students of Trivandrum district, Kerala.

Findings reveal that while the introduction of online education provided opportunities for continued learning, it also posed challenges. Students' access to technology played a pivotal role in determining their engagement and success in online classes. Socioeconomic factors emerged as crucial barriers, with financial disparities affecting students' ability to access online resources.

The experiences of students during the COVID-19 pandemic have implications that extend beyond the crisis, offering insights into the future of education in Kerala and beyond. This research serves as a valuable resource for policymakers, educators, and stakeholders seeking to enhance online education and ensure equitable access for all students.

#### **CHAPTER 1**

#### INTRODUCTION

Coronavirus disease 2019 (COVID-19) is a contagious disease caused by severe acute respiratory syndrome coronavirus. The first case was identified in Wuhan, China, in December 2019. The disease has since spread worldwide, leading to an ongoing pandemic. Symptoms of COVID-19 are variable, but often include fever, cough, fatigue, breathing difficulties, and loss of smell and taste.

The COVID-19 pandemic has affected educational systems worldwide, leading to the near-total closures of schools, universities, and colleges. Most governments decided to temporarily close educational institutions to reduce the spread of COVID-19. As of 12 January 2021, approximately 825 million learners are currently affected due to school closures in response to the pandemic. According to UNICEF monitoring, 23 countries are currently implementing nationwide closures and 40 are implementing local closures, impacting about 47 percent of the world's student population. 112 countries' schools are currently open.

School closures impact not only students, teachers, and families. But have far- reaching economic and societal consequences. School closures in response to the pandemic have shed light on various social and economic issues, including student debt, digital learning, food insecurity, and homelessness, as well as access to childcare, health care, housing, internet, and disability services. The impact was more severe for disadvantaged children and their families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work.

In response to school closures, UNESCO recommended the use of distance learning programmers and open educational applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of education.

COVID-19 transformed the world's education sector. Globally over 1.2 billion students are out of the classroom. As a result the importance of online education has increased. In this situation students had to explore new ways to continue their studies. COVID-19 also created great changes

in the Indian education sector. Virtual school might be relatively a new concept in India, but we are experiencing a new trend of the blended learning model gaining more popularity. The Indian education sector has been forced to adopt online education methods.

In Kerala, the government of Kerala has launched a number of schemes to facilitate online education. During the COVID-19 period, students in Kerala continued their education through online classes. The rapid change in student learning style during the COVID-19 period greatly influenced the students. It took time for the students to adapt to the new situation. The new online education system has created confusions among students. Not all students had the facilities needed for online education. The financial capacity of the student's families was a major factor in obtaining the facilities. Given the importance of the current situation, we learn about the impact of online education on students. We are trying to understand the acceptance of online education among students. We are trying to learn new possibilities of online education.

This study helps to identify the student's problems in online classes and find solutions. We can understand student's feedback on online education through this study. This study helps to understand how the socio-economic factors of students affect their online education. It helps to understand student's participation in online classes. Through this study, information on student situations can be gathered and the methods of online education can be improved accordingly. When we learn about a student's online education, we are able to identify their needs. This study helps us to understand the new possibilities in online education.

#### STATEMENT OF THE PROBLEM

COVID-19 transformed the world's education sector. Globally over 1.2 billion students are out of the classroom. As a result the importance of online education has increased. In this situation students had to explore new ways to continue their studies. COVID-19 also created great changes in the Indian education sector. Virtual school might be relatively a new concept in India, but we are experiencing a new trend of the blended learning model gaining more popularity. The Indian education sector has been forced to adopt online education methods.

In Kerala, the government of Kerala has launched a number of schemes to facilitate online education. During the COVID-19 period, students in Kerala continued their education through

online classes. The rapid change in student learning style during the COVID-19 period greatly influenced the students. It took time for the students to adapt to the new situation. The new online education system has created confusions among students. Not all students had the facilities needed for online education. Factors such as financial capacity of the student's families is a major factor in accessing online education. Also many other factors determine their participation. Given the importance of the current situation, this study aims at recording the experience of online education of students and the new possibilities of online education.

#### SIGNIFICANCE OF STUDY

This study helps to identify the student's problems in online classes and suggest solutions. We can understand student's feedback on online education through this study. The pandemic highlighted the importance of preparedness for unexpected disruptions. By studying the experience of online education during Covid-19, researchers and educational institutions can enhance their preparedness for future crises, ensuring a smooth transition to online learning when necessary, and mitigating potential challenges.

#### **CHAPTER II**

#### **REVIEW OF LITERATURE**

The COVID-19 pandemic had a profound impact on education worldwide, compelling institutions to rapidly transition to online education to ensure continuity of learning. This literature review synthesizes existing research to examine the challenges, benefits, and implications of online education during this unprecedented period.

Jana (2020) conducted a study on online learning during the lockdown period. The study aimed at the changes of the education system in the lockdown period. The study used a quantitative method to study how COVID-19 made changes globally. It has made people mandatory to sit indoors and sitting idle indoors may lead to mental stress. Online learning has an important role in reducing mental stress. Teachers can use virtual classrooms to teach from home with all necessary tools which make the online sessions. Pandemics often compel the learners to stay at home for a long period of time and abstract teaching -learning process and online class was helpful for people. The study focused on how online learning is beneficial during times of crisis like work absences or pandemics. Therefore, some tools and techniques for online learning which can ensure the continuity of learning are highlighted. Government of India presented online learning the time of COVID- 19. The result of the study online learning provides merits and demerits effect.

Gupta (27 May 2020) conducted a study on online school education in India during COVID-19. The study aimed at the COVID-19 pandemic has led to a burst of activity with online education. The HRD ministries platforms such as SWAYAM and the national digital library have seen a fivefold increase in daily traffic during the first week of lockdown. The HRD minister Ramesh pokhriyal has encouraged educational institutions to embrace online education to the extent possible. The study uses a quantitative method for the study. In the metros private schools appear to have taken the lead in switching over to online classes. Many teachers and students are still grappling with the digital transition. The result of the study universities too have pointed out that they are not ready and that many of their students do not have access to the internet.

Soykan (2020) conducted a study on challenges and opportunities of online education. The study aimed at the opportunities of online education in the lockdown period. The COVID-19 has successfully forced global shutdown of several activities including educational activities and this has resulted in tremendous crisis response migration of universities with online learning serving as the educational platform. Online learning will be more sustainable while instructional activities will become more hybrid provided the challenges experienced during this pandemic are well explored and transformed to opportunities. The study uses a quantitative method for the study. Effective online education consists of online teaching and learning, boosting of several research works, principles, prototypes, theories, ethics and appraisal of benchmark concentrations on quality online course design teaching and learning. The result of the study online learning elements are technology driven and dependent on internet facilities, educational institutions can collaborate with telecommunication industries to either subsidize the cost of internet subscriptions or provide free browsing data to the students and instructors as part of their corporate social responsibilities.

Dhawan (June 20, 2020) conducted a study on online learning in the time of COVID19 crisis. The study aimed at the changes of the education system and the challenges of the education system in COVID-19 time. The sudden outbreak of a deadly disease called COVID-19 caused by a coronavirus shook the entire world. The world health organization explained it is a pandemic situation. This situation challenged the education system across the world and forced educators to shift to an online mode of teaching overnight. The article includes the importance of online learning and strengths, weaknesses, opportunities and challenges analysis of e- learning modes in the time of crisis. The study uses a quantitative method for the study. The article also put some light on the growth of ad tech start-ups during the time of pandemic and natural disasters and includes suggestions for academic institutions on how to deal with challenges associated with online learning.

Kundu (July 21, 2020) conducted a study on the online education system. The COVID-19 outbreak and the subsequent lockdown resulted in the closure of schools nationwide. As a result the Indian school system shifted away from traditional classrooms to a digital platform. The study uses a quantitative method for the study. The unplanned and rapid move towards online education has alienated a large number of digital have notes from virtual classrooms. Online education and its associated lifestyle is affecting the physical and mental wellbeing of children. It would have a

larger impact on a child's life than the academic impact teachers and policymakers are hoping for. The result of the study is parents, teachers and policymakers to help children cope with the crisis and thrive in the post COVID-19 world. Preeti (September 16, 2020) conducted a study on online education in government schools during the lockdown. The study aimed at the changes of online education in government schools. Schools in India were focused to shut down in March after P. M. Narendra Modi announced a nationwide lockdown to fight the coronavirus pandemic. Schools deliver lectures online but thousands of students lack access to smartphones. As many as 27 crore children in India were affected. The study uses a quantitative method for the study. Most of the children were deprived of online education due to a lack of digital devices. The Corona virus has pushed lakhs of families in rural areas into poverty. These situations affected children. According to the Oxfam report experts estimate that out of schools children in India will double where in marginalized social groups such as Dalit's, adivasis and Muslims will be disproportionately affected. Moreover girls in rural areas will be more affected than boys. Many of them may even be forced to get married early. The result of the study was that most of the children were deprived of online education due to a lack of digital devices.

Wei Bao conducted a study on covid-19 and online teaching in higher education. This paper focuses on a case of Peking University's online education. Six specific instructional strategies are presented to summarize current online teaching experiences for university instructors who might conduct online education in similar circumstances. The study concludes with five high high-impact principles for online education. (a) high relevance between online instructional design and student learning, (b) effective delivery on online instructional information, (c)adequate support provided by faculty and teaching assistants to students, (d) high- quality participation to improve the breadth and depth of student student's learning, and(e) contingency plan to deal with unexpected incidents of online education platforms.

Ranghuai Huang and Ahmed Tlili conduct a study on open educational practices and resources (OEP) as an effective educational solution to overcome these challenges. Particularly, this study presents a generic OEP framework built on existing open practice definitions. (3 July 2020)

Muhammad conducted a study on online learning amid the COVID-19 pandemic: Student's perspectives. This research study examines the attitudes of Pakistan higher education students to

words of compulsory digital and distance learning university courses and coronavirus. The findings of the study highlighted that online learning cannot produce desired results in underdeveloped countries, where a vast majority of students are unable to access the internet due to technical as well as monetary issues. (Published 30 May 2020).

Singh in her article noted that since the COVID-19 pandemic has disrupted the normal lifestyle of people across the globe, the virtual world has come to the rescue. The problems faced by this society during this COVID-19 were they had to go to school. First and learn about. What they themselves are and then education today. But after this COVID-19 the online class started. How helpful it has been.

