"STUDENTS' PERCEPTION TOWARDS

E-LEARNING"

Project report submitted to

CHRIST COLLEGE (AUTONOMOUS), IRINJALAKUDA

In partial fulfillment of the requirements for the award of the degree of

Bachelor of Commerce

Submitted by

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Under the guidance of

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CHRIST COLLEGE (AUTONOMOUS), IRINJALAKUDA

UNIVERSITY OF CALICUT

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CERTIFICATE

This is to certify that the project entitled "STUDENTS' PERCEPTION TOWARDS E-LEARNING" by Mr. ATHUL PAUL K.V is a bona-fide record of work done under my guidance and supervision in partial fulfillment of the requirement for the award of the degree of Bachelor of Commerce.

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DECLARATION

I, Athul Paul K.V, hereby declare that the bona-fide record of "STU-DENTS' PERCEPTION TOWARDS E-LEARNING" done in partial ful-fillment of the B.Com degree program of Calicut University under the guidance of Prof .Shine Paul, Post Graduate Department of Commerce, Christ College (Autonomous), IRINJALAKUDA

I also declare that the project has not formed the basis of reward of any de-gree or any other similar title to any other University.

Place: IRINJALAKUDA

ATHUL PAUL K.V

Date: 30 - 3 - 2021

ACKNOWLEDGEMENT

Place: Irinjalakuda

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

E- learning is a learning system which provides education through electronic media with the help of internet and electronic devices. It is a new trend which emerged when internet and the use of electronic devices became popular. Though it had came into existence earlier, it wasn't that much popular as traditional learning.

As the name suggests, which means electronic learning, one should require an electronic device and internet facility. Usually, it was used for research purposes and distant students where mobility were limited. They are available in the form of databases,pre recorded videos ,live streams ,references etc. But it wasn't much accessed by people initially since it couldn't replace the traditional learning. But due to many technological changes, it has gained a rapid increase. Conventional classrooms have become dissatisfied in many occasions. It is where the significance of e-learning arises. Widespread use of internet and electronic devices paved the way for increase in use of e-learning. Also various other factors such as COVID pandemic and the lockdown held worldwide also pushed all the educational institutions to adopt e-learning facility. Thus there was huge usage of online learning facilities in the academic year 2020-2021.

E- learning is of much advantages because of ease in access and availability . It could be accessed at anytime from anywhere with the help of internet and an electronic device. The purpose of learning is to provide the required knowledge to the student. It is actually served here. He/she gets what they need from this platform. Just as a student interact with a teacher directly, an individual interacts with the wide world of knowledge. It also serves an arena for self study purpose. But also, having a lot of qualities, it also have many problems . Problems such as least interaction with teachers, doubt clearing problems etc. are abundant. But despite of all this problems, the students worldwide are

pushed to move on to e-learning due to the current situations where normal learning is not possible. But it has helped both the students and the teachers to go on with the learning – teaching process due to e-learning. They could go on with their regular activities via online. Classes were taken ,exams were taken. Therefore e-learning has helped the educational sector in many ways.But,since it is not a regular concept, do the students feel anything annoying on this matter ? Are they comfortable with this method? What is their opinion on that? This study is conducted ro find an answer for this.

1.1 Statement of the Problem

It is evident that though academic activities are carried out with the hell of e-learning tools, students face a lot of problems. They have satisfactions and dis-satisfactions. This would affect their academic performances. Although it is a concept which has originated a few years ago, it is for the first time that all the students in the world make use of this system for their learning purposes. There-fore, there is a need of a study to be conducted to understand the perception lev-el of students towards online learning and to find solution to any problems if any. This study is being conducted on the students of Commerce aided depart-ment of Christ College Irinjalakuda,Thrissur district, Kerala. This study assess the perception level of students towards e-learning .

1.2 Objectives of the Study
- To analyse the perception of students towards e-learning in general.
- To study the factors which affects the perception of students, whether it makes them satisfactory or dissatisfactory.

1.3 Purpose of the Study

The main purpose of the study is to investigate the change in perception of students towards e-learning. Also ,it identifies the factors which results in such a change.

1.4 Scope of the Study

The study attempts to understand the perception of students towards e-learning, their likes and dislikes for it, their satisfaction levels.

1.5 Research Methodology

The study is both analytical and descriptive in nature.

1.5.1 Types of Data

The study requires both primary and secondary data.

1.5.2 Data Collection

The data required for the study was drawn from Primary data collection through survey method using Google form. Secondary data was collected from bools , journals, articles, internet and the works of similar nature.

1.5.3 Sample Design

1.5.3.1 Universe – The students of Commerce aided department of Christ College Autonomous Irinjalakuda.

1.5.3.2 Sample size:- Sample size is 60. Samples are collected from Christ college autonomous, Irinjalakuda

1.5.3.3 Sampling technique:- For the study, Convenience sampling technique is used.Required data are collected by preparing pre defined questionnaire via Google forms. The collected data are tabulated. Percentage Analysis is used for the analysis of data. Interpretations are

drawn on this basis. A pictorial representation of these data are shown in the form of charts.

