A STUDY ON HOW E-LEARNING APPS AFFECT STUDENTS

Dissertation submitted to

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

In partial fulfilment of the requirement for the degree of

BACHELOR OF COMMERCE

Submitted by

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BHARATA MATA COLLEGE,THRIKKAKARA,KOCHI
(Affiliated to Mahatma Gandhi University Accredited by NAAC with 'A+' Grade)

2020-2023

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BONAFIDE CERTIFICATE

This is to certify that this dissertation entitled "**A study on how e-learning apps affect students**" has been prepared by AARON BENNY (Reg. No. 200021072267), APARNA THOMAS (Reg. No. 200021072276) and MARY NIDHIYA (Reg. No. 200021072291) under my supervision and guidance in partial fulfilment of the requirement for the Degree of bachelor of commerce of Mahatma Gandhi University. This is also to certify that this report has not been submitted to any other institute or university for the award of any degree.

They are allowed to submit this dissertation.

Signature of the HOD   Signature of the Guide

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Place: Thrikkakara

Date:

                                          Name & signature of external examiner

DECLARATION

We, AARON BENNY , APARNA THOMAS and MARY NIDHIYA B.com final year students, Department of Commerce, Bharata Mata College, Thrikkakara, hereby declare that the dissertation submitted forthe award of bachelor's degree is our original work. We further declare that the said work has notpreviously been submitted to any other university or academic body.

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ACKNOWLEDGEMENT

In preparation of this dissertation "**A study how e-learning apps affect students**" We received valuable guidance and encouragement from many quarters. We take this opportunity to thank them all. Firstly, we thank the god almighty for showering his bountiful blessings without whichwe would not have completed this dissertation successfully,

We express our deep sense of gratitude to HOD **Dr.CA Joseph Joy Puthussery**, Head of the Department of Commerce In the task of preparing dissertation report we have been assisted by respected teachers of Bharata Mata College. Thrikkakara.

We would like to express our gratitude to our academic guide Assistant Professor **Dr. CA Joseph Joy Puthussery**, faculty of the Commerce department for her meticulous guidance and constantencouragement throughout our dissertation.

We extremely indebted to our parents and friends for their encouragement given to our task of preparing the dissertation report. We again extend our whole sincere to all those who has directly and indirectly helped us during the course of our work.

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CHAPTER-1

INTRODUCTION

1.1 INTRODUCTION

"If we teach today as we taught yesterday,we rob our children of tomorrow."

-John Dewey

The teaching methods of the past only take us backwards, not forwards. In today's always-connected world, the value of information has risen and the ways we obtain it have changed. E-learning is undoubtedly one of the most promising companies on the world market. E-learning is the process of disseminating knowledge through a variety of media, including webinars, CDs, e-books, and e-applications. This completely changed how pupils were taught in the past using chalk and a chalkboard. E-learning training, on the other hand, facilitates giving and receiving and increases productivity. Teachers only use the most recent technology when implementing a lesson plan. E-learning is what we refer to as instruction that is expressly provided over the Internet as opposed to in a traditional classroom setting with an instructor. Online learning is the use of the internet, technology, and previously learned information and abilities. As a result, learning and teaching are made simpler, easier, and more efficient. Students can design their own training schedules with online learning. The teachers find things to be pretty simple.

Due to digitization or Covid-19, people are adopting educational apps as a means of learning. Learners will love the app, which allows you to stream lessons online, live concepts and tests. The huge growth in the use of educational programs has left its mark on the minds of the youth, so future learning will depend a lot on these educational programs.

BYJU's, Udemy, Duolingo, edX and Photomath bring unique features. These features provide learners with new learning experiences. Completing any course remotely through the app helps a person develop their learning. Through these programs, all people from anywhere in the world can get their desired courses. Since educational applications are related to technology, students not only get theoretical knowledge, but also watch video animations or real photos and videos. E-learning applications take learning to a whole new level. Education is everyone's right and thanks to apps, everyone is using this right properly.

E-learning has been developed to enable students to complete their foundational education and develop their abilities. Additionally, individuals are able to earn a degree certificate without ever setting foot inside a classroom, university, or other educational setting. Tutors can teach from anywhere at their preferred time, which is a terrific source of income. Applying e-learning to all educational levels aided in ensuring that students quickly and fully understood the lectures. As a result, sharing knowledge through various online platforms is a useful practise. In the modern era, where competition is growing and the world is expanding, this is crucial. Therefore, timely knowledge aids in a person's improved development.

A crucial component of our society is education. It plays a significant role in our lives, and having access to it has a huge impact on both our achievements and failures. Technology has played a significant influence in the evolution of the educational system to meet the demands of the rapidly changing global environment. Recently, the use of mobile phones in education has increased significantly, particularly with regard to e-learning tools.

These programmes offer an interactive learning environment that enables students to learn whenever and wherever they want, making learning enjoyable and simple. Learning has many advantages, including access to more knowledge, personalised learning experiences, improved engagement, communication ease, and—most importantly—remote access.

The COVID-19 pandemic has improved online education in a number of ways. The majority of people embraced new forms of distance learning when schools, colleges, and offices were shut down. In addition, a lot of people are using their free time to use online learning platforms to pick up new personal or professional skills due to the cancellation of social gatherings and confinement limits. The industry for online learning had already been expanding quickly before the coronavirus outbreak. The use of e-learning technologies has, however, increased as a result of the closure of enterprises and educational institutions. Since the introduction of COVID-19, there has been a huge increase in the use of remote learning, virtual teaching, video conferencing, online learning software, and language apps. Online learning will likely become popular when the epidemic is gone as a way to supplement the education that was previously provided in classrooms and universities. Traditional offline learning and online learning can work together to enhance the overall educational experience for both young learners and adults in the post-COVID-19 future.

For learners to enhance their abilities and obtain a foundational education, online learning has been introduced. They are able to earn a degree without attending a college, university, or other educational facility. Teachers can earn a lot of money teaching online since they can do it whenever and anywhere they want. Students are now better able to comprehend the courses quickly and completely , thanks to the adoption of online learning at all academic levels. The audio-visual teaching approach, according to psychology, creates a structured learning environment. Both teachers and students are effectively engaged. The goal of online education is to bring together all the many stakeholders, including students, teachers, specialists, and professionals. Therefore, it is a good idea to spread material that has been validated through a number of internet venues. This is significant in current times when rivalry is expanding and the world is likewise developing. Therefore, having quick knowledge aids improvement.

1.2 STATEMENT OF THE PROBLEM

Online education apps helps students to learn according to their pace. Further, it also promotes easy understanding of concepts through visualization.However, it also has some difficulty in it. One such major challenge is accessing. Students without reliable access to the internet or technology struggle to participate in eLearning. Most of the students do not have enough technology gadgets. Even if the students who have this gadgets, are not able to practice like they do in normal classes. There are lot more problems student face with online education app like Network issues, High cost of product, and so on. This problem make online learning more complicated for students who prefer online education app.Therefore this study will enable us to know the impact of
e-learning apps on the students of Ernakulam and Idukki district.The disadvantages of e-learning apps ,the quality of information provided by it etc.