Trivikrama et.al., (2020) conducted a study to evaluate the attitudes and the factors of affecting medical students attending online classes during lockdown. They used a survey method for the collection of data. They used online questionnaires with open ended, closed ended, and Likert scale questions. Links to the questionnaires were shared with medical undergraduate students who have attended at least one online class during the COVID-19 lockdown period. Respondents were 1061 participants from 30 medical colleges from the States of Kerala and Tamil Nadu in India. The majority of students 94% used smartphones to attend online classes. Zoom /Skype by 57% and Google platforms by 54. 4% were commonly used. Learning at leisure 44.5% was the top reason why students liked online classes, whereas network problems 85.8% was the top reason why students disliked them. Lack of sufficient interaction 61.1% was another reason why students disliked online learning. More than half of the participants 51.7% didn't want to continue online classes after COVID-19 lockdown. More students 55% favored regular classes than online classes. Students in their survey didn't seem favorably disposed to online classes. Network problems experienced by students should be addressed. Furthermore, teachers should try to make them effective in the future.

Mohali and Sahoo (2020) conducted a study to assess the student teachers, e-readiness and perception towards online learning was the major intention of this study. Major objectives of this study are to find the e-readiness of student teachers for online learning, To access the digital skills of student teachers for online learning, To study the perception of student teachers towards Online learning, To find out the problems and challenges faced by the student teachers in online learning.

Online survey method was adopted to gather the responses from 318 members of student teachers from different states of India by using a self-developed questionnaire. Purposive sampling technique was adopted. It is revealed from this study that student teachers have-e- readiness with digital devices (99%) and financial support (80%), but are lacking in good internet connectivity, adequate electricity supply and personal space at home. Only 35% student teachers are found to be proficient in digital skills and the majority feel that online classes are lacking proper teacher student interaction. A significant percentage of student teachers are found to feel stressed, isolated and poor confidence in online platforms of learning and are not agreeing that curriculum can be effectively translated through Online mode. But the majority of student teachers accepted online learning as a better choice for learning during this pandemic period.

Agarwal and Anuradha Sharma (September2020) conducted a study focused on the impact of COVID-19 pandemic in unleashing digital transformation in the education sector in India. In order to measure the impact the study tracked the rate at which the virtual tools were used by various schools and institutions during the COVID-19 lockdown. Data collected from secondary sources, mainly newspaper articles, magazines and peer-reviewed journals. The findings are that, in India during the lockdown a variety of virtual tools were unleashed from primary education to higher and tertiary education where educational activities switched to online learning. These observations point to the fact that India generally has some pockets of excellence to drive the education that has always been a challenge due to a limited number of spaces available. Much as this pandemic has brought with it massive human suffering across the globe, there is an opportunity to access successes and failures of deployed technologies, costs associated with them and scaling these technologies to improve access.

COVID-19 pandemic and its impact and strategies for the education sector in India. Author says that in the second week of March state governments across the country began shutting down schools and colleges temporarily as a measure to contain the spread of the Novel Coronavirus. Author argued this is a crucial time for the education sector. Author found out that more than 285 million young learners in India suffered economic and societal consequences. Schools have adopted online teaching methods. Recent graduates in India are fearing withdrawal of job offers from corporates because of the current situation. Author says that this disruption in the delivery of education is pushing policy makers to figure out how to drive engagement at scale while ensuring

inclusive e-learning solutions and tackling the digital divide. Author says in this time of crisis well-rounded and effective educational practices will develop skills that will drive their employability, productivity, health and well-being in the decades to come and ensure the overall progress of India.

Modi& Potaria (2020) conducted a study. They say that a total of 320 million learners in India have been adversely affected by the Covid 19 pandemic and have transitioned to e-learning. They are finding out the huge regional and household disparities in access to the internet and technology. This transition has not been possible for all students and educators. They say the rapid shift to e-learning prompted by the pandemic has resurfaced long standing issues of inequality and digital divide in India that must be addressed by future economic, education and digitalization policies. The education system in India is facing a new crisis. Because Covid 19 effect on short term learning outcomes extended school closures economic opportunities in the long run. According to the key indicators of household social consumption on education in India report based on the 2017, 18 NSSO, fewer than 15% of rural Indian households have internet access. A mere 13% of people surveyed in rural areas and just 8.5% of females could use the internet. The scope of e learning is enormous and can help realize the potential of each student. They find that the Indian education system aims to transition to online learning in the future. It must emphasize policies that bridge the digital divide and move the country close to achieving the sustainable development goals.

Umek et.al., (2020) focused on the first wave of Covid 19 crisis in early 2020 on various aspects of their lives on a global level. They used a sample of 30383 students from 62 countries for their study. The study reveals that amid the world wide lockdown and transition to online learning students were most satisfied with the support provided by teaching staff and their universities public relations. The data were obtained through a web based comprehensive questionnaire composed of 39 mainly closed ended questions, covering socio demographic, geographic and other characteristics as well as different aspects of higher education student life such as academic Online work and life, social life, emotional life, personal circumstances, change in habits, the roles and measures of institutions as well as personal reflection on Covid 19. They find out students were mainly concerned about issues to do with their future professional career and studies, and experienced boredom, anxiety, and frustration. The findings also show that students with certain

socio demographic characteristics were significantly less satisfied with their academic work / life during the crisis.

Singh (July 13, 2020) conducted a study on online learning and education during the time of COVID-19. The study was aimed at the schools that have also shifted their base to virtual platforms to conduct classes online. The COVID-19 pandemic has disrupted the normal lifestyle of people. The study uses a quantitative method for the study. Accordingly various stakeholders such as government and private organizations are trying their best to assist each other by sprucing up their existing online platforms, apps and providing training to teachers to use these apps and platforms to the optimum level. The study was focused on both government and non-government organizations and tech companies to support the school system to make a smooth transition to the virtual world. The central government has recently launched the PME-VIDYA platform with 12 new DTH Channels one for each class to reach out to all stratas of society. The result of the study was students and teachers also have their own struggles while accessing these online platforms. They are faced with many problems such as financial constraints, students are not able to access the internet and are devoid of electronic gadgets and laptop, phone or computer or even radio and TV.

Nayak (August 6, 2020) article focused on the impact of COVID-19 in online education. The study was aimed at the time of lockdown. Many schools have taken timely steps to continue the flow of education by holding online classes for students. The study uses a quantitative method for the study. The survey studied that online classes have helped students during lockdown more than ever before. The positive effect of online education is that students have become more tech savvy. They got to know more about various apps and programs. The result of the study was academic learning. There is so much technological learning happening in students during lockdown. Their knowledge about computers, smartphones /mobile phones, radio and television are getting enhanced.

Lakshmanan (April 9, 2020) conducted a study on digital learning in India. Online education as a result of the digital world has brought a lot to the learning table at all levels of education beginning from preschool up to higher level institutions. The study focused on how many countries are continuing to handle online education by deploying different modes of learning through a mix of

technologies. In almost all countries teachers and school administrators are encouraged to continue the communication of digital learning. The study uses a quantitative method for the study. The move to remote learning has been enabled by several online tech stack such as Google classroom, blackboard, zoom and Microsoft teams all of which play an important role in this transformation. The study was focused on schools that have always considered educational apps or digital learning as a supplementary tool and may have had difficulty in mainstreaming it mostly due to not having fully understood its efficiency. The result of the study was that digital learning acceleration continued. It also throws light on the digital divide in India. Students from remote districts and those belonging to poor communities lack infrastructure and the means to reap the benefits of online learning.

Gupta (June 5, 2020) conducted a study on Indian online education industry during the time of covid19. The study was focused on the demand for online courses and learning in lockdown. This clearly indicates the huge demand that is rising for online learning. The study uses a quantitative method for the study. The coronavirus was affecting 500 million students. Most of the companies' schools and institutions have come up with online essentials as their primary mode of teaching. Online learning has been adopted in various countries as the primary mode of education. The elearning method requires only a good internet connection and a computer/mobile as essentials. The sessions can also be recorded for later use. He said that online leading from home also provides a comfortable ambience to focus as students are flexible to choose the right environment for themselves. Moreover, the importance of virtual learning is increasing as the academic year has been drastically interrupted due to COVID-19. The result of the study was that online teachings are a potential model for resource-crunched countries like India. Online teachings will promote self-development and effective teachers are able to realize it.

Indian express (7May 2020) said that the impact of online education in COVID-19. Millions of kids take online school classes from home globally including in India government along with private education sector have a great responsibility to offer online e-learning to more than 60 million college students and 1.5 billion school students. N. K Goyal said that e – learning or online education is the new normal. In future we will see the proliferation of information technology tools and gadgets post COVID-19. E- learning apps like BYJUS and Khan academy are targeting schools; others like Adda 24&7 are offering specialized coaching for entrance exams like IIT and

JEE. According to Rajan S Mathews there will be a suge in online education by schools and colleges in the county. The telecom induris fully prepared with 99.9 % network capacity. The telecom companies have taken appropriate measures to meet the surge in traffic due to online education and other online activities using telecom infrastructure, Mathews said. The government is offering a slew of educational applications and platforms for both school and higher education institutes. The World University of Design claims that it has collected materials for online learning across its courses during the last one year. WUD IS using technology enabled all supervision technologies and video conferencing and other tools to enable virtual learning.

Subbarao (May 25, 2020) conducted a study on reasons for online classes during lockdown. The coronavirus pandemic has resulted in the course of schools and colleges across the country. Education has changed dramatically over the last two months with a considerable rise of eLearning whereby teaching is executed remotely and on digital platforms. The suture is a quantitative method for the study. The study was that tens of thousands of students are glued to computers and smartphone screens as teachers and students enter a new world of virtual lectures, tutorials and assessments. Though e-learning poses a challenge to both students and teachers over technology and access, it is keeping everyone busy with lectures, worksheets and assignments. According to 2019 global learning technology investment patterns. Reported tech companies around the world pulled an investment of 18.66 billion in 2019. It will be interesting to see if the changes coronavirus has caused in the education system stay forever. The study focused on various online education platforms that have made it easy for students to develop new skills while continuing with a regular course at a college university. Online education is the key and perhaps the best part to upskilling. The result of the study online learning which came as a panacea for the crisis is increasingly seen as a new paradigm in education.