1.6 Limitation of the Study

The major limitation of the study is that it is confined only to the commerce aided department of the college, therefore can't study about other students belonging to other departments. Furthermore ,this study online take into consideration of only a population of 60 students, therefore cannot generalise the perception level to all the students.

1.7 Chapterisation

- Chapter 1 - Introduction, Statement of problem, Scope of the study, Objectives of the study, Purpose of the study, research Methodology and limitations of Study.
- Chapter 2 - Review of Literature (empirical review)
- Chapter 3 - Theoretical Framework9Conceptual review)
- Chapter 4 - Data Analysis and Interpretation , which is done using percentage analysis.
- Chapter 5 - Findings, suggestions and conclusion.

CHAPTER 2

REVIEW OF LITERATURE

A literature review is an evaluative report of information found in the literature related to your selected area of study. The review should describe, summarise, evaluate, and clarify this literature. It should give a theoretical base for the research and help to determine the nature of your research.

Anca Popovici, Cosmina Mironov (2015)[1] studied about students' perception onusing e-learning technologies. With the emergence of the Internet and new technologies, eLearning has become the promising solution for the Universities which are currently in an environment of intense change. Considering students' perception toward eLearning technologies, their expertise in the field is important for successful development of the academic programs, since the attitude of the end user towards application of information technology is one of the most effective factors. The objectives of the research are: a) identification of students' perception regarding e-learning; b) identification of e-learning practices employed by students in different contexts; c) identification of e-learning practices used in HE. This study investigated students' views on eLearning technology within non-formal and formal settings.

Although the number of responses was not high 115 valid replies we only considered research as a first step to pilot a tool in order to implement it at a larger scale. It becomes quite obvious that students are deeply aware of the changes brought over by the digital technologies, by their impact on the learning process. Also it is clear that students are well equipped in using technology in formal environments and are already using these technologies in order to support their learning process. Furthermore, students seem to understand that a more coherent approach based on specific developments might prove even more effective. However such an approach can be supported mainly by teachers. Just as

much as the teacher represents an organiser of the learning activity of student in the offline environment, he/she should assume the role of organising the students' e-learning process related to the HE. The need for a systematic, well organised approach to e-learning in HE might be the main conclusion that should empower further study on the subject that further could be translated later in a strategy for HE teacher training.

Christina Keller,Lars Cerberus(2002)[2] examined students' perceptions of e-learning taking students at Jönköping University in Sweden as an example. The students had experiences from two years of e-learning on campus. Students (n = 150) filled in a questionnaire with closed as well as open-ended questions. The answers were analysed in a multiple regression analysis, putting the students' perceptions in relation to gender, age, previous knowledge of computers, attitudes to new technology, learning styles and the way of implementing e-learning at the university. Advantages and disadvantages of e-learning were categorized in a qualitative content analysis. The main conclusion from the study was that the strategy of implementing the learning system at the university was more important in influencing students' perceptions than the individual background variables. Students did not regard access to e-learning on campus as a benefit. Male students, students with previous knowledge of computers and students with positive attitudes to new technologies were all less positive to learning on campus than other students.

Michael Tagoe (2012)[3] studied about the incorporation of e-learning in a university. Technological advancement has led to significant changes in the way university education is being provided in the developed countries. Whilst their universities have made great strides in addressing issues of access, cost of high-

er education and quality through e-learning, Africans are in the 21st century still grappling with these issues. Although the University of Ghana has as one of its strategic directions, the introduction of e-learning, very little information has been provided on its policy direction. In addition, not a lot of research has been conducted on the benefits and barriers to e-learning at University of Ghana. This paper discusses the perceptions of students who may be directly and indirectly affected by the programme, yet ignored in most studies on e-learning. The paper examines the policy environment and infrastructure needs critical to effective e-learning take-off, as well as the benefits and the barriers to implementation. The paper also makes recommendations for the future.

Hassan M Selim (2007)[4] led an exploratory investigation on the factors which affect the perception on e-learning. Information Technology (IT) and intense competition are reshaping universities worldwide. Universities have begun to utilise and integrate IT in teaching and learning in order to meet the instructors' and students' needs. E-learning, one of the tools that has emerged from IT, has been integrated into many university programmes. There are several factors that need to be considered while developing or implementing university curriculums that offer e-learning-based courses. Since e-learning is a relatively new learning technology, this paper is intended to identify and measure its Critical Success Factors (CSFs) from student perceptions. In line with the literature, four CSFs were identified and measured, namely, instructor characteristics, student characteristics, technology infrastructure and university support. Student attitude towards using e-learning was empirically tested. A sample of 37 class sections with 538 responses was used to validate the proposed e-learning CSFs. The results revealed that students perceived instructor characteristics as the most critical factor in e-learning success, followed by IT infrastructure and university support. The student characteristics factor was perceived as the least critical fac-

tor to the success of e-learning. In conclusion, this study investigated the critical factors affecting e-learning technology adoption by universities from students' perspective. The factors identified and measured in this study can assist higher education institutions in increasing the efficiency and effectiveness of the adoption process.