1.3 OBJECTIVES OF THE STUDY

The online learning or e-learning had its impact both the pre and post covid 19 pandemic .The amount of support provided by it for the students to access information was a revolution over the past decades ,it had all its positives and negatives so, the major objectives of this study are:

- To study why e-learning apps are preffered by students
- To study the quality of information provided by online educational apps
- To study the perception of students to e-learning apps
- The major challenges faced by students using e-learning apps
- To study the impact of e-learning apps on students of 2 different districts.

1.4 SCOPE OF THE STUDY

The study is limited to check the performance of students who reside in the districts of Ernakulam and Idukki.This data will help us understand the varied perception of students to e-learning apps ,the challenges face ,the level of understanding etc which wil be more benefited in the future research.

1.5 RESEARCH METHADOLOGY

1.5.1 TOOLS FOR DATA COLLECTION

- PRIMARY DATA
  The primary data is collected through questionnaire method.Questionnaire were distributed to the students in Ernakulam and Idukki district who were using e-learning apps.

- SECONDARY DATA
  The secondary data is collected through internet , books,journal etc.

SAMPLE DESIGN

- SAMPLE SIZE
  The sample size taken for the study is 50 and it represent the number of respondents

- SAMPLING TECHNIQUE
  Sample for the study is selected through simple random sampling.

- STATISTICAL TOOL
  Statistical tools like percentage method ,pie chart,bar diagram etc are used for analyzing and interpreting the data.

1.6 LIMITATIONS OF THE STUDY

- The data was collected from only one type of respondents that is the students.So, the results of the study cannotbe generalised.

- The study is done on the students of Ernakulam and Idukki only ; thus, if the data is collected fromvarious states or countries, it can give better comparative results to understand the student's perspective.

1.7 CHAPTERISATION

- Chapter 1

  It deals with introduction to the topic ,statement of the problem ,objectives,scope,methodology,limitations etc.

- Chapter 2
  The second chapter deals with the review of literature done by other researchers on e-

learning apps.

- Chapter 3
  The third chapter deals with theoretical framework.

- Chapter 4
  The fourth chapter deals with the analysis and interpretation of data collected from students.

- Chapter 5
  The fifth chapter deals with the findings and suggestion we made after the analysis and interpretation of thedata.

CHAPTER-2

REVIEW OF LITERATURE

A literature review is a report that evaluates data from the literature in your area of interest. This literature should be described, summed up, assessed, and explained in the review. This need to give the study's theoretical foundation and assist in defining its scope.

2.1 Previous Studies

Zheng, et al., (2016) and Nambiar, D. et al. (2020) have found that pupil show more interest and engagement in social media than in MOOC courses. One of the reasons why boys and teenagers occasionally misuse the Internet and develop Internet addiction is the effectiveness and measure of course material, specialised assistance, and general involvement in online class delivery. When children are attending online classes, parents should keep an eye on this and provide them sufficient freedom. The biggest challenge we face is providing pupils with decent learning that is qualified, organised, and available in this situation. Recognising the students' common sense concepts and their preferred online learning strategies increases the likelihood that clients for innovation have an increased capacity for innovation.Use of innovation that is enthusiastic yet sloppy is viewed as going in the right path.

Alqahtani, Mohammad, Ansari, M. S., & Tripathi, A. (2015) conducted experimental research to determine the relationship between behavioral factors and utility of Mobile Learning applications. They discovered that students were quite satisfied with and had a favourable attitude towards mobile learning tools.

Lopuch, M. (2013) A study on the usage of mobile learning apps in higher education in India discovered that students were knowledgeable about the use of the internet and mobile applications in the classroom. In order to develop personalised learning curriculum employing educational apps and assessment tools, researchers conducted experimental study using the e spark app. They came to the conclusion that educational applications have shown to have a significant and favorable impact on students' performance and outcomes. According to Zhang, S.C., & Camilleri, M. A. (2016), users of the learning app were pleased with its practicality, adaptability, user-friendliness, wealth of resources, and authentic linguistic environment. Researchers Thinley, Geva, and Reye (2014) found that participation by both teachers and students is necessary for successful learning to take place.

Anca Popovici, Cosmina Mironov (2015) the study of students' opinions on e-learning in both official and informal contexts. The study's goals were to determine how students felt about online learning, what strategies they used to learn online in various situations, and which online learning tools were used in higher education. The findings demonstrated that students are knowledgeable about the changes brought on by digital technologies, skilled users of technology in formal settings, and active users of these technologies to assist learning.

Christina Keller, Lars Cerberus (2002) examined students' perceptions of e-learning taking students at Jönköping University in Sweden as an example.The findings demonstrated that the university's method for deploying the learning system had a greater impact on students' perceptions than did the specific background elements. Male students, students with prior computer experience, and students who had a positive outlook on new technology all had lower attitudes about learning on campus than other students did.

Michael Tagoe (2012)[3] studied about the incorporation of e-learning in a university. The way universities are run in developed nations has undergone substantial changes as a result of technological development. Despite the fact that their universities have made significant progress in tackling concerns of access, cost of higher education, and quality through e-learning, Africans are still battling these problems in the twenty-first century. Although the adoption of e-learning is one of the University of Ghana's strategic aims, not much is known about its policy orientation. Additionally, little research has been done on the advantages and difficulties of e-learning at the University of Ghana.In contrast to most studies on e-learning, this paper explores the perspectives of students who may be adversely and directly influenced by the programme. The article looks at the infrastructure requirements, the policy environment, the advantages, and the challenges of effective e-learning implementation. Additionally, the article offers suggestions for the future.

In 2007, **Hassan M. Selim** oversaw an exploratory inquiry into the variables that how people perceive e-learning and how IT and fierce competition are changing colleges all over the world. This study looks at the policy environment, infrastructure requirements, and advantages and disadvantages of implementing e-learning. This study looked at the crucial variables influencing universities' use of e-learning technologies from the viewpoint of the students, and it identified

four CSFs: teacher characteristics, student characteristics, technological infrastructure, and institutional support.

Brahmanand Sharma, Shilpa Sankpal, Chanda Gulati (2020) and Anuradha Pathak, Khushboo Makwana, Pragya Sharma (2019) conducted studies to identify the factors which affect students' perception on e-learning. The findings showed that four key factors—e-learner competency, external influence, system interactivity, and social influence—significantly affect students' view. The study's goal was to explore students' attitudes and perceptions of online learning, and the findings revealed that most students have favourable attitudes and perceptions of the medium.

Researchers **Zainal Fikri Zamzuri, Mazani Manaf, Yuzaimi Yunus, and Adnan Ah-mad (2013)** looked at how users perceived the security mechanism for e-learning. Students were given questionnaires, and STRIDE threat modelling was used to determine the system's critical area. Results indicated that students are worried about the reliability and honesty of the system, with the evaluation service being the most important service. To guarantee that students have faith, system developers and administrators must ensure that the information in the system is error-free. To further understand how e-learning developers meet students' demands, more research is required.