Henaku's (June 2020) study focused on the online learning experience of college students and their perception of online learning in Ghana. This paper explores college student's online learning experience and their perception of online learning. The descriptive phenomenological research design was used in this study. Ten college students were selected from four colleges of education using the snowball sampling procedure. Participants were interviewed via phone. Colaizzi's phenomenological data analysis process was adopted for this study. The findings presented in this paper are common themes that emerged from most research participants. The reported findings

are generally representative of the sample as a whole and accurately describes the online learning experience and perception of college students. The themes that emerged were, the nature of online learning, connectivity problem, internet bundle, and challenges with device, household production and overall perception of online learning. The study concludes that both social media and elearning platforms are utilized in teaching and learning by the colleges of education in Ghana, due to the closure of schools. The findings of this study also suggest that a better understanding of online learning experiences of college students may inform the ministry of education, Ghana education service, parents and lectures to put in place measures that would ensure a better online learning Experience

Kapadia's (June 2020) article mainly focused on the impact of lock down amidst Covid 19 on undergraduate and postgraduate learners of various colleges and Universities of West Bengal. An online survey was conducted from 1 May to 8 May 2020 to collect the information. A structural questionnaire link using 'Google form' was sent to students through whatsapp and Email. Participants were provided full consent before participation in the online survey. A total of 232 students provided complete information regarding the survey. This study has suggested some recommendations to the government, policymakers and institutional authorities. This study find out the lock down period, around 70% of learners were involved in e-learning. Most of the learners were used android mobile for attending e-learning. Students have been facing various problems related to depression anxiety, poor internet connectivity, and unfavorable study environment at home. Students from remote areas and marginalized sections mainly face enormous challenges for the study during this pandemic. This study suggested targeted interventions to create a positive space for study among students from the vulnerable section of society. Strategies are urgently needed to build a resilient education system in the state that will ensure to develop the skills for employability and the productivity of the young minds.

Jahangir (May 2020) said that e-learning is not a new phenomenon, the outbreak of COVID-19 and the country going under lockdown shifted the whole education system into a virtual mode. According to UNESCO since the outbreak of COVID-19 began, some 1.37 billion students in 138 countries worldwide have been affected by school and university closures. Nearly 60.2 million school teachers and university lectures are no longer in the classroom. Since the whole country is under lockdown, education is the best bet left. University faculties are setting up accounts on

online video conferencing platforms such as zoom, Skype and Google classroom, among others to engage with students. The author mentioned some advantages of the online learning system in his article. Author said that the sudden shift of education to virtual mode comes with several challenges in the beginning of the online education system. In a country like India where access to the internet is pitifully low. In the last two decades there has been a conscious effort on the part of the government to improve access to the internet in every sector. But still India has to face the internet challenge. Author said that students belonging to urban households are more likely to have internet access while students belonging to rural households merely have an Internet connection. Among students from rural households only 28% are likely to have internet access at home. Although about 78% of India's 1.3 population has mobile phones, in rural areas it is around 57%, according to the Telecom regulatory authority of India. The author say education planner needs to adopt more technological advancement in the curriculum

Lall and Singh (2020) conducted a study. This study was designed for understanding the students perspectives, attitudes, and readiness about online classes being conducted at the university level. An observational, descriptive study was conducted. This study was conducted at graphic era hill university Dehradun, Uttarakhand. The study population was collected randomly. The data was collected using a questionnaire. The study was carried out amongst 200 students. After analysing the results it was found that 74% of the students liked studying through online classes. The most common reason (49%) as to why the students like studying online was that the study time becomes flexible, and they can study any time they want. Lack of co-curricular activity was the most common issue (34%) of online classes as reported by the students. Most of the students were found satisfied with the content and procedure of online teaching. About 30% of the students reported that they prefer PPT with an audio recording. The study that was conducted among college students revealed that maximum students are in favor of studying through online classes, but they feel that there is a lack of co-curricular activities in the online mode of conducting classes. Author says the education ministry must develop certain rules and guidelines where certain online activity sessions can be made compulsory along with regular lecture sessions.

Bagul's (2020) paper mentioned the impact of lock down on education. He says the education issue has become very big and similarly in future, exams in all schools and colleges in Maharashtra (India) have been canceled, mainly on traditional education of students and what they think about

online education during the lockdown period and its consequences, with the help of a few questions. He conducted a study for collecting information. He used a survey method to collect the information. The research concludes that the coronavirus has an effect on students learning an issue that is mainly surveyed online and involves total hundred graduate and postgraduate students, and seeks to know what they thinks about it, and send students from different areas through social networking and sought their views on the impact of lock down periods issues on education. Survey issues included a variety of questions, the results of all opinions mentioned in the result and discussion point. According to his survey more than 90% of students think that lockdown has had a huge impact on education. Very few students feel that it has any effect and some students are neutral. More than 50% of the students feel that the university has made a wrong decision to cancel the exams, an issue that mainly involves smart students, assuming that their past marks have been verified. Only 27.7% of students think the university's decision is right and 16.9 % can't say anything.

Farooqui's (2020) says COVID-19 has forced universities across India and the world indeed to suspend physical classrooms and shifted to online classes. Author describes in his article, advantages and disadvantages of online classes. Author said that the larger universities in India have suspended classes since March 31. On the basis of this pandemic there were many platforms created to enable inline education. The author evaluates the experiences of teachers and students. Many feel that online education is not as easy as speaking into the microphone at one and connecting a laptop or phone and listening in on the other. This article introduced the confusions and experiences of the learners, teachers, and parents.

Sam says that transition from teacher-class based teaching to digital-education will need multipronged efforts over time. For parents, students, teachers and institutions, investment and infrastructure are needed. He argued that Internet facilities are very bad in most houses and the lack of computer knowledge of parents and their children. This article first appeared in the print edition on September 3, 2020 under the title 'The digital over-promise' in Indian Express. The writer is former chairman of the National Knowledge Commission and the National Innovation Council. Zubair on 4th July 2020 in mathrubhumi explained digital learning platforms for education and its challenges. He addressed the economical backwards of Indian people. Online classes using various platforms offer a big opportunity to reach out to students in remote locations. Virtual classrooms have already become a popular reality. Online education has its own limitations too. The main hindrance is the DIGITAL DIVIDE due to the non-availability of high-speed internet in rural and remote areas. He explained government programs to online education for students.

Nikhil, Founder and Managing Director, July 10, 2020. This arrival mainly focused on the impact of online learning and teaching in business and industry sectors. Online learning is much more economical than traditional learning methods. In fact, online degrees cost almost a tenth of their offline counterparts. This is a crucial aspect in today's economy, where job losses and pay cuts are rampant. Students can rest assured that the economic blows dealt by the pandemic will not affect their education and, in turn, the future of their careers. The traditional learning method—rote learning followed by a degree—is now almost rendered outdated. Today's students understand that hands-on learning and relevant practical industry training are far more valuable in building a successful career. As a result, the desire to learn from industry professionals is booming. Students believe that such experiences will help them prepare for employment more effectively than in a classroom with archaic lessons.

Rohit, SEPTEMBER 23, 2020 in 'The Hindu'.He argued in this article, In poorly performing educational systems as in the country, online learning may not usher in a revolution. Author criticizes the online education system in our country.His view of point,the importance of an institutional environment cannot be overemphasized when one thinks of online teaching. Even when the institutions function sub-optimally, students themselves create an environment that supports their growth morally, socially and intellectually in conversations and interactions with each other. The online mode of teaching completely foreclosed this opportunity.He explained various type organization's activities for smooth running of online education.

Anna and Xiufang primarily focused on how theories, practices and assessments apply to the online environment. The purpose of this paper is to provide practical suggestions for those who are planning to develop online causes so that they can make informed decisions in the implementation process. In doing this it is hoped that this will stimulate an ongoing discussion of

effective strategies that can enhance universities and faculty success in transitioning to teach online. Under current debates on the cost and quality of higher education this study could help for the improvement of higher education Student enrolment.

Abhishek, August 17, 2020 in Hindustan Times. This article focused on the digital divide. Lack of access to the internet and devices has also created a gap in digital literacy. As many as 76% of students in India in the 5-35 age group did not know how to use a computer. The share of those who did not know how to use the internet was 74.5%. Once again, this gap rises with a fall in income levels. 55% of students among the top 20% of households by monthly per capita expenditure (MPCE) knew how to use a computer and internet while these proportions were only 9% and 10% among the bottom 20%.

Jena's article (June 2020) focused on the major impacts of Covid 19 on HEIs in India. This article is mainly focused on the following objectives. They highlight the impacts of Covid 19 on higher education sector, enlighten various emerging approaches of India for higher education and enlist post covid trends of HEIs. He put few suggestions for continuing educational activities of HEIs facing the challenges by created by covid 19. He was used the secondary data for the data collection. In this articles information are collected from different authentic websites, journals, and e-contents relating to impact of Covid 19 on higher educational system of India. This study has outlined various impacts of Covid 19 on higher education in India. This study has not covered any statistical analysis on the impact of Covid 19 on higher education. In this article the author introduced some suggestions to carry out educational activities during the pandemic situation. The author finds out the pandemic has been steering the education sector forward with technological innovation and advancement.

Chandra(October 2020) conducted a study on online education during Covid 19 perception of academic stress and emotional intelligence coping strategies among college students. Due to covid 19 pandemic the government around the world has closed all the educational institutions to control the spread of disease, which is creating a direct impact on students, educators and institutions. The sudden shift from the physical classroom to virtual space is creating a disruption among students. This study was mainly focused on analyzing the perception of academic stress experienced by students during current online education and coping strategies using emotional intelligence

adapted by them. In this study the author used a sampling method for data collection. Data were collected on a sample of 94 students pursuing undergraduate and postgraduate from two Indian cities, Ahamedabad, and Mumbai. The survey was conducted using two online questionnaires. A telephonic discussion was also conducted with some respondents to understand different coping strategies used by them to handle the stress. The findings indicated significant differences were observed between the fear of academic failure and online and home environment among male and female students. Many of them have started diverting themselves to various creative activities and taking up courses that are helping them to learn new technical skills. By using emotional intelligence and distancing from boredom and depressive thoughts students were trying to cope with negative effects arising from the current pandemic situation.