Brahmmanand Sharma, Shilpa Sankpal, Chanda Gulati (2020)[5]studies about the factors which affects students' perception on e-learning. The study was conducted to identify the factors which are affecting the perception of students towards E-learning. The exploratory phase of research was focused primarily on identifying the underlying factors which are affecting the perception of students towards e-learning. For this research work non probability sampling technique was used on 160 respondents via survey methods. The results indicated that student's perception is significantly influenced by four major factors. These factors are E-learner Competency, External Influence, System Interactivity and Social Influence. The purpose of study was to identify the factors which are affecting the perception of students towards E-learning. The exploratory phase of research was focused primarily on identifying the underlying factors which are affecting the perception of students towards e-learning. The present study fulfilled its objective and pointed out certain factors that affects the perception of students towards online education. The results indicated that student's perception is significantly influenced by four major factors. These factors are E-learner Competency, External Influence, System Interactivity and Social Influence. The study also indicate that E-Lerner competency is most essential factors which play major role in online education along with other factors.

Anuradha Pathak, Khushboo Makwana, Pragya Sharma (2019)[6] Information and Communication Technology has transformed the way of doing things. It has affected almost all the domains and divisions. It has also changed the process of teaching and learning. E-learning has emerged as an unconven-

tional mode of teaching and learning. Thus incorporating this unconventional mode with the conventional mode is required to enhance teaching learning effectiveness. Accordingly there is a need to find out the attitude and perception of students towards e-learning. The purpose of this study is to examine students' attitude and perception towards E-learning. The results of the study show that the majority of students have positive attitude and perception towards e-learning.

Zainal Fikri Zamzuri, Mazani Manaf, Yuzaimi Yunus, Adnan Ahmad(2013)[7] All the web based systems are exposed to computer security threats. This is one of the main reasons why people are reluctant to use the web based system including the e-learning system. It is very important to understand the needs and fears of users when they use the e-learning system. This paper analysed user perception on the e-learning security system. Questionnaires were distributed to the students to get their responses on the e-learning security system. The feedback from the students was analyzed using statistical software. STRIDE threat modelling was used to identify the critical area in the e-learning system. The results show that students are concerned with the integrity and availability of the system. They do not mind if other people know what their activities are in the system. The most critical service compared to other services offered by the e-learning system is the assessment service. As the main users, students' feedback is important to ensure that the e-learning system is successfully implemented in the institution. The system developer and administrator need to make sure that the information in the system is error-free since that will ensure that students will have confidence to use the system. The system developer also has to pay more attention on the components and services which are exposed to security threats to make the users more confident to use the e-learning system. Further research on how e-learning system developers respond to the needs of students is required.

Karl L Smart, James J Cappel (2006)[8] In search of better, more cost effective ways to deliver instruction and training, universities and corporations have expanded their use of e-learning. Although several studies suggest that online education and blended instruction (a blend of online and traditional approaches) can be as effective as traditional classroom models, few studies have focused on learner satisfaction with online instruction , particularly in the transition to online learning and traditional approaches. The study examines students' perceptions of integrating online components in two undergraduate business courses where students completed online learning modules prior to class discussions. The results indicate that participants in an elective course rated the online modules significantly better than those in a required course .Overall, participants in the elective course rated the online modules marginally positive while those in the required course rated them marginally negative. These outcomes suggest that instructors should be selective in the way they integrate online units into traditional , classroom –delivered courses. This integration should be carefully planned based on learner characteristics, course content ,and the learning context. For most participants of the study9 (83 percent), this was their first experience completing an online learning activity or module. In addition, the largest dissatisfaction factor reported among the participants was the time required to complete the online modules. Future research is encouraged to explore: 1) how previous experience with technology and online learning affects students' attitudes towards and success with e-learning; and 2) the effects of interspersing online units that are considerably shorter in length into the traditional classroom model. The additional research can provide greater insight into which factors promote e-learning success.

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CHAPTER 3

THEORETICAL FRAMEWORK

E-Learning, or electronic learning, is the delivery of learning and training through digital resources. Although eLearning is based on formalized learning, it is provided through electronic devices such as computers, tablets and even cellular phones that are connected to the internet. This makes it easy for users to learn anytime, anywhere, with few, if any, restrictions.