Karl L Smart, James J Cappel (2006) examined students' satisfaction with online instruction in two undergraduate business courses. As a result, participants in an elective course gave the online modules much higher ratings than those in a required course, according to the findings. This implies that teachers should be cautious in how they include online modules into their conventional, in-person courses. The impacts of incorporating online modules that are significantly shorter in duration into the traditional classroom model as well as how prior experience with technology and online learning affects students' attitudes towards and success with e-learning are recommended to be explored in future study.

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  factors affecting perception of students towards e-leaming, Intenationa Journal of Management(1JM) 11(10).
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2.2 THEORETICAL FRAMEWORK

An interactive programme known as an e-learning app enables students to enter data and receive anticipated results on their devices. To access such an app, students only need cellphones with an internet connection. You can access interactive content through e-learning apps, which keeps you interested in what you're studying. They provide a variety of elements, including tests, evaluations, videos, audio files, and more, to support learning in a variety of ways.

Online learning apps have a user-friendly interface. Students are required to log their attendance throughout class. Assignments are given to students with due dates for completion. They can keep tabs on and evaluate their own performance. They can even offer suggestions for improving learning and teaching methods. A few well-known e-learning applications are BYJU'S, 90+, Google Meet, and Zoom. E-learning software is a fantastic learning resource for students without access to a physical classroom. Students who are working professionals who want to develop their abilities can benefit from it. It keeps students from travelling too far.

2.2.1 Features

1. 1.The retention and completion rates for e-learning apps are greater. This allows students to finish one course fast and move on to the next.
2. 2.Students have access to a number of learning opportunities through e-learning tools, including podcasts, videos, and other practical methods. It will boost e-learning's adaptability.
3. 3.This approach also includes parents. Inquiries about their children's academic or extracurricular performance can be answered. Using their performance, e-learning apps produce individual student reports.
4. .These apps focus on several things, but one of them is raising student involvement. They have put a lot of effort into making the apps available to students at any time and from any location.

2.2.2Advantages

1. Active, autonomous learning is encouraged by online education.
2. It is actually a very practical learning alternative for persons who are full- or part-time workers and students.
3. People can use the resources offered by e-learning with the utmost freedom and convenience from any location at any time.
4. Because the internet is readily available around-the-clock, people can train themselves at

any time and from any location.
5. People can also train themselves throughout the day, on the weekends, or whenever they have free time.
6. Through message boards and chats, one can also connect with everyone online and, if necessary, clear any questions.

2.2.3 Disadvantages

1. People only acquire knowledge on a theoretical level; when it comes time to apply what they have learned, things may be slightly different.
2. Online learning completely lacks face-to-face instruction, which some people find to be quite important.
3. Another major issue with e-learning programmes is the level of security.

4. The majority of online tests only allow questions that are strictly objective in nature.
5. In addition, the online exams that are computer graded typically have a propensity to be knowledge-based exclusively and are not primarily based on practicality.
6. As anyone can do any project online, rather than the actual student themselves, there is a concern with the reliability of any online course student's work.

CHAPTER – 3
# DATA ANALYSIS AND INTERPRETATION

DATA ANALYSIS AND INTERPRETATION

Any research project must include data analysis and interpretation. The analysis and interpretation of customer data are the topics covered in this chapter. Tables and diagrams were used to present the data once they had been analysed. Inferences were later made based on the interpretations of the acquired data in order to provide answers to the questions of the study.

The analysis and interpretation of data collected regarding **"A STUDY ON HOW E-LEARNING APPSAFFECT STUDENTS"**

3.1 GENDER OF RESPONDENTS

| GENDER	NO.OF RESPONDENTS	PERCENTAGE
MALE	39	39
FEMALE	61	61
OTHERS	0	0
TOTAL	**100**	**100**

Sales

■ MALE   ■ FEMALE   ■ OTHERS
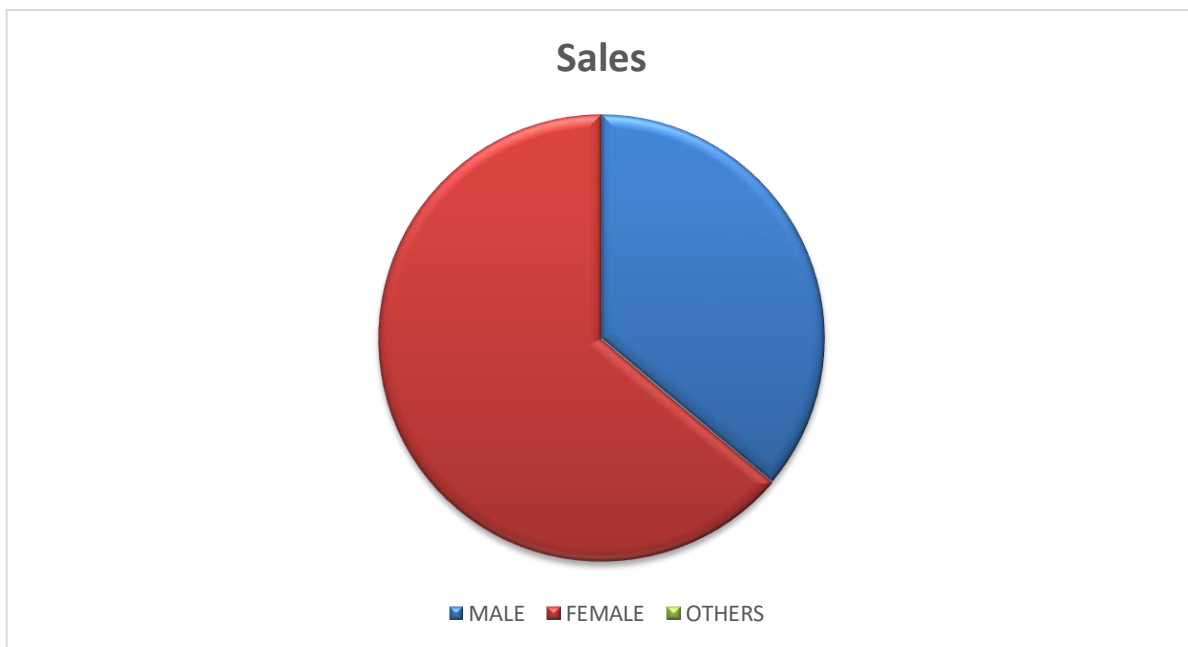
Source:Primary Data

INTERPRETATION:

From the above graph we can see that the majority of the respondents were of females. They contributed upto 61% of total respondents.While male students were only 39% of total respondents.