'Hindustan Times conducted a study on issues facing online education. This article was published in August 2020. This article was mainly focused on the digital divide. This article said that the covid 19 pandemic has disrupted the education sector globally. Classes have been suspended to enforce social distancing and educational institutions from schools to universities have shifted to online methods of teaching evaluation. The new national education policy (NEP) approved digital and online education although it adds a rider that the digital divide must be eliminated to fully benefit from such methods. This article said that three to four students in India did not have access to the internet at home, according to a 2017-2018 all India NSO survey. The share of those who did not have computers, including devices such as palm tops and tablets was much greater 89%. Access to these facilities was higher among students at higher levels of education. But even at the highest levels a large share of students did not have access to these facilities. Access to the internet and computers is directly related to household incomes. Lack of access to the internet and devices has also created a gap in digital literacy. This article finds out India has to focus on online learning. It would do well to ensure students have access to devices and internet connections.

Zee media bureau wrote an article about online education amid covid 19 pandemic causing digital divide among students. This was edited by Arun kumar. This article was published in August 2020. This article said that covid 19 pandemic created a wedge between haves and havenots. The growing digital divide is also being witnessed among rich and poor states in India. The internet has reached the maximum number of people in Delhi, Kerala, and Haryana, but it is still away from the majority of people in the northern States except Assam. Digital India has become a necessity

during the covid 19 lock down. This article argued that earlier people struggled to reach schools and now the present generation is striving for online education. Schools are closed amid corona virus scare and there is no hope when they will open, therefore schools are teaching students online. In India all families have no access to the internet this is creating the digital divide. NCERT conducted a survey to find out the problem of digital divide. According to this survey 27% of students in India do not have smartphones and laptops. 28% of students are not able to study properly due to frequent power outages. 33% of students admitted that they were not able to focus on studies during online classes. Online classes are not able to solve problems related to math and science subjects. This article explained many challenges facing students during this online learning.

Cathy Li and Lalani (world economic forum-April 2020) conducted a study on changes in education during Covid 19 pandemic. They said that covid has resulted in schools shut all across the world globally, over 1.2 billion children are out of the classroom. As a result education has changed dramatically with the distinctive rise of e learning whereby teaching is undertaken remotely and on a digital platform. This sudden shift away from the classroom in many parts of the globe, some are wondering whether the adoption of online learning will continue to persist post pandemic and how such a shift would impact the world wide education market. They said that many online learning platforms are offered free access to their services. They found out some challenges of online learning in their study. They argued, some students without reliable internet access and technology struggle to participate in digital learning. This gap is seen across countries.

Sharma (April 2020) conducted a study on 'why online classes may not be such a good idea after all, especially for kids'. Online lessons are helping educational institutions around India beat the covid 19 lock down to push ahead with the academic calendar. But the trend has raised many concerns among educational experts including those at UNESCO and UNICEF. She said that some have expressed alarm about the potential dangers of internet exposure for young children; others say they are scared the digital shift may alienate economically disadvantaged students who don't have access to the technology digital lessons require. In a report issued 21 April UNESCO a multi dimensional agency highlighted another concern about the online shift. Giving a global perspective UNESCO noted half of the total number of learners some 826 million (82.6) students kept of the classroom by covid pandemic do not have access to a household computer and 43 % have no

internet at home, at a time when digitally based distance learning is used to ensure educational continuity in the vast majority of countries.

Nair(16 october 2020)conduct a study on online learning in the times of covid19. The study was aimed at the challenge of education in adolescent girls the time of covid 19. In fact a 2018 report by the national commission for protection of child rights found that across india 39.4% girls aged between 15-18 years drop out of school and college. But with online learning becoming the new normal in wake of a pandemic that continues to stretch on and continues to pose risks to the reopening of schools, countless adolescent girls from remote rural communities are finding their educational prospects in grave jeopardy. The study uses a quantitative method for the study. The study focused on online learning is here to stay. While it has definitely come with its pitfalls there is an urgent and alarming need to bridge these gaps and ensure that the pivoting to e-learning only brings with it greater digital literacy and more innovative modes of imparting skills and knowledge rather than proving to be something that further alienates and discourage adolescent girls from continuing their education and following their aspirations. The result of the study is that there is a need to explore options of how to make digital learning available to all sections of students especially marginalizing. The Kerala state education department's first bell initiative which was launched on June 1, 2020 has been a big step forward in this regard.

Abhasree (10, September 2020)conducted a study on online learning in higher education during the lockdown period. The study aimed at the changes of the education system in covid 19 period. This study is a portrayal of online teaching – learning modes adopted by the mizoram university for the teaching. Learning process and subsequent semester examinations. It looks forward to an intellectually enriched opportunity for forward to an intellectually enriched opportunity for further future academic decision making during any adversity. The study uses a quantitative method for the study. The result of the study draw a holistic picture of ongoing online teaching – learning activities during the lockdown period including establishing the linkage between change management process and online teaching – learning process in education system amid the covid 19 outbreak so as to overcome the persisting academic disturbance and consequently ensure the resumption of educational activities and discourses as a normal course of procedure in the education system.

This article written by Cathy and Farah on 29 Apr 2020. Authors say that, COVID-19 has resulted in schools shut all across the world. Globally, over 1.2 billion children are out of the classroom. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. Research suggests that online learning has been shown to increase retention of information, and take less time, meaning the changes coronavirus have caused might be here to stay. With this sudden shift away from the classroom in many parts of the globe, some are wondering whether the adoption of online learning will continue to persist post-pandemic, and how such a shift would impact the worldwide education market.In response to significant demand, many online learning platforms are offering free access to their services, including platforms like BYJU'S, a Bangalore-based educational technology and online tutoring firm founded in 2011, which is now the world's most highly valued edtech company. Since announcing free live classes on its Think and Learn app, BYJU's has seen a 200% increase in the number of new students using its product, according to Mrinal Mohit, the company's Chief Operating Officer.Major world events are often an inflection point for rapid innovation – a clear example is the rise of e-commerce post-SARS. While we have yet to see whether this will apply to e-learning post-COVID-19, it is one of the few sectors where investment has not dried up. What has been made clear through this pandemic is the importance of disseminating knowledge across borders, companies, and all parts of society. If online learning technology can play a role here, it is incumbent upon all of us to explore its full potential. This article focused on online industries and their activities for helping online education.

This article was written by Dr. Vidya on March 31, 2020. The author of this article is University director. She explained challenges and suggestions based on her own experience. She said that Attendance has always been the biggest challenge for teachers. The pandemic has made attendance compulsory as students participate in online sessions, submit assignments in time, ensure there is compliance and most of all are engaged in learning as this is the only option being given to them. Some lessons are learned the hard way but learn they must and COVID-19 has been a rather severe learning lesson for teachers and the lessons are certainly learned well. Auther Said, the benefits of online classes. They can improve their quality of teaching by sharing ppts, photos etc. The author points out rubric based assignments and assessments have now become a reality. In the author's point of view there is widespread acceptance by teachers of opting for video sessions, banking on

that dormant online environment, exploring the official software that has been left unattended to at the office, making maximum use of WhatsApp groups, growing active on emails, use of ERP, twitter and ensuring students are engaged and are connected. Where we grudged our students of networking on various social media platforms, teachers are found scurrying around to create groups and build a community of learners. Education has always been facing a challenging time, but this one is unprecedented and warrants a lot of thought and the most important support from digital students.

This article written by Charles, Stephanie, Barb, Torrey and Aaron. This article published on March 27, 2020. This article Said that well-planned online learning experiences are meaningfully different from courses offered online in response to a crisis or disaster. Colleges and universities working to maintain instruction during the COVID-19 pandemic should understand those differences when evaluating this emergency remote teaching. Everyone involved in this abrupt migration to online learning must realize that these crises and disasters also create disruptions to student, staff, and faculty lives, outside their association with the university. So all of this work must be done with the understanding that the move to ERT will likely not be the priority of all those involved. Instructors and administrators are urged to consider that students might not be able to attend to courses immediately. As a result, asynchronous activities might be more reasonable than synchronous ones. Flexibility with deadlines for assignments within courses, course policies, and institutional policies should be considered. For a high-level example, the US Department of Education has relaxed some requirements and policies in the face of COVID-19. The threat of COVID-19 has presented some unique challenges for institutions of higher education. All parties involved—students, faculty, and staff—are being asked to do extraordinary things regarding course delivery and learning that have not been seen on this scale in the lifetimes of anyone currently involved. Although this situation is stressful, when it is over, institutions will emerge with an opportunity to evaluate how well they were able to implement ERT to maintain continuity of instruction. It is important to avoid the temptation to equate ERT with online learning during those evaluations. With careful planning, officials at every campus can evaluate their efforts, allowing those involved to highlight strengths and identify weaknesses to be better prepared for future needs to implement ERT.

Shivangi in June 20, 2020 explained that Educational institutions in India are currently based only on traditional methods of learning, that is, they follow the traditional set up of face-to-face lectures in a classroom. Although many academic units have also started blended learning, still a lot of them are stuck with old procedures. The sudden outbreak of a deadly disease called Covid-19 caused by a CoronaVirus shook the entire world. The World Health Organization declared it as a pandemic. This situation challenged the education system across the world and forced educators to shift to an online mode of teaching overnight. Many academic institutions that were earlier reluctant to change their traditional pedagogical approach had no option but to shift entirely to online teaching-learning. The article includes the importance of online learning and Strengths, Weaknesses, Opportunities, & Challenges (SWOC) analysis of e-learning modes in the time of crisis. This article also put some light on the growth of EdTech Start-ups during the time of pandemic and natural disasters and includes suggestions for academic institutions of how to deal with challenges associated with online learning. Accessibility, affordability, flexibility, learning pedagogy, life-long learning, and policy are some of the arguments related to online pedagogy. It is said that online mode of learning is easily accessible and can even reach to rural and remote areas.It is said that online mode of learning is easily accessible and can even reach to rural and remote areas. It is considered to be a relatively cheaper mode of education in terms of the lower cost of transportation, accommodation, and the overall cost of institution-based learning.