E-learning literature identifies an ecology of concepts, from a bibliometric study were identified the most used concepts associated with the use of computers in learning contexts, e.g. computer assisted instruction (CAI), computer assisted learning (CAL), computer-based education (CBE), e-learning, learning management systems (LMS), self-directed learning (SDL), and massive open online courses (MOOC). All these concepts have two aspects in common: learning and computers; except the SDL concept, which derives from psychology, and does not necessarily apply to computer usage. These concepts are yet to be studied in scientific research, and stand in contrast to MOOCs. Nowadays, e-learning can also mean massive distribution of content and global classes for all the Internet users. E-learning studies can be focused on three principal dimensions: users, technology, and services.

3.1 Learning Theory

Learning theory is meant to explain and help us understand how people learn; however, the literature is complex and extensive enough to fill entire sections of a library. It involves multiple disciplines, including psychology, sociology, neuroscience, and of course, education. Three of the more popular learning theories—behaviourism, cognitivism, and social constructivism—will be highlighted to form the foundation for further discussion. Mention will also be made of several other learning theories that are relevant to online education.

3.1.1 Behaviourism

As its name implies, behaviourism focuses on how people behave. It evolved from a positivist worldview related to cause and effect. In simple terms, action produces reaction. In education, behaviourism examines how students behave while learning. More specifically, behaviourism focuses on observing how students respond to certain stimuli that, when repeated, can be evaluated, quantified, and eventually controlled for each individual. The emphasis in behaviourism is on that which is observable and not on the mind or cognitive processes. In sum, if you cannot observe it, it cannot be studied.

The development of behaviourism is frequently associated with Ivan Pavlov, famous for his experiments with dogs, food, and audible stimuli, such as a bell. In his experiments, dogs learned to associate food or feeding time with the sound of the bell and began to salivate. Pavlov conducted his experiments in the early 1900s and they were replicated by many other researchers throughout the 20th century. John B. Watson, among the first Americans to follow Pavlov's work, saw it as a branch of natural science. Watson became a major proponent of Pavlov and is generally credited with coining the term behaviourism. He argued that mind and consciousness are unimportant in the learning process and that everything can be studied in terms of stimulus and response.

Other major figures associated with behaviourism are B.F. Skinner and Edward Thorndike. Skinner is particularly well known, primarily because he introduced what he referred to as operant conditioning which emphasized the use of both positive and negative reinforcement to help individuals learn new behaviours. This was quite different from Pavlov, who relied on simple reflexive responses to specific stimuli although both Pavlov and Skinner promoted repetitive behaviour that leads to habit formation. Skinner had a significant influence on early

computer-assisted instructional (CAI) models as developed by Pat Suppes and others. A common aspect of early CAI programs was the reliance on encouragement and repetition to promote positive learning activities.

3.1.2 Cognitivism

Cognitivism has been considered a reaction to the "rigid" emphasis by behaviourists on predictive stimulus and response (Harasim, 2012, p. 58). Cognitive theorists promoted the concept that the mind has an important role in learning and sought to focus on what happens in between the occurrence of environmental stimulus and student response. They saw the cognitive processes of the mind, such as motivation and imagination, as critical elements of learning that bridge environmental stimuli and student responses. For example, Noam Chomsky (1959) wrote a critical review of Skinner's behaviorist work in which he raised the importance of creative mental processes that are not observable in the physical world. Although written mainly from the perspective of a linguist, Chomsky's view gained popularity in other fields, including psychology. Interdisciplinary in nature, cognitive science draws from psychology, biology, neuroscience, computer science, and philosophy to explain the workings of the brain as well as levels of cognitive development that form the foundation of learning and knowledge acquisition. As a result, cognitivism has evolved into one of the dominant learning theories. The future of cognitivism is particularly interesting as more advanced online software evolves into adaptive and personalized learning applications that seek to integrate artificial intelligence and learning analytics into instruction.

3.1.3 Social Constructivism

Parallel to behaviorism and cognitivism was the work of several education theorists, including Lev Vygotsky, John Dewey, and Jean Piaget. Their focus on social constructionism was to describe and explain teaching and learning as com-

plex interactive social phenomena between teachers and students. Vygotsky posited that learning is problem solving and that the social construction of solutions to problems is the basis of the learning process. Vygotsky described the learning process as the establishment of a "zone of proximal development" in which the teacher, the learner, and a problem to be solved exist. The teacher provides a social environment in which the learner can assemble or construct with others the knowledge necessary to solve the problem.Likewise, John Dewey saw learning as a series of practical social experiences in which learners learn by doing, collaborating, and reflecting with others. While developed in the early part of the 20th century, Dewey's work is very much in evidence in a good deal of present-day social constructivist instructional design. The use of reflective practice by both learner and teacher is a pedagogical cornerstone for interactive discussions that replaces straight lecturing, whether in a face-to-face or online class. Jean Piaget, whose background was in psychology and biology, based his learning theory on four stages of cognitive development that begin at birth and continue through one's teen years and beyond. Seymour Papert, in designing the Logo programming language, drew from Jean Piaget the concept of creating social, interactive microworlds or communities where children, under the guidance of a teacher, solve problems while examining social issues, mathematical and science equations, or case studies. Papert's approach of integrating computer technology into problem solving is easily applied to many facets of instructional design.