3.2 AGE OF RESPONDENTS

| AGE	NO.OF RESPONDENTS	PERCENTAGE
15-20	30	30
20-25	64	64
25-30	6	6
TOTAL	100	100

AGE

■15-20 ■20-25 ■25-30
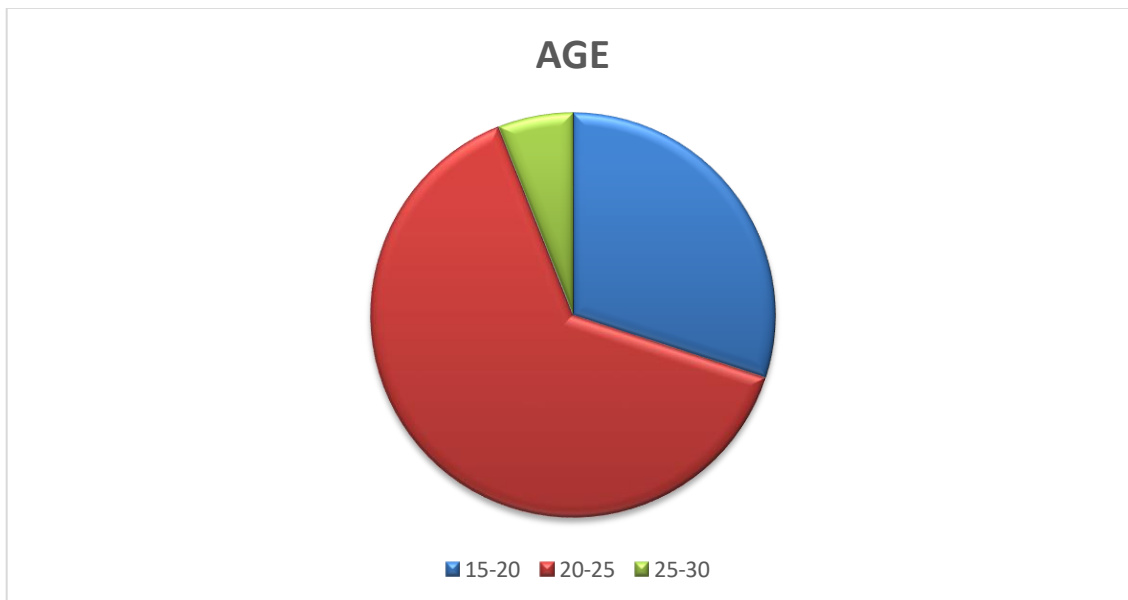
Source: Primary Data

INTERPRETATIONS:

Out of 100 respondents 64% are in the age group of 20-25, 30% under 15-20, 6% under 25-30.Most of the respondents falls under the age group of 20-25.

3.3 QUALIFICATION OF RESPONDENTS

QUALIFICATION	NO.OF RESPONDENTS	PERCENTAGE
SCHOOL LEVEL	8	8
UNDER GRADUATE	81	81
POST GRADUATE	10	10
OTHERS	1	1
TOTAL	**100**	**100**

Qualification

■ School level ■ Undergraduate ■ Post graduate ■ Others
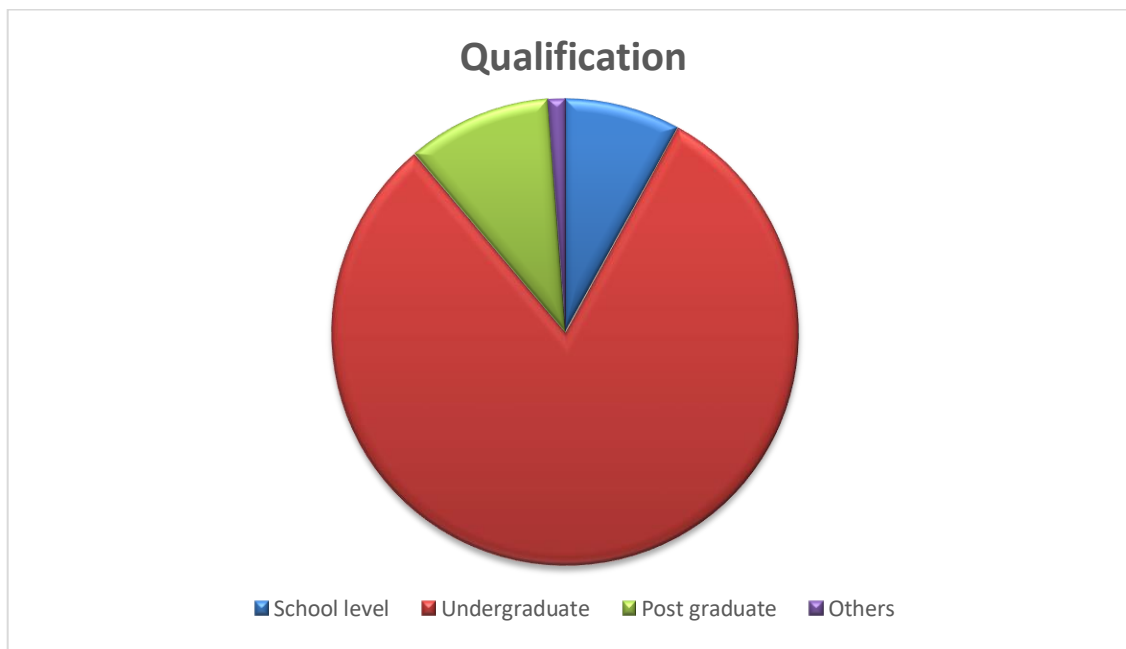
Source:Primary Data

INTERPRETATIONS:

Out of 100 respondents 81% belongs to under graduate, 10% under post graduate, 8% under school level and 1% falls under other course.Most of the respondents falls under under-graduate level.

3.4 DISTRICT OF RESPONDENTS

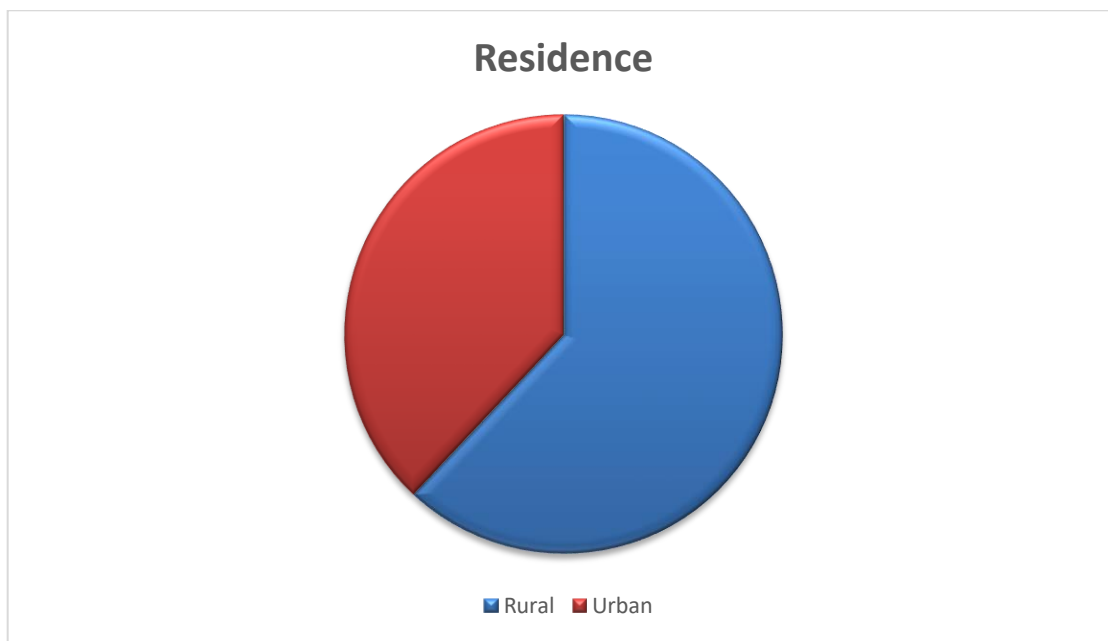| DISTRICT	NO.OF RESPONDENTS	PERCENTAGE
ERNAKULAM	77	77
IDUKKI	23	23
TOTAL	**100**	**100**