Carmen & Maria in 13, September 2020. This article Said that the COVID-19 pandemic has impacted education at all levels in various ways. Institutions and teacher educators had to quickly respond to an unexpected and 'forced' transition from face-to-face to remote teaching. They also had to create learning environments for student teachers doing their preparation in the light of the requirements of teacher education programmes and the conditions in which both universities and schools had to operate. This paper provides a review of the literature on online teaching and learning practices in teacher education. In total, 134 empirical studies were analyzed. Online teaching and learning practices related to social, cognitive and teaching presence were identified. The findings highlighted the need for a comprehensive view of the pedagogy of online education that integrates technology to support teaching and learning. The implications of this study for the development of online teaching and learning practices are discussed. Suggestions for further research are also examined. This study has reviewed online teaching and learning in the context

of teacher education and has analyzed practices leading to impact. However, due to the large number of studies under examination and the constraints in terms of word limitation, this paper has highlighted the most recurrent themes or aspects that have been considered to be the most relevant for the purpose of this paper and have not included other important issues.

Kasrekar and Gayatri in 16 May 2020. They point out that digital learning has many advantages in itself like digital learning has no physical boundaries, it has more learning engagement experience rather than the traditional learning, it is also cost- effective and students get to learn in the confines of their comfort zone. However, digital learning is not without its limitations and challenges, since face-to-face interaction is usually perceived as the best form of communication as compared to the rather impersonalized nature of remote learning. Globally, online education has met with some success. In the case of India, we still have a long way to go before digital learning is seen as mainstream education, because students living in urban areas have the facilities to opt for digital education, however, rural area students do not have the required infrastructure nor are financially strong to avail the resources required for digital education. Building of the digital education infrastructure by the Government of India presently appears to be difficult due to lack of budget. They discussed the challenges of online education in India. They explained different challenges of online education and they suggested solutions for this challenge.

#### **CHAPTER III**

#### RESEARCH METHODOLOGY

**TITLE:** EXPERIENCE OF ONLINE EDUCATION DURING THE COVID 19 PERIOD: A STUDY AMONG DEGREE STUDENTS.

#### **OBJECTIVES**

- **♣** To understand the experience of students undergone online classes.
- ♣ To understand how socio- economic factors of students affect their online education.
- **♣** To understand the needs of the students.
- **♣** To examine the advantages and disadvantages of online education

#### **HYPOTHESIS**

Most of the students faced many issues in attending online education

#### **VARIABLES**

#### **CONCEPT**

The major concepts used in this study are online education and COVID 19.

**Online education**: - Online education is a flexible instructional delivery system that encompasses any kind of learning that takes place via the internet. Online learning gives educators an opportunity to reach students who may not be able to enroll in a

traditional classroom course and supports students who need to work on their own schedule and at their own pace. (Encyclopedia).

**Covid 19:-** COVID-19 is a disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.' The COVID-19 virus is a new virus linked to the same family of viruses as severe acute respiratory syndrome (SARS) and some types of common cold. (Definition of WHO)

#### RESEARCH DESIGN

Descriptive design is used in the present study. Our study focuses on the experience of students. This study clarifies the relation between student's socio-economic factors and their online education. The design aims to find needs of the students and advantages and disadvantages of students.

#### SOURCE OF DATA

Both primary and secondary data are used. Primary data was being collected by using questionnaires. Secondary sources of data include articles and books.

#### **UNIVERSE**

The universe of the present study are the degree students of Trivandrum district.

#### **UNIT**

**A** degree student who has undergone online education as part of the Covid pandemic situation

#### **SAMPLING**

A college in Thiruvananthapuram has been chosen for the study. A non-probability sampling technique was used to select 20-degree students from each department, totalling 100 respondents by way of purposive sampling.

#### PILOT STUDY

A pilot study was conducted in a college in Thiruvananthapuram to check the feasibility of the study. Researcher selected 5 students for pilot study from this college.

#### **PRETEST**

The questionnaire was pretested with few respondents before starting the actual research. This helps to modify the questions in order to make the questionnaire more precise and focused.

#### TOOLS OF DATA COLLECTION

The main tool of data collection is the questionnaire. A questionnaire is developed with a clear purpose in mind, whether it's to gather demographic information, opinions, attitudes, behaviours, or any other type of data. The questions in the questionnaire are designed to address the research objectives and provide valuable insights.

#### DATA ANALYSIS

The questionnaire was prepared based on the objectives of study. Data were collected and sorted through questionnaires. The table was prepared based on classification. The information obtained was analysed based on the table. Descriptive statistics was used to analyse the data. The filled in questionnaire was

coded and presented in tabular form. The quantitative data obtained was presented in percentages.

# **LIMITATIONS**

The major challenges faced in the study is that studying a very small group will reduce the amount of information available. A challenge with purposive sampling is ensuring that the selected participants are representative of the larger population.

#### **CHAPTER IV**

#### DATA ANALYSIS AND INTERPRETATION

The first objective was to analyze socio-economic factors of college students, and how they affected their online education. Here we can see different features of the student's socio-economic factors.

**Table- 4.1 Respondents Gender** 

Gender	Frequency	Percentage
Male	50	50%
Female	50	50%
Total	100	100%

Gender is an important variable in this study. Researcher selected an equal number of males and females. We selected 50% males and 50% females for this study.

**Table – 4.2 Year of Study** 

Year	Frequency	Percentage
2nd year	50	50
3rd year	50	50
Total	100	100%

Year of the study of the respondents is one of the variables in this study. Researcher selected 50% of students from the 2nd year for this study.50% of students selected from 3rd year for this study. First year students were omitted as they haven't undergone much online classes.

**Table – 4.3 Department of the respondents** 

Department	Frequency	Percentage
Math's	20	20%
Commerce	20	20%
Economics	20	20%
English	20	20%
Sociology	20	20%
Total	100	100%

This table shows the department of the respondents. Researcher selected an equal number of the respondents from each department of this college.

Table -4.4 Duration of having underwent online class

Duration	Frequency	Percentage
1-2 months	3	3%
3-4 months	5	5%
5-6 months	31	31%
More than 7 months	61	61%
Total	100	100%

In this table 3% of students comment that they had online classes for 1-2 months. 5% of students commented they had online classes for 3-4 months. 31% of students commented that they had

classes for 5-6 months. 61% of students commented that they had online classes for more than 7 months. This table shows that most students have online classes for more than 7 months.

**Table -4.5 Mode of Classes** 

Mode	Frequency	Percentage
Live classes	36	36%
Recorded audio via whatsapp and live classes	29	29%
Recorded video with ppt via whatsapp	35	35%
Total	100	100%

This table show's classes imparted by teacher's during online education. 36% of students commented that the teachers took live classes for them. They used the Googlemeet application for attending the classes. 29% of students commented that their classes were imparted by teacher's through recorded audio via whatsapp and live classes. 35% of students commented that their teachers took classes through recorded video with PPT via whatsapp.

Table -4.6 Student's internet facility in their home

Answer	Frequency	Percentage
Yes	70	70%
No	30	30%
Total	100	100%

This table shows the students' internet facility in their home. 65% of students had an internet facility in their home. 35% of students had no internet facility in their home.

Table- 4.7 A) If yes, was it stable and economic?

Opinion	Frequency	Percentage
Yes	49	70%
No	21	30%
Total	70	100%

In this table show's 70% of students say that they have stable and economic internet facilities in their home. 30% of students commented that there was no stable and economical internet facility in their home.

Table-4.8 Students access of class without internet facility

Way of access the class	Frequency	Percentage
Relatives	8	26.67%
Friends	10	33.33%
Neighbors	12	40%
Total	30	100%

This table shows the access of class without internet facility. 26.67% commented that they got help from relatives. They got Wi-Fi and economical support from relatives.33% of students commented they got help from friends for attending the classes. 40% of students commented they got help from their neighbours.

Table -4.9 Ability of parents to recharge.

Category	Frequency	Percentage
Yes	55	55%
No	45	45%
Total	100	100%

In this table 55% of students' parents are able to recharge the internet for online classes. 45% of students commented that their parents were not able to recharge the internet for online classes. Because of their financial backwardness.

Table – 4.10 For students who are unable to recharge.

Support system	Frequency	Percentage
College	13	32.5%
Friends	11	27.5%
Relatives	16	40%
Total	45	100%

This table show's support for students who are unable to recharge for attending their classes. 32.5% of students commented that they got help from college. Colleges spend money through teachers for recharge. 27.5% of students commented that they get help from friends. 40% of students commented that they got help from their relatives.

Table- 4.11 Devices for attending classes.

Devices	Frequency	Percentage
Smartphone	84	84%
Desktop	10	10%
Laptop	6	6%
Total	100	100%

In this table, 84% of students commented that they used smartphones for attending online classes. 10% of students commented that they use a desktop for attending the classes. 6% of students commented they used laptops for attending classes.

Table- 4.12 Ownership of student's devices for online classes

Ownership	Frequency	Percentage
Own	60	60%
Father	10	10%
Mother	8	8%
Relatives	15	15%
Friends	7	7%
Total	100	100%

This table shows the ownership of student's devices for online classes. 60% of students commented that their device is their own. 10% of students commented they used their father's device for attending the classes. 8% of students commented that they used their mother's device for attending the classes. 15% of students commented that they used their relatives' devices. 7% of students commented that they used their friend's device for attending the classes.

Table -4.13 Learning of new technology

Source of learning	Frequency	Percentage
Family	33	33%
Friends	52	52%
Other's(relatives, institutions)	15	15%
Total	100	100%

In this table shows, 33% of students learnt using new technology from their family. 52% of students commented they learn about using new technology from friends. 15% of students commented they learnt using new technology from others, it means relatives and institutions.

Table- 4.14 Ease of use

Ease of use	Frequency	Percentage
Yes	46	46%
No	54	54%
Total	100	100%

This table shows, 46 % of students commented they felt easy to use new technology. But 54% of students commented that they feel it is difficult and hard to use new technology.

Table- 4.15 Difficulties in using new technology.

Difficulties	Frequency	Percentage
Range problem	27	50%
Recharge issue	18	33.33%
Lack of technical knowledge	9	16.67%
Total	54	100%

54% of students faced difficulties in using new technology. This table shows, 50% of students commented they faced range problems. 33.33% of students commented they faced recharge issues. 16.67% of students commented they faced lack of technical knowledge. They overcame such difficulties by asking others and switching to network areas.

#### Digital divide among students

In this table, 71% of students commented that the online education system has increased the rate of digital divide. 29 % of students opinionated that the online education system has not increased the rate of digital divide.