3.2 Theories Of Online Learning.

Just as no single learning theory has emerged for instruction in general, the same is true for online education. A number of theories have evolved, most of which derive from the major learning theories discussed previously. In this section, several theories will be examined in terms of their appropriateness for the online environment.

3.2.1 Community of Inquiry(COI)

The "community of inquiry" model for online learning environments developed by Garrison, Anderson & Archer (2000) is based on the concept of three distinct "presences": cognitive, social, and teaching. While recognizing the overlap and relationship among the three components, Anderson, Rourke, Garrison, and Archer (2001) advise further research on each component. Their model supports the design of online and blended courses as active learning environments or communities dependent on instructors and students sharing ideas, information, and opinions. Of particular note is that "presence" is a social phenomenon and manifests itself through interactions among students and instructors. The community of inquiry has become one of the more popular models for online and blended courses that are designed to be highly interactive among students and faculty using discussion boards, blogs, wikis, and videoconferencing.

3.2.2 Connectivism

George Siemens (2004), one of the early MOOC pioneers, has been the main proponent of connectivism, a learning model that acknowledges major shifts in the way knowledge and information flows, grows, and changes because of vast data communications networks. Internet technology has moved learning from internal, individualistic activities to group, community, and

even crowd activities. In developing the theory, Siemens acknowledged the work of Alberto Barabasi and the power of networks. He also referenced an article written by Karen Stephensen (1998) entitled "What Knowledge Tears Apart, Networks Make Whole," which accurately identified how large-scale networks become indispensable in helping people and organizations manage data and information.

Siemens describes connectivism as:

the integration of principles explored by chaos, network, and complexity and self-

organization theories [where] learning is a process that occurs within nebulous

environments of shifting core elements – not entirely under the control of the

individual. Learning (defined as actionable knowledge) can reside outside of

ourselves (within an organization or a database), is focused on connecting

specialized information sets, and the connections that enable us to learn more and

are more important than our current state of knowing" (Siemens, 2004).

Siemens noted that connectivism as a theory is driven by the dynamic of information flow. Students need to understand, and be provided with, experiences in navigating and recognizing oceans of constantly shifting and evolving information. Siemens proposed eight principles of connectivism . Connectivism is particularly appropriate for courses with very high enrollments and where the learning goal or objective is to develop and create knowledge rather than to disseminate it.

1. Learning and knowledge rests in diversity of opinions.

2. Learning is a process of connecting specialized nodes or information sources.

3. Learning may reside in non-human appliances.

4. Capacity to know more is more critical than what is currently known.

5. Nurturing and maintaining connections is needed to facilitate continual learning.

6. Ability to see connections between fields, ideas, and concepts is a core skill.

7. Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning

activities.

8. Decision making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision.

3.2.3 Online Collaborative Learning (OCL)

Online collaborative learning (OCL) is a theory proposed by Linda Harasim that focuses on the facilities of the Internet to provide learning environments that foster collaboration and knowledge building. Harasim describes OCL as:

a new theory of learning that focuses on collaborative learning, knowledge building, and Internet use as a means to reshape formal, non-formal, and informal education for the Knowledge Age" (Harasim, 2012, p. 81).

Like Siemens, Harasim sees the benefits of moving teaching and learning to the Internet and large-scale networked education. In some respects, Harasim utilizes Alberto Barabasi's position on the power of networks. In OCL, there exist three phases of knowledge construction through discourse in a group:

1. Idea generating: the brainstorming phase, where divergent thoughts are gathered

2. Idea organizing: the phase where ideas are compared, analyzed, and categorized through discussion and argument.

3. Intellectual convergence: the phase where intellectual synthesis and consensus occurs, including agreeing to disagree, usually through an assignment, essay, or other joint piece of work (Harasim, 2012, p. 82)

3.3 ADVANTAGES & DISADVANTAGES of E-LEARNING

3.3.1 Advantages.

1. Online learning promotes active independent learning.
2. It is really a very convenient option for learning for people who are working full time or part-time students.
3. The ultimate convenience and flexibility of e-learning enable people to get the resources available from anywhere and at any point in time.
4. People can train themselves anytime and from anywhere also due to easy accessibility of the net 24x7.
5. Individuals can also train themselves on a day to day basis or on weekends or whenever they are having free time to do so.
6. One can also interact with everyone online and clear his or her doubts if there is any through discussion boards and chats.