DISTRICT
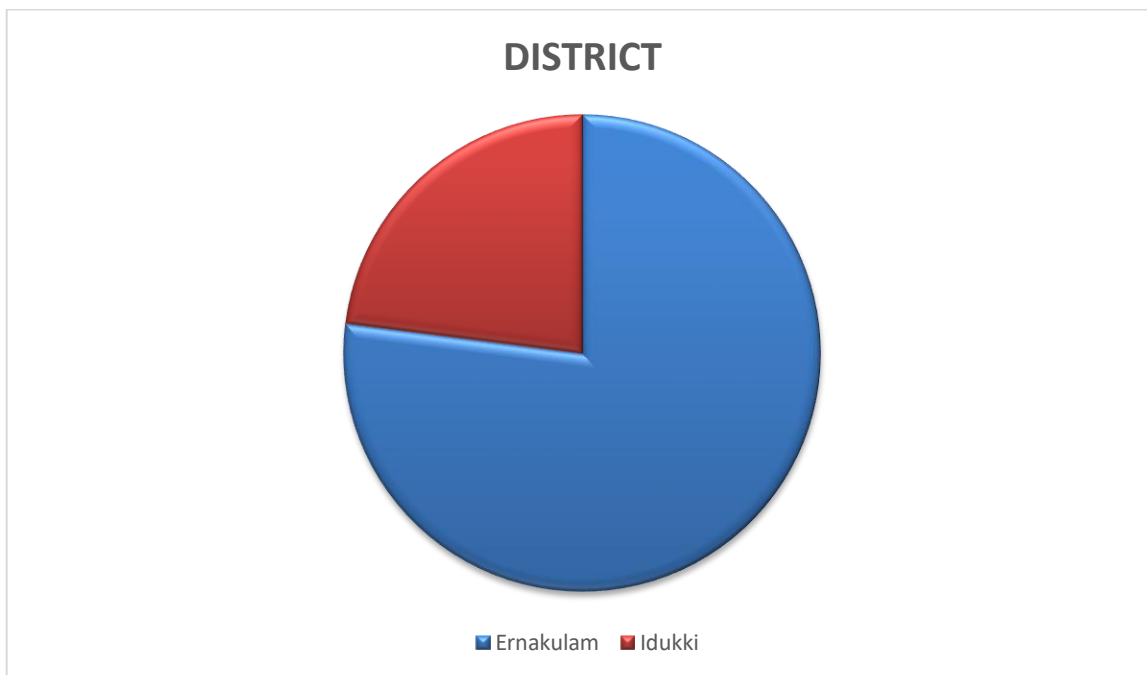
■ Ernakulam ■ Idukki

Source:Primary Data

INTERPRETATIONS:

Out of 100 respondents 77% belongs to Ernakulam and the rest 23% belongs to Idukki.Majority of the respondents are from Ernakulam district.

3.5 RESIDENCE OF RESPONDENTS

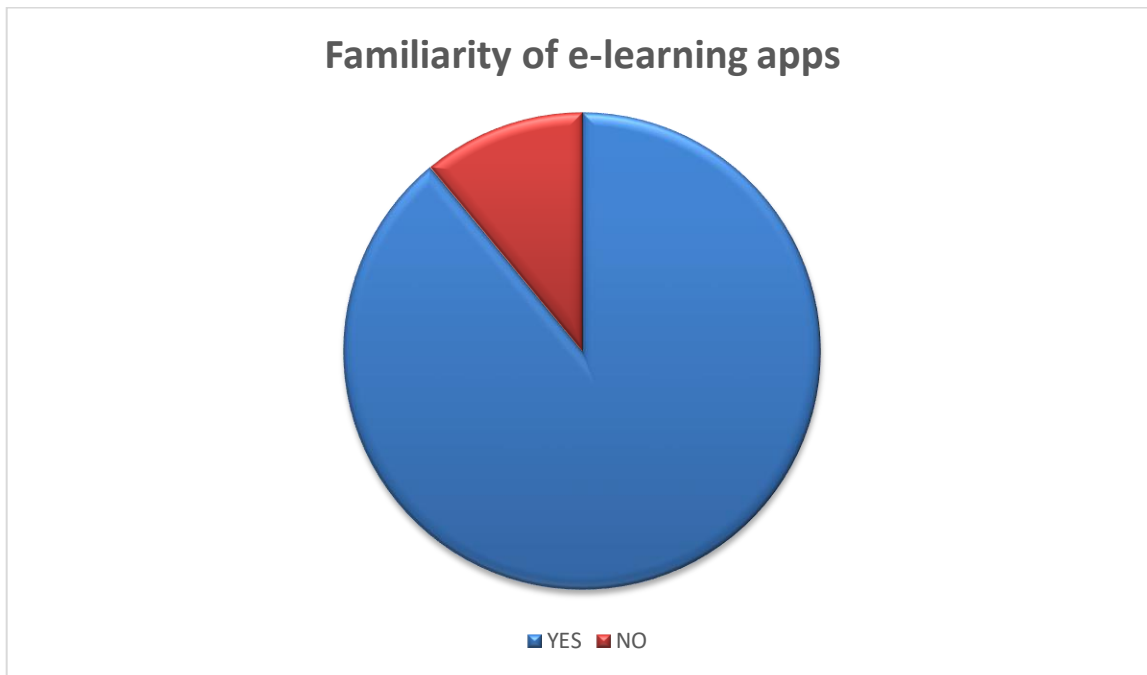| RESIDENCE	NO.OF RESPONDENTS	PERCENTAGE
RURAL	62	62
URBAN	38	38
TOTAL	100	100

Residence

■ Rural ■ Urban

INTERPRETATIONS:

Out of 100 respondents 62% belongs to rural and the 38% comes under urban area.Majority of the respondents belong to rural area.