Table- 4.16 Digital divide among students

Whether the online education system had increased the rate of digital divide	Frequency	Percentage
Yes	71	71%
No	29	29%
Total	100	100%

Table-4.17 Student's attendance in online education

Did you attend all the classes in online education?	Frequency	Percentage
Yes	48	48%
No	52	52%
Total	100	100%

In this table, 48% of students commented they attend all classes in online education. 52% of students commented that they cannot attend all classes in online education because they faced some issues like technical, social, economical, and health based issues etc.

Table – 4.18 Missed online classes

Number of classes	Frequency	Percentage	
1-3	12	23.23%	
4-6	7	13.38%	
6-8	14	26.77%	
More than 9 classes	19	36.62%	
Total	52	100%	

This table shows the missed online classes of students. 23.23% of students commented they missed 1-3 class. 13.38% of students commented they missed 4-6 classes. 26.77% of students

commented they missed 6-8 classes. 36.62% of students commented that they missed more than 9 classes. Range issue, device complaint and recharge issue are the reasons for why they missed classes.

Table -4.19 Parents response while students spending so much time before Computer/mobile

What was your parents' response while you were spending so much time in front of the computer?	Frequency	Percentage
Angry	35	35%
Concerned about health	40	40%
Neutral	25	25%
Total	100	100%

This table shows the parents' response while students spend so much time before the computer. 35% of students commented that parents were angry with spending so much time before computers. 40% of students commented that parents were concerned about health, they advised damage of eyes in spending so much time before computer.25% of students commented that parents had no response in spending so much time before the computer.

Table- 4.20 Criticisms of family members or neighbors

Heard criticism	Frequency	Percentage
Yes	34	34%
No	66	66%
Total	100	100%

This table shows the criticism of family members or neighbors. 34% of students commented that family members and neighbors criticized them for spending a lot of time online. 66% of students commented that family members and neighbors were not criticized for spending a lot of time online.

Table- 4.21 Criticisms of family members or neighbors about student's online education

Criticisms	Frequency	Percentage
Waste of time	16	47.24%
Online education is not effective	11	32.41%
You can't follow online classes	7	20.35%
Total	34	100%

This table shows criticism of family members or neighbors about student's online education.47.24% of students commented that family members and neighbors told online education is a waste of time. 32.41% of students commented that family members and neighbors said online education is not effective. 20.35% of students commented that family members and neighbors said students can not follow the online classes.

**Table- 4.22 Support of parents** 

Were your parents supportive	Frequency	Percentage
Yes	76	76%
No	24	24%
Total	100	100%

This table shows the support of parents in online classes. 76% of students commented that parents are supportive in online class. 24% of students commented that parents are not supportive in online classes, due to lack of awareness of online classes and health problems while using the devices.

**Table- 4.23 Peaceful environment** 

Is the Home peaceful for studying	Frequency	Percentage
online education?		
Yes	72	72%
No	28	28%
Total	100	100%

This table shows that it is home peaceful for studying in online education. 72% of students commented they had a peaceful environment for online education. 28% of students commented they did not have a peaceful environment in online education. Family problems are also affected in online education. Range issues also affected the online classes.

**Table-4.24 Issues of peaceful houses** 

Issues	Frequency	Percentage
Noisy surroundings	19	67.43%
Polluted environment (air pollution, noise pollution)	9	32.57%
Total	28	100%

This table shows the issues of peaceful houses. 67.43% of students commented on noisy surroundings in peaceful houses. 32.57% of students commented on the polluted environment in peaceful houses.

#### Ability to focus on studying while staying at home

This table shows the ability to focus on studying while staying at home. 25% of students commented fully focused on study while staying at home. 20% of students commented that sometimes they can not focus on studying. 60% of students commented very less on focus on

study. 5% of students commented on average focusing on study because they had noisy surroundings and lack of network connection.

Table-4.25 Ability to focus on studying while staying at home

How much you could focus on	Frequency	Percentage
studying online while staying at		
home?		
I can fully focused on study	15	15%
Sometimes I can't focus on study	20	20%
Very less focus on study	60	60%
Average of focusing on study	5	5%
Total	100	100%

Table – 4.26 Opinion of students on real classroom

Did you want to return to the real	Frequency	Percentage
classroom?		
Yes	78	78%
No	22	22%
Total	100	100%

This table shows the opinion of students in the real classroom. 78% of students commented in favor of going to the real classroom. 22% of students commented on not going to the real classroom. Many students want the real classroom experience. They preferred real classrooms over online education for studies.

Table-4.27 Opinion of students about their online classes

Opinion	Frequency	Percentage
Very good	13	13%
Good	31	31%
Average	38	38%
Bad	18	18%
Total	100	100%

This table shows that 13% of students are of the opinion that their online classes were very good. Because they never had any problems with online classes. 31% of students opinionated that their online classes were good. Because they faced some issues (technical or other's) in attending online classes.38% of students opinionated their online classes as average. This is because they are not satisfied with the online classes but they do not say that the classes are very bad. 18% of students thought that their online classes were bad. This is because they have faced financial, technical and health problems in addition to understanding classes.

**Table-4.28 Better mode of education** 

Do you think classroom education is better than online classes?	Frequency	Percentage
Yes	74	74%
No	26	26%
Total	100	100%

This table shows a better mode of education. 74% of students commented that classroom education is better than online class. Classroom education have face to face interaction without out any range issues or any barriers. Classroom education is better for the study of all students. 26% of students commented that online education is better than classroom education.

Table -4.29 Student's exams in online mode

How did you attend exams in online mode?	Frequency	Percentage
Google forms and descriptive test by writing and sending as email	10	10%
Google forms	40	40%
Descriptive test by writing and sending as email	37	37%
Others ( Google meet,)	13	13%
Total	100	100%

This table shows students exams in online mode. 10% of student's used Google forms and descriptive tests by writing and sending email in online exams. 40% of students commented on Google forms for exams. 37% of students commented on the descriptive test by writing and sending it as an email in online exams. 13% of students commented on Google meet and email in online exams.

**Table-4.30 Experiences in online exams** 

Afraid of facing online exam	Frequency	Percentage
Yes	70	70%
No	30	30%
Total	100%	100%

This table shows that experience in online exams. 70% of students commented they were afraid to face exams because of the online learning system. 30% of students commented that they were not afraid to face exams because of the online learning system.

Table -4.31 Student's opportunity to discuss lessons with their friends during covid

Did you get any opportunities to discuss the lessons	Frequency	Percentage
with your friends during COVID-19?		
Yes	39	39%
No	61	61%
Total	100	100%

This table shows students opportunities to discuss the lessons with their friends during COVID-19. 39% of students commented on the opportunities to discuss the lessons with our friends during COVID-19. 61% of students commented they did not get any opportunities to discuss the lessons with our friends during COVID-19.

Table-4.32 Ability to follow online classes as effective as classroom sessions

Were you able to follow online classes as effectively as classroom sessions?	Frequency	Percentage
Yes	44	44%
No	56	56%
Total	100	100%

This table shows the ability to follow online classes as effective as classroom sessions. 44% of students commented online classes were as effective as classroom session's. This is because online classes can be understood just like sitting in a classroom and listening directly to classes.56% of students commented online classes were not as effective as classroom session's. Because they encountered technical problems(range issues, sound braking complaint of the device )in online classes.

Table-4.33 Interaction between teachers and students in online classes

Was there interactions between teachers and	Frequency	Percentage
students in online classes as in classrooms?		
Yes	47	47%
No	53	53%
Total	100	100%

This table shows the interaction between teachers and students in online classes. 47% of students commented they had more interactions between teachers and students in online classes as in classrooms. 53% of students commented on no interactions between teachers and students in online classes as in classrooms.

Table-4.34 Opportunities to ask doubts in online education

Did you get opportunities to ask doubts in online education?	Frequency	Percentage
Yes	78	78%
No	22	22%
Total	100	100%

This table shows students opportunities to ask doubts in online education. 78% of students commented they got opportunities to ask doubts in online classes. 22% of students commented that they do not get opportunities to ask doubts in online education.

**Table-4.35 Ability to follow taught** 

Were you able to follow what is taught?	Frequency	Percentage
Yes	64	64%
No	36	36%

Total	100	100%

This table shows that ability to follow the taught. 64% of students commented that they were able to follow the instructions taught. 36% of students commented that they were not able to follow the instructions taught.

**Table-4.36 Mutual cooperation among students** 

Whether there was mutual cooperation among	Frequency	Percentage
students as in online classes as in classroom?		
Yes	44	44%
No.	56	560/
No	56	56%
Total	100	100%

This table shows the mutual cooperation among students in online classes. 44% of students say that online classes have the same mutual cooperation as in classrooms. Because there is interaction between teachers and students. 56% of students say that there is no mutual cooperation in online classes like in a classroom. Because there is no interaction between students and teachers and students interact with each other.

**Table-4.37 Interaction facility with other students** 

Was there any interaction between faculty and students?	Frequency	Percentage
Yes	51	51%
No	49	49%
Total	100	100%

This table shows the interaction between faculty and students in online classes. 51% of students say that there was an effective interaction between faculty and students. Because they had the opportunity to ask and understand each other's questions in online lessons. 49% of students say

that there is not much interaction between faculty and students. Because they did not get the chance to discuss lessons and doubt's in online classes

Table-4.38 Technical issues

Did you face any technical issues during online classes?	Frequency	Percentage
Yes	79	79%
No	21	21%
Total	100	100%

This table shows the technical issues faced by students during online classes. 79% of students say that they faced technical issues. Range issue, recharge problem, device complaints, like these problems are students faced in online classes. 21% of students say that they did not face any technical issues.

**Table- 4.39 Technical Problems in online classes** 

Problems	Frequency	Percentage
Network problems and data recharge problems	73	73%
Others (technical issues, charging problems etc.)	27	27%
Total	100	100%

This table show's problems in online classes. 73% of students commented they faced network problems and data recharge problems. 27% of students commented they faced technical issues and charging problems etc. due to online classes. Students overcome such problems by using power banks and switching to network areas to get range.

**Table-4.40 Cyber threats in online education** 

Did you face any health issues due to online education?	Frequency	Percentage
Yes	26	26%
No	74	74%
Total	100	100%

This table shows the cyber threats faced by students in online education. 26% of students say that they faced cyber threats (like lack of privacy, loss of the security of phones) in online education. 74% of students say that they did not face any cyber threats.