3.3.2 Disadvantages

1. Individuals just get knowledge on a theoretical basis and when they are about to put to use whatever they have learned; it may be a little different thing.
2. Face-to-face learning is completely missing in online learning that really matters to some of the people.
3. The extent of security is also one of the main problems in E-learning programs.
4. Most of the online assessments are also limited to questions that are only objective in nature.

5. Furthermore, the online assessments which are computer marked normally have a tendency of being knowledge-based only and these are not essentially practicality-based.

6. The authenticity of the work of any online course student is also a problem as online anyone can do any project rather than the real student itself.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

Table 4.1

Batch of respondents

Batch	Number of respondents	%
B.Com 1st year	18	30
B.Com 2nd year	27	45
B.Com 3rd year	15	25
Total	60	100

(source: Primary Data)

Interpretation: From the table and the chart it is clear that out of 60 respondents, 30% of the respondents belong to B.Com 1st year. 45% of the respondents are of B.Com 2nd year. Rest 25%   consists of B.Com 3rd year.

Figure 4.1 wBatch of Respondents
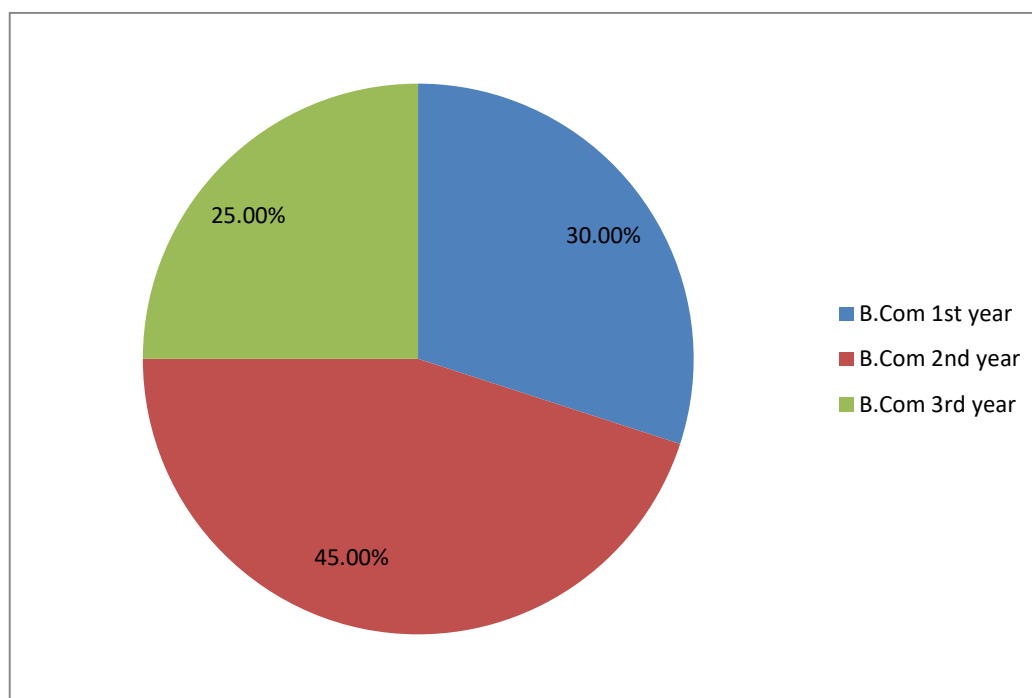
Table 4.2

Gender of Respondents

Gender	Number of respondents	%
Male	24	40
Female	36	60
Others	0	0
Total	60	100

(source: Primary data)

Interpretation: From the above pie chart it is clear that 60% of the respondents are females and the rest 40% of the respondents consist of males.