3.6 RESPONDENTS FAMILIAR WITH E-LEARNING APPS

| RESPONSES	NO.OF RESPONDENTS	PERCENTAGE
YES	89	89
NO	11	11
TOTAL	**100**	**100**

Source:Primary Data

INTERPRETATIONS:

Out of 100 respondents 89% are familiar with e-learning apps and the rest 11% are unfamiliar.Majority of the respondents are familiar with e-learning apps.

3.7 USAGE OF VARIOUS E-LEARNING APPS

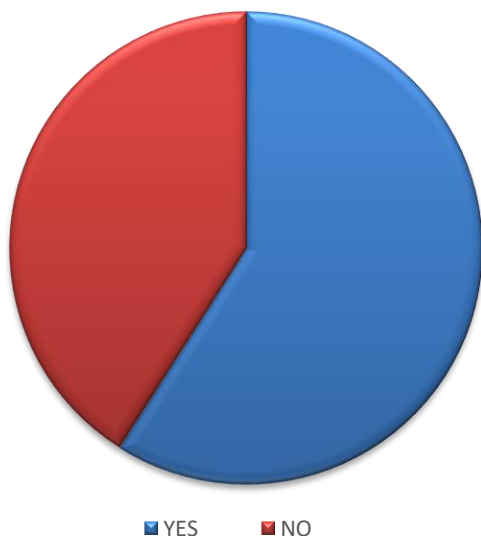| E-LEARNING APPS	POSITIVE RESPONSES	NEGATIVE RESPONSES	TOTAL	POSITIVE PERCENTAGE	PERCENTAGE	TOTAL
BYJU'S	59	41	**100**	59	41	**100**
90+	31	69	**100**	31	69	**100**
WhiteHat Jr	12	88	**100**	12	88	**100**
Clubhouse	29	71	**100**	29	71	**100**
Coursera	20	80	**100**	20	80	**100**
SWAYAM	15	85	**100**	15	85	**100**

Types of E-learning apps you use ?
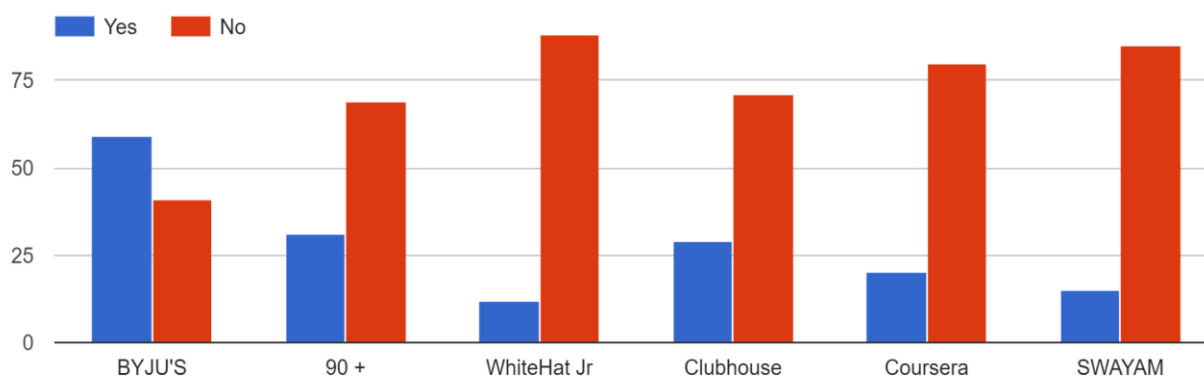
Source:Primary Data

INTERPRETATION:

From the above chart we can see that BYJU'S is the widely used e-learning app by the respondents. Nearly 59% are using it. It is followed by other e-learning apps such as 90+ which constitute around 31% users, followed by WhiteHat Jr with 12%users , clubhouse with 29%users,Coursera with 20% and SWAYAM with 15%. However popular e-learning apps like , WhiteHat Jr& SWAYAM have only limited number of users which constitute 12& 15% respectively because it has drawn criticism from many of its misleading claims,quality of teaching and aggressive tactics to court students.

3.8 RESPONDENTS RESPONSE ON THE MOTIVE OF E-LEARNING APPS

| RESPONSE	NO.OF PARTICIPANTS	PERCENTAGE
YES	59	59
NO	41	41
TOTAL	**100**	**100**

Source:Primary Data

INTERPRETATION:

From the above table 59% of the respondents give a positive response and the rest 41% gives a negative one . From this it is clear that majority of the respondents believe that E-learning apps are more profit oriented than service oriented.

3.9 PROBABLITY OF TAKING ONLINE COURSES IN FUTURE

PROBABLITY	NO.OF RESPONDENTS	PERCENTAGE
Less than 25%	16	16
25-50%	40	40
51-75%	36	36
More than 75%	8	8
TOTAL	**100**	**100**

PROBABILITY

■ Less than 25% ■ 25-50% ■ 51-75% ■ More than 75%
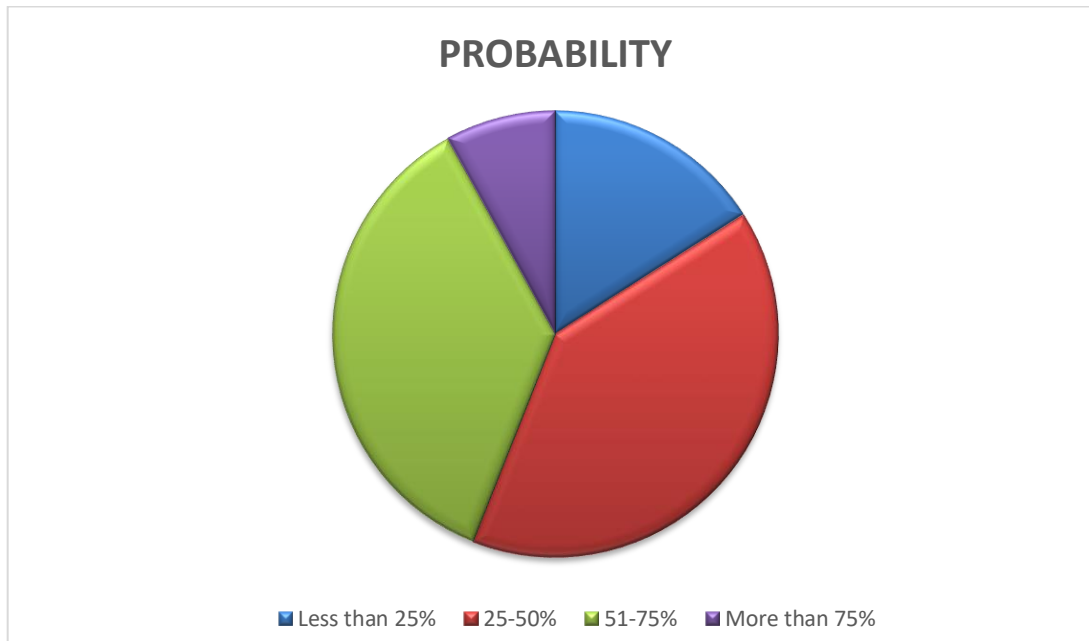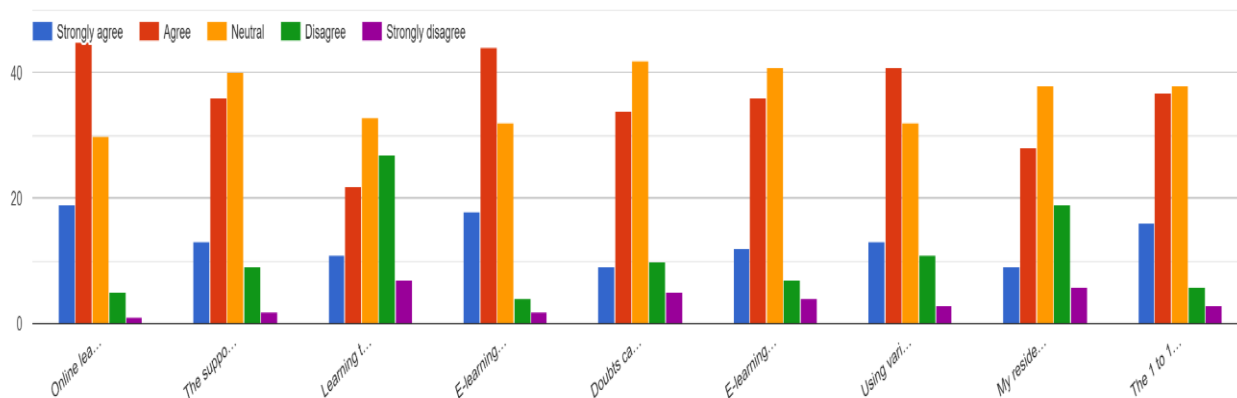
Source: primary data