Table-4.41 Health issues due to online education

Were you facing any health issues due to online education?	Frequency	Percentage
Yes	56	56%
No	44	44%
Total	100	100%

This table shows the health issues due to online education. 56% of students opinionated that they faced health issues due to online education. Many of them suffered from health problems such as headaches, eye pain, neck pain, back pain and blurred vision.44 % of students thought they did not feel health issues.

Table-4.42 Mood disorder/ mental health issues due to online education

Did you experience depression & anxiety due to online classes?	Frequency	Percentage
Yes	34	34%
No	66	66%
Total	100	100%

This table show's depression and anxiety faced by students due to online classes. 34% of students commented that they experienced depression and anxiety due to online classes. Because they faced stress on studies and irregular teaching and notes. In COVID-19 period there was no interaction between other students so they were depressed. 66% of students commented they did not experience any depression and anxiety due to online classes.

Table-4.43 Acquiring of new knowledge due to online education

Has online education helped you to acquire new knowledge?	Frequency	Percentage
Yes	45	45%
No	55	55%
Total	100%	100%

This table shows the acquiring of new knowledge due to online education. 45% of students commented that online education helped to acquire new knowledge. Students can understand new applications due to online education. Online education helped them to understand more options in mobile and computers. 55% of students commented online education did not help to acquire new knowledge.

**Table-4.44 Advantages of online education** 

What all advantages did you experience in online education?	Frequency	Percentage
Can avoid transport costs	15	15%
Can attending classes from whenever we are	20	20%
Saving time	30	30%
Visual classes with ppt	10	10%
No advantages	25	25%
Total	100	100%

In this table 15% of students commented that they can avoid transport costs because of online classes. 20% commented they can attend classes from wherever they are. 30% of students commented that online classes helped to save time. 10% of students commented they got visual classes and PPT through online classes. 25% of students commented they got no advantages from online classes.

Table- 4.45 Disadvantages of online education

What all disadvantages did you experience in online education?	Frequency	Percentage
Lack of communication	11	21.46%
Health issues	29	55.31%
Stress	12	23.23%
Total	52	100%

In this table 21.46% of students commented that they faced lack of communication because of online classes. 55.31% of students commented they faced several health issues due to online classes. 23.23% of students commented they faced stress due to online classes.

**Table-4.46 Reading habit of students** 

Did you think that reading habits have been reduced during online education?	Frequency	Percentage
Yes	64	64%
No	36	36%
Total	100	100%

In this table 64% of students commented that their reading habit has reduced due to online education. Because colleges and libraries both were closed. 36% of students commented that their reading habit has not reduced due to online education. Because they read books through online platforms.

**Table-4.47 Effectiveness of online learning** 

Was online learning effective?	Frequency	Percentage
Yes	35	35%
No	65	65%
Total	100	100%

In this table 35% of students commented that online learning is effective. 65% of students commented that online learning is not effective. Because they faced many issues in online classes.( Like range problem, lack of proper interaction)

**Table-4.48 Support from college** 

What support did you expect from	Frequency	Percentage
college?		
Financial support	14	26.77%
Free Wi-Fi	13	25%
Implement offline classes	25	48.23%
Total	52	100%

In this table 26.77% of students commented they expect financial support from college. 25% of students commented they expect free Wi-Fi support from college. 48.23% of students expect colleges to implement offline classes.

**Table -4.49 Support from teachers** 

What support did you expect from teachers?	Frequency	Percentage
Good teaching	5	9.85%
Sending notes properly	13	25%
Reduce study burden like assignments and home works	15	28.54%
Extra classes	7	13.38%
Classes takes on time	12	23.23%
Total	52	100%

In this table 9.85% of students commented they expected good teaching from teachers. 25% of students commented that they expected sending notes properly from their teachers. 28.54% of students commented that they expect teachers to reduce study burden like assignments and

homeworks.13.38% of students commented that they expect extra classes from teachers. 23.23% of students commented they expected classes to be taken on time from teachers.

**Table- 4.50 Support from family** 

What support did you expect from your family?	Frequency	Percentage
Recharging	31	59.85%
Provide private and quiet place	14	26.77%
Support for study	7	13.38%
Total	52	100%

In this table 59.85% of students commented they expected recharging support from family. 26.77% of students commented that they expect their family to provide a private and quiet place for study. 13.38% of students commented they expect support for their study from family.

**Table-4.51 Changes in online education** 

What changes do you expect in online education?	Frequency	Percentage
Recorded audio should be gives	12	23.23%
N. 1. 1. 1. C	22	44.600/
Need new online platform	23	44.69%
Reduce the time	17	32.08%
Total	52	100%

In this table 23.23% of students commented that recorded audio should be given in online classes. 44.69% of students commented that they need a new online platform for the study.32.08% of students commented that they should reduce the time of online classes.

#### **CHAPTER V**

#### FINDINGS SUGGESTIONS AND CONCLUSION

#### **FINDINGS**

- Most of the students commented that their teachers took classes through recorded videos with PPT via WhatsApp.
- 35% of students had no internet facility in their home.
- 40% of students got help from their neighbours for internet facilities.
- 45% of students' parents were not able to recharge the internet for online classes, because of their financial backwardness.
- 84% of students used smartphones for attending online classes.
- 60% of students had very less focus on study while staying at home.
- 60% of students used their own devices for online education.
- 78% of students wished to return to real classroom education.
- 74% of students commented that classroom education is better than online class.
- 40% of students used Google forms for attending online exams.
- 52% of students learnt using new technology from friends.
- 52% of students felt it was hard to use new technology.
- 70% of students commented they were afraid to face exams because of the online learning system.
- 61% of students commented that they do not get any opportunities to discuss the lessons with friends during COVID-19.
- 56% of students commented online classes were not as effective as classroom session's. Because they encountered technical problems (range issues, sound braking complaint of the device) in online classes.
- 71% of students commented that the online education system has increased the rate of digital divide.

- 52% of students commented that they cannot attend all the classes in online education because they faced some issues like technical, social, economic, and health base issues etc.
- 56% of students said that there is no mutual cooperation in online classes like in a classroom.
- 53% of students commented that there is no interaction between teachers and students in online classes as in classrooms.
- 79% of students say that they faced technical issues. Range issue, recharge problem, device complaints, like these problems are students faced in online classes.
- 56% of students opinionated that they faced health issues due to online education.
   Many of them suffered from health problems such as headaches, eye pain, neck pain, back pain and blurred vision.
- 64% of students commented that their reading habit has reduced due to online education.

65% of students commented that online learning is not effective.

#### SUGGESTIONS

- Reduce the time of online classes.
- Educational institutions should assist financial support for economically backward students. It includes scholarship, stipend etc for students to attend the online classes.
- Design courses with flexibility to accommodate diverse schedules and time zones.
- Ensure all course materials are accessible to students with disabilities.
- Encourage self-assessment and reflection through regular prompts and exercises.
- Provide constructive feedback that focuses on both strengths and areas for improvement.
- Provide multiple formats for content, such as text, audio, and video, to cater to different learning preferences.
- Address language barriers by offering translated materials or subtitles.

#### CONCLUSION

Online education has been around for a long time. Covid 19 Pandemic made it the main component. Covid 19 on the various aspects of online education during the Pandemic. The study was conducted to find out their experiences among the students in a degree college in Thiruvananthapuram. Researcher found that students view online education as a practical bet in the current context. However, researcher think there is room for improvement. Professors should strive to make online education better accepted among students. Covid 19 Pandemic led to the widespread adoption of online education around the world. The lessons we learnt about online education during the pandemic will be useful for future needs. Online classes were very helpful in the times of lockdown and restrictions. Students believe that online classes are the best. Also, these classes are also comfortable for them. Network problems are a major obstacle to the smooth running of classes. However, it is a novelty for the student community. During a study among students, Researcher were able to learn a lot from them. 80% of the students said that their problem was range issue, network problem and recharge problem. Online learning is a form of electronic learning that provides education over the Internet instead of the traditional classroom. There are numerous benefits to studying online. And online learning is more independent. The education sector has undergone significant changes during the Covid period. Online classes have been very helpful in those times of lockdowns and restrictions. Students believed that online classes were the best and comfortable for them. Network issues were a major obstacle to the smooth running of classes. However, students were careful about accessing online classes. Through this study researcher were able to gain a more in-depth understanding of the online education that began during Corona. The advantages and disadvantages of online education are well documented. Created psychological and financial problems for students during the Corona period. It created a new experience for the students which was different from the traditionally followed education system. Online education in students turned into a different learning experience. This made the students more aware of the positive aspects of the use of the Internet and the innovation of learning and the proper use of technology. Technology has benefited the education sector in a positive way. We were able to understand the difference between online education and classroom learning. Through online education we were able to understand the needs of the students and their learning style. The majority of students also commented on how ineffective online education was from classroom education. Workshops and exams given through the classroom could be done online. However, due to the range issue, network issue and recharge issue, there are others who were unable to write the exam through online education. Online learning could not be done as effectively as classroom work or Examine. Online education is not just a change of technology. This is a change in the student body of the younger generation as a species. Online education has been around for a long time. But the Covid 19 Pandemic made it into the mainstream. The same goes for Covid 19 about the various aspects of online education during the pandemic. The study was conducted to find out their opinion and we found that students consider online education as a practical bet in the current context. However, we found that there is potential for improvement.

84% of students used smartphones to attend online classes.60% of students had very less focus on study while staying at home. 60% of students used their own devices for online education. 78% of students want to return to real classroom education. 74% of students commented that classroom education is better than online class. 40% of students used Google forms for attending online exams. 52% of students learnt about using new technology from friends.52% of students felt it was hard to use new technology. 70% of students commented they were afraid to face exams because of the online learning system. 61% of students commented they did not get any opportunities to discuss the lessons with their friends during COVID-19. 56% of students commented online classes were not as effective as classroom session's. Because they encountered technical problems (range issues, sound braking problem of the device) in online classes.

#### **BIBLIOGRAPHY**

Abhishek (August 17, 2020), Issues Facing Online Education, Hindustan Times.

Agarval Surendra (September 2020)The digital transformation of education in India during the period of lockdown due to Covid 19.https://www.researchgate.net/.

Aristovnik Aleksandr, Kerzic Damijana, Ravseli Dejan, Tomazevic Nina & Umek Lan (October 2020)Impacts of COVID 19 pandemic on higher education students: A global perspective. https://www.mdpi.com/.