Figure 4.2

Gender of Respondents
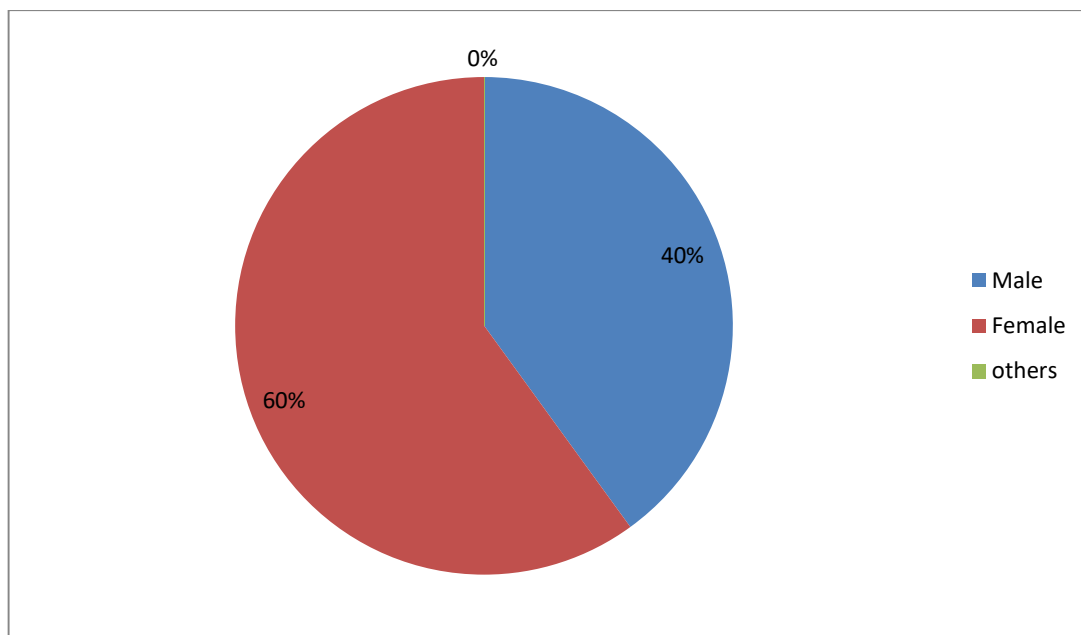
Table 4.3

Devices used for accessing online classes

Device	Number of Respondents	%
Mobile phone	58	96.67
Laptop	2	3.33
Desktop	0	0
Others	0	0
Total	60	100

(source: Primary data)

Interpretation: From the table and chart, it is clear that 96.67% of the respondents uses mobile phone to access their online classes. The rest 3.33% of respondents uses laptops.

Figure 4.3

Devices used for accessing online classes
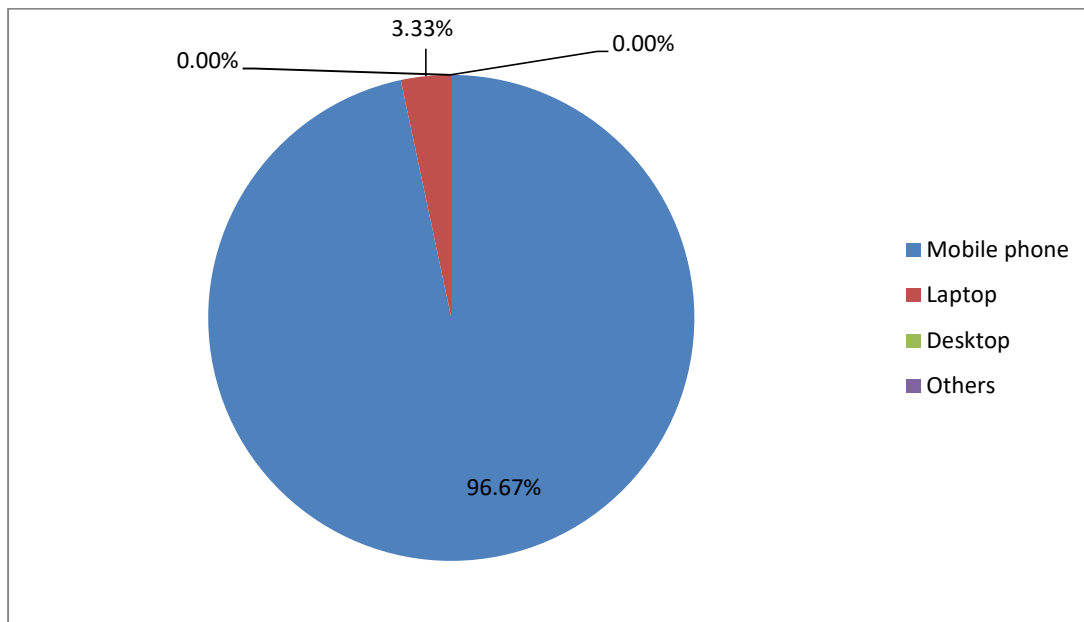
Table 4.4 Preferred Application

Application	Number of respondents	%
Google meet	40	66.67
Zoom meeting	12	20
Moodle	8	13.33
Total	60	100

(source: Primary data)

Interpretation: From the table and the chart, it is clear that 66.67% of the respondents uses Google meet. Zoom meeting is used by 20% of the respondents, the rest 13.33% uses Moodle.