INTERPRETATIONS:
From the above graph we can say that about 40% of the respondents seem to use online courses in near future.8% of the respondents say that probability of taking online courses is very low.

3.10 RESPONSE TOWARDS VARIOUS QUIERIES

RESPONSES	Online learning helps me learn better		The support from teachers are high in online classes		Learning through online is far better than regular classes		E-learning helps in saving time and helps to focus in other activities	
	NO.	%	NO.	%	NO.	%	NO.	%
Strongly agree	19	19	13	13	11	11	18	18
Agree	45	45	36	36	22	22	44	44
Neutral	30	30	40	40	33	33	32	32
Disagree	5	5	9	9	27	27	4	4
Strongly Disagree	1	1	2	2	7	7	2	2
TOTAL	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

RESPONSES	Doubts can be cleared easily online		E-learning helped me improve my academic results		Using various gadgets for e-learning has decreased concentration		Residence act as a barrier in providing proper benefits		The 1 to 1 tutor facility is as effective as realtime teaching	
	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
Strongly agree	9	9	12	12	13	13	2	2	16	16
Agree	34	34	36	36	41	41	28	28	37	37
Neutral	42	42	41	41	32	32	38	38	38	38
Disagree	10	10	7	7	11	11	19	19	6	6
Strongly Disagree	5	5	4	4	3	3	6	6	3	3
TOTAL	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

25

State you agreement with respect to the following statements
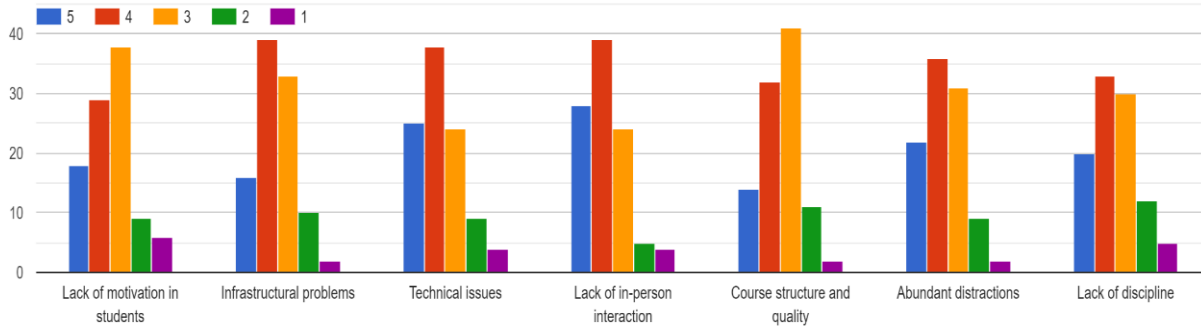
Source: Primary Data

INTERPRETATIONS:

- From the above graph we can see that about 45% of the respondents agree with the statement that e-learning helps learning better and about 6% disagree with the statement.

- Majority of the respondents (40%) neither agree nor disagree with the statement that 'The support and assistance from the teachers in online classes are very high', 12% of the respondents strongly agree with the statement and 4% strongly disagree with it.

- Here, majority of the respondents provide a neutral response to the statement that' learning through online is far better than regular classes.'11% of the respondents strongly agree with this and the 7% strongly disagreed.

- About 44% of the respondents says that e-learning apps are time saving and helps to focus in other activities, about 2% disagree with it. The majority response shows that e-learning is time efficient as compared to regular learning.

- 42% of the respondents provide a neutral response to the statement that 'doubt can be cleared easily in online classes', 34% agree with this and the 5% strongly disagree with it.

- Majority of the respondents (41%) neither agree nor disagree with the statement that e-learning helps to improve academic results, 12% of the respondents strongly agree and 4% strongly disagreed.

- For the statement 'Using various gadgets for e-learning has decreased concentration', 41% of the respondents agree and 3% strongly disagree.

- 38% of the respondents provide a neutral response to the statement that 'Residence act as a barrier in providing proper benefits ', 28% agree with this and the 6% strongly disagree with it.

- About 37% of the respondents says that 1to1tutor facility is as effective as real-time teaching , 38% provide a neutral response and about 3% disagree with it.

3.11 RESPONSE TOWARDS DRAWBACKS OF E- LEARNING

RESPONSES	Lack of motivation		Infrastructural Problems		Technical issues		Lack of in-person interaction	
	NO.	%	NO.	%	NO.	%	NO.	%
Strongly agree	18	18	16	16	25	25	28	28
Agree	29	29	39	39	38	38	39	39
Neutral	38	38	33	33	24	24	24	24
Disagree	9	9	10	10	9	9	5	5
Strongly Disagree	6	6	2	2	4	4	4	4
TOTAL	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

RESPONSES	Course structure and quality		Abudant distractions		Lack of discipline	
Strongly agree	14	14	22	22	20	20
Agree	32	32	36	36	33	33
Neutral	41	41	31	31	30	30
Disagree	11	11	9	9	12	12
Strongly Disagree	2	2	2	2	5	5
TOTAL	**100**	**100**	**100**	**100**	**100**	**100**

According to you what is the major problem faced through e-learning apps? Rank the following on a scale of 1-5(1 strongly disagree,2 disagree,3 Neutral,4 Agree, 5 Strongly agree)

Source:Primary Data

INTERPRETATIONS:
- Majority of the respondents neither agree nor disagree that lack of motivation in students is a drawback in e-learning.
- About 39% of the respondents are in the opinion that infrastructural problems exist in e-learning.
- From the point of view of majority respondents (38%), technical issues are a major problem faced in e-learning.
- Majority of the respondents (39%) agree that lack of in-person interaction is a major drawback of e-learning.
- Neutral responses are provided by the respondents,that the course structure and quality of e-learning are inferior compared to regular learning.
- 36% of the respondents are in the opinion that abundant distractions hinder the students from the efficient learning.
- The majority of the respondents agreed that lack of discipline is a major drawback in e-learning.