Bagul D Tushar (May 2020)Covid 19 era: students role to look at problems in education system during lockdown issues in Maharashtra India.https://www.ijrrjournal.com/IJRR-Vol. 7-issue. 5.

Barshikar Nikhil (July 10, 2020), How COVID-19 is Revolutionizing the Online Education Industry, https://www.entrepreneur.com

Carmen & Maria (September 13, 2020), COVID-19 and teacher education: a review of online teaching and learning practices, https://www.tandfonline.com

Chaubey Kumar Arun (August 2020)Online education amid covid 19 pandemic causing digital divide among students.https://zeenewes.india.com/india/online-education.

Choudary Richa (April 2020)Covid 19 pandemic :Impact and strategies for education sector in India. https://government.economictimes.indiatimes.com.

Dhanakar Rohit (September 23, 2020) E-learning in India, a case of bad education, The Hindu.

Dhawan Shivangi (20 June 2020) Online leading: A panacea in the time of covid19 crisis.https://journals.sagepub.com.

Dhewan Shivangi (June 20, 2020), Online Learning: A Panacea in the Time of COVID-19 Crisis,https://journals.sagepub.com

Dr Singh Anviti (13 July 2020), Online learning and education for all during and after covid19 pandemic.https://www-financialexpress-com.

Dr.Shetty Shankar Vidya (March 31, 2020), Emergence of Online Learning Platforms during COVID-19 Pandemic.https://www.highereducationdigest.com

Farooqui Sarah (may 2020)Education in the time of covid 19:how institutions and students are coping. <a href="https://www.business-standard.com/article">https://www.business-standard.com/article</a>.

Farooqui Sarah (1 May 2020), Education in the time of covid19 how institutions and students are coping.https://wap-business—standard-com.

Gupta Anuraj (5 June 2020),Post covid19 Indian online education industry Boon or bane for students.http://bweducation.businessworld.in.

Gupta Gouri (27 May 2020) Online school education in India during covid19 the students, parents, teacher experience: Learning opportunities and challenges.https://www-orfonline-org.

Gupta Rishabh (13 July 2020) A student's perspective on online education covid19 may have changed the classroom but learning continues.https://www-firstpost-com.

Henaku Adu Eugene (June 2020)Covid 19 online learning experience of college students in the case of Ghana.https://www.researchgate.net/publication.

Hodges Charles, Moore Stephanie, Lockee Barb, Trust Torrey and Bond Aaron (March 27, 2020), the Difference between Emergency Remote Teaching and Online Learning. https://er.educause.edu

Jahangeer Sumbul (may 2020)How lockdown reveals actual state of e-education in India.https://nje-newspaper.com/ Chandra Yamini (October 2020)Online education during Covid 19 pandemic stress and emotional intelligence coping strategies among college students.https://www.emerland.com/

Jahangeer Sumbul(20 May 2020),How lockdown reveals actual state of education in india.https://government-economictimes-indiatimes-com.

Jahangir Sumbul (20 May 2020) How lockdown reveals actual state of eeducation in India.https://government-economic times-India times-com.

Jena Kumar Pravat (June 2020) Impact of Covid 19 on higher education in India. https://www.researchgate.net/publication/.

Jena kumar Pravat (May 2020),Online learning during lockdown period for covid19 in India.https://www.researchgate.net

Jha Abhishek ( August 2020)Issues facing online education.https://m.hindusyantimes.com/india-news.

Kapasia. N ( June 2020)Impact of lock down on learning status of undergraduate and postgraduate during Covid 19 West Bengal. https://www.ncbi.nlm.nih.gov/pmc/articles.

Kasrekar Deepali & Wadhavane Gayatri (May 16, 2020), Impact of COVID-19 on Education System in India, https://www.latestlaws.com.

Kundu protiva (21 July 2020) to no one's surprise online schooling has started taking a psychological toll on students.https://m-thewire-in.cdn.

Lakshmanan Remya(9 April 2020) How is covid19 impacting online education.https://www.investindia.gov.in

Lall Shatakshi & Singh Narved (2020) COVID 19 unmasking the new face of education. https://pharmascope.org/.

Li Cathy & Lalani Farah (April 2020)The covid 19 pandemic has changed education forever. This is how.https://www.weforum.org/agenda/

Li Cathy and Lalani Farah (April 29, 2020), The COVID-19 pandemic has changed education forever. This is how? https://www.weforum.

Li Cathy(29 April 2020),The covid19 pandemic has changed education forever this is how.https://www.weforum.org

Live Edex(7 May 2020)Lockdown impacts online education, a new normal for government ed tech platforms.https://m-edexlive-com.

Mohalik Ramakanta, Sahoo Sonali (January 2020)E-readiness and perception of student teachers towards Online learning in the midst of Covid 19 pandemic.https://www.researchgate.net.

Nair Vandana (16 October 2020), Online learning in the times of covid19.http://bweducation.businessworld.in.

Sam (September 3, 2020) Digital India is not prepared for digital education, under the title 'The digital over-promise', Indian Express.

Sharma Krithika (April 2020) Why online classes may not be such a good idea after all, especially for kids.https://theprint.in/india/education.

Soni preeti(16 September 2020),8 in 10 parents in those five Indian States say there was no Online education in government schools during the lockdown.https://www-businessinsider-in.

Soykan Emarah (5May 2020) COVID-19 pandemic and online learning the challenges and opportunities.https://www.tandfonline.com

Subbarao Nagaraj(25 May 2020),7 Reasons why students should be part of online classes during lockdown.https://www.investindia.gov.in.

Sun Qyan Anna & Chen Xiufang (2008) Online Education and its Effective Practice,https://www.researchgate.net,

Sushma Modi, Postaria Ronika (October 2020) How COVID 19 deepens the digital education divide in India.

Thomas Andrew, Shenoy Mohan, Trivikrama K Shenoy( August 2020)Survey among medical students during Covid 19 lockdown: The online class Dilemma.https://www.ijms.info/IJMS/article.

Mathrubhumi.	

# **APPENDIX**

# QUESTIONNAIRE

# EXPERIENCE OF ONLINE EDUCATION DURING THE PERIOD OF COVID 19 : A STUDY AMONG DEGREE STUDENTS

STUDY AMONG DEGREE STUDENTS	
PERSONAL DETAILS:	
NAME:	
SEMESTER:	
DEPARTMENT:	
SOCIO-ECONOMIC FACTORS OF STUDENTS	
1) How long have you been undergoing online classes?	
a) 1-2 months b) 3-4 months c) 5-6 months d) more than 7 months	
2) How were classes imparted by teachers?	
a) Live class b) Recorded audio send via Whatsapp c)Recorded video with ppt v	via
WhatsApp d) Others-specify	
3) Do you have an internet facility in your home?	
a) Yes b) No	
A) If yes, was it stable and economic?	
a) Yes b) No	
B) If no, how did you access class	
4) Were your parents able to recharge the internet for classes?	
a)Yes b) No	
A) If no, who else supported you?	

a) Collage b) Friends c) Relatives d) others specify
4) Which device were you using to attend online class?
a) smartphone b)computer c) laptop A) Was that yours or others?
a)) mine b) others (specify-father, mother siblings)
5) How did you learn about using new technology?
a) family b) friend's c) others- specify A) Did you feel it was easy to use?
a) Yes b) no
B) If no, what difficulties have you faced in using it?
a) Range problem b) recharge issue c) lack of technical knowledge
d) Others - specify
C) How did you overcome such difficulties?
6) Whether the online education system has increased the rate of digital divide?
a)Yes b)No
7) Did you attend all the classes in online education?
a)Yes b) No
A) If no, how much had you missed? Specify
8) On an average how many hours did you have online class a day?
a)1hour, b)2 hour, c) 3 hour d) more than 3 hour
9) What was your parents' response while you were spending so much time before
computers/mobile?

10)	Did any of your family members or neighbors criticize you for spending a litime online?
	a) Yes b) No
A) If	yes, what did they tell?
11) V	Vere your parents supportive?
	a) Yes b) NO
12) V	Vas the home environment peaceful for studying through online education?
a)	Yes b) No
A) If	not what issues were you faced?
	ow much you could focus on studying online while staying at home? Specify 14 vant to go to a real classroom?
	a)Yes b)No
EXP	ERIENCE OF THE STUDENTS
15) V	What is your opinion about your Online classes?
	a) Very good b) Good c) Average d) bad
,	o you think classroom education is better than online classes?  a) Yes b) No
Δ) <b>S</b> t	ate Reason;
A) Si	
17)	How did you attend your exams in online mode?
ŕ	How did you attend your exams in online mode?  a) Google forms test b) Descriptive test by writing and sending as mail
17)	

	a)Yes b)No
19)	Did you get any opportunities to discuss the lessons with your friends during
	covid 19?
	a) Yes b)No
20)	Were you able to follow Online classes as effectively as classroom sessions?
a) `	Yes b) No A) If no, why?
	Was the interaction between teacher and students in online classes as effective as in classrooms  a) Yes b) No A) if no, why?
21)	Did you get the opportunity to ask doubts in online education?
	a) Yes b) No
22)	Were you able to follow what is taught? a) Yes b)No
23)	Whether there was mutual cooperation among students as in online classes as in
	classroom?
	a) Yes b) No
24)	Was there any interaction with Faculty and other
	students?
	a)Yes b)No
ADVA	ANTAGES AND DISADVANTAGES
25)	Did you face any technical issues during online classes?
	a)Yes b)No
<b>65</b>   P a g e	

26) What was your major problem to attend online classes? a)Network problem b) Charging problem c)Data recharge problem d) Othersspecify; A) How did you overcome it? 27) Did you face any cyber threat in online education? a)Yes b)No 28) Were you facing any health issues due to online education? a)Yes b) No 29) Did you experience depression & anxiety due to online classes? a) Yes b) No A) If yes specify; 30) What benefits did you experience in online education? 31) Has online education helped you to acquire new knowledge? a)Yes b) No A) If yes what was that? 32) What all advantages did you experience in online education? 33) What disadvantages have you experienced in online education? 34) Did you think that reading habits have reduced during online education? a)Yes b)No 36) Was online learning effective?

# a)Yes b)No

### **NEEDS OF STUDENTS**

- 35) What support did you expect from College?
- 36) What support did you expect from teachers?
- 40). What all support did you expect from Family?
- 41) What changes do you expect in online education?

\*\*\*\*