CHAPTER-4
FINDINGS, SUGGESTIONS AND CONCLUSIONS

4.1 FINDINGS

- Most of the respondents are women
- Most of the respondents are in their 20s
- Students pursuing under graduation form major part of the study
- Most of the respondents belong to Ernakulam district.
- Majority of the respondents are from rural area than urban.
- The majority of respondents use educational applications and are familiar with e-learning apps.
- The most common educational application used and preferred by the respondents is BYJU'S.
- WhiteHat Jr and SWAYAM are the least preferred apps.
- 45% of the respondents agree with the statement that e-learning helps learning better
- Most of the respondents have a neutral opinion about the support and assistance received from the teachers in online learning.
- Neutral response is provided by the respondents about the opinion that learning through online is far better than regular learning.
- Majority find that e-learning helps is time saving.
- Respondents have conflicting opinions regarding the clarification of doubts in online classes.
- Most of the respondents remain neutral about how e-learning affect their academic results.
- Majority of the respondents states that usage of gadgets in online learning decrease the level of concentration.
- Majority of the respondents provide a neutral response on the fact that residence act as a barrier in e-learning.
- Respondents neither agree nor disagree that the 1 to 1 tutor facility provided by e-learning is effective as real time teaching.
- Most of the respondents have a neutral opinion about the motivation of e-learning applications.
- It is found that lack of infrastructural facilities is a major drawback in e-learning.
- There is increased chance of technical problems while using e-learning apps.
- As there is no face-to-face interaction between tutor and the student it results in lack of in-person interaction.
- There is neutral response regarding course structure and quality provided by the e-learning apps.
- Most of the respondents agree that distractions are abundant due to the access of various entertainment applications which can be used simultaneously.
- Due to lack of real time face-to-face interactions, students find difficult to concentrate which leads to lack of discipline.

- Regarding the development of time management skills, the respondents have mixed opinions.
- Out of 100 respondents majority are in the opinion that e-learning apps are profit seeking.
- About half of the respondents are willing to participate in online courses in future.

SUGGESTIONS

- Lack of in-person interaction is seen as a major drawback of inline learning, virtual reality platforms are far better now but as coming to studies the learning app must increase the quality of teaching and should also increase the assistance from teachers.
- E-learning ought to be advanced in such a way that each pupil may want to concentrate properly
- A right care taken through academics helps students to concentrate more and increase the level of discipline.
- As the major drawback seem to be technical issues, various steps must be taken to rectify it.
- Proper plans should be taken to increase the quality of knowledge provided through online learning.
- The time for gaining knowledge is to be decreased so which could keep away from large intake of information.
- E-learning apps should not be just profit making centers, it should be designed and structured for providing quality knowledge to the required ones.
- The number of users can be increased by adopting quality information and methods to gain the interest of pupil.
- Feedback can be beneficial for students to focus on the performance that improves learning.
- The course design through online classes through e-learning apps need to provide essential details like course structure , content ,educational goals etc so that students would find e-learning worthy for them.

CONCLUSIONS

Various studies show that online learning is very useful for students, teachers and the educational institution in general, and the current challenges can be overcome by technological development and increasing the efficiency of the learning.

Since schools and colleges have to close after March 2020 due to the Covid19 epidemic, online education has become increasingly popular in India's educational system. During the pandemic, online schooling also rose to prominence as a major educational tool. Students and professors did not need to present together at a certain location for online instruction to take place. The ability to teach from home was made possible by online education. The time that the kids would have spent attending physical classes can now be saved. The pupils can now use the time they have saved for other activities that will develop their personalities.

Despite many advantages online learning has, it has various challenges some of them include technical issues, lack of in-person interaction, lack of discipline, quality of education etc. Even though e-learning is very effective the occurrence of these errors make it more difficult.

From the study conducted it shows that majority of the respondents are familiar with E-learning apps. Respondents suggest that e-learning apps are greater step towards the economic development of a country. Many students stated that online learning has helped them learn better but what they lack is the support and assistance that they receive through regular classes, lack of in-person interaction has affected students to a great extent. Respondents has provided neutral replies regarding various opinions which shows that both regular learning and E-learning are two discrete steps towards learning and that both these are equally important in this fast changing world. They major drawbacks shown is the infrastructural problems and lack of in-person interaction, improving this would make e-learning far better.

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APPENDIX

1. **Gender**
- Male
- Female
- Other

2. **Age**
  - 15-20
  - 20-25
  - 25-30

3. **Qualification**
  - School level
  - Undergraduate
  - Post graduate
  - Others

4. **District**
  - Ernakulam
  - Idukki

5. **Residence**
  - Rural
  - Urban

6. **Are you familiar with E-learning apps?**
  - Yes
  - No

7. **Type of E-learning apps you use?** (multi choice grid)
  - BYJU'S
  - 90+
  - WhiteHat Jr
  - Clubhouse
  - Coursera
  - SWAYAM

<u>Opinions of respondents towards various statements</u> (multi choice grid)

8. Online learning apps helps me learn better?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

9. The support and assistance from teachers are high in online classes?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

10.Learning through online is far better than regular courses?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

11.E-learning helps in saving time and helps to focus in various other activities?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

12.Doubts can be cleared easily through online?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

13.E-learning helped me improve my academic results?
- Strongly agree

- Agree
- Neutral
- Disagree
- Strongly disagree

14.Using various gadgets for E-learning has decreased my level of concentration in studies?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagreeE

15.My residence acted as a barrier in providing proper benefits?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

16.The 1 to 1 tutor facility provided by E-learning apps are as effective as realtime teaching?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Opinion regarding various problem faced through E-learning apps (multi choice grid)

17.Lack of motivation in students
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

18.Infrastructural problems

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

19.Technical issues
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

20.Lack of in-person interaction
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

21.Course structure and quality
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

22.Abundant distractions
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

23.Lack of discipline
- Strongly agree
- Agree
- Neutral

- Disagree
- Strongly disagree

24. Do you think e-learning apps are just a profit seeking business over service motive?
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

25. What is your probability of taking more online courses in future?
- Less than 25%
- 25-50%
- 51-75%
- More than 75%