Figure 4.4

Preferred Application
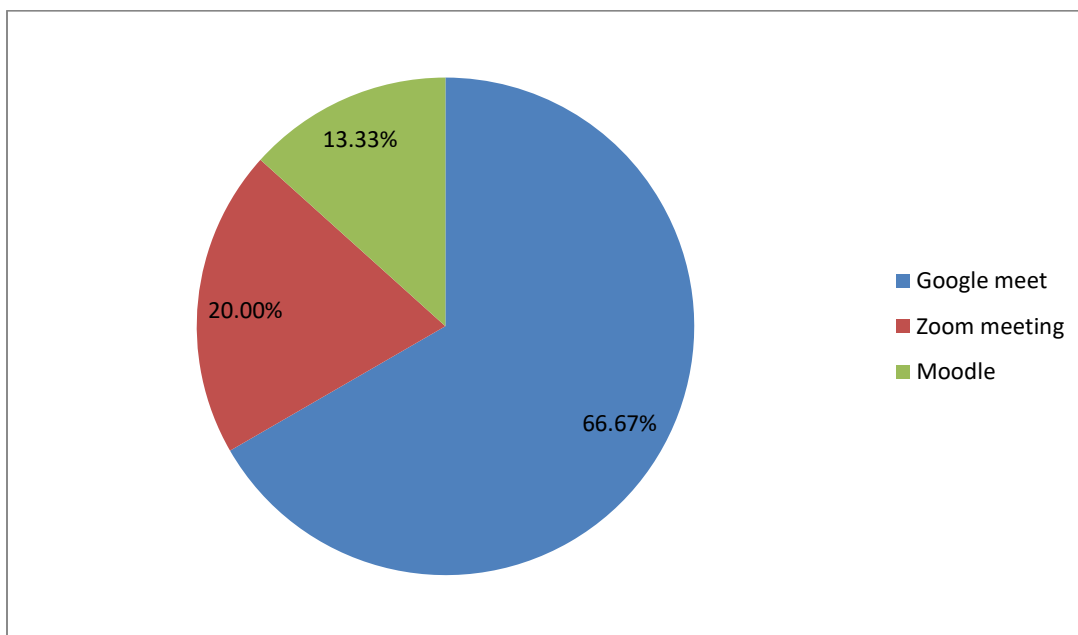
Table 4.5

Access to Internet

Particulars	No. of respondents	%
Mobile data	44	73.33
Wi-Fi	15	25
Cable data	1	1.67
Total	60	100

(source: Primary data)

Interpretation: As it is clear from the table and the chart, 73.33% of the respondents uses mobile data to get access to internet.25% of them uses Wi-fi connection and the rest 1.67% uses Cable data.

Figure 4.5 Access to internet
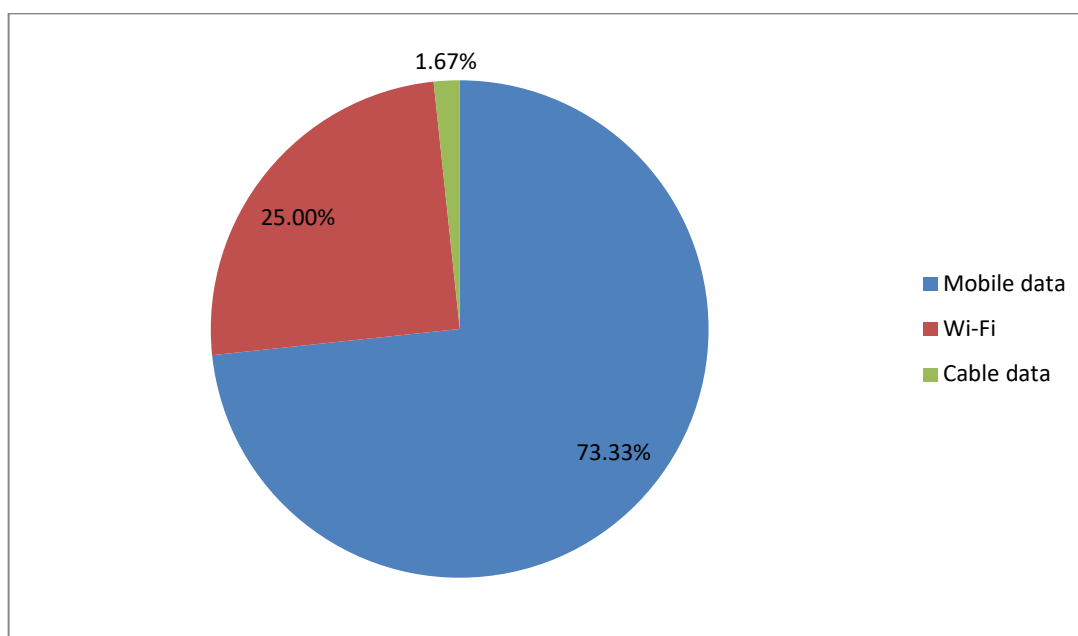
Table 4.6

Data usage per day

Data Range	Number of respondents	%
Less than 100 MB	2	3.33
100-500 MB	33	55
500 MB – 1GB	19	31.67
More than 1 GB	6	10
Total	60	100

(source: Primary data)

Interpretation: 3.33% of the respondents ' data usage is less than 100 MB. 55% of them ranges in 100-500 MB, while 31.67% of respondents usage ranges in 500 MB- 1GB. Rest of the 10% of respondents require more than 1GB.

Figure 4.6

Data usage per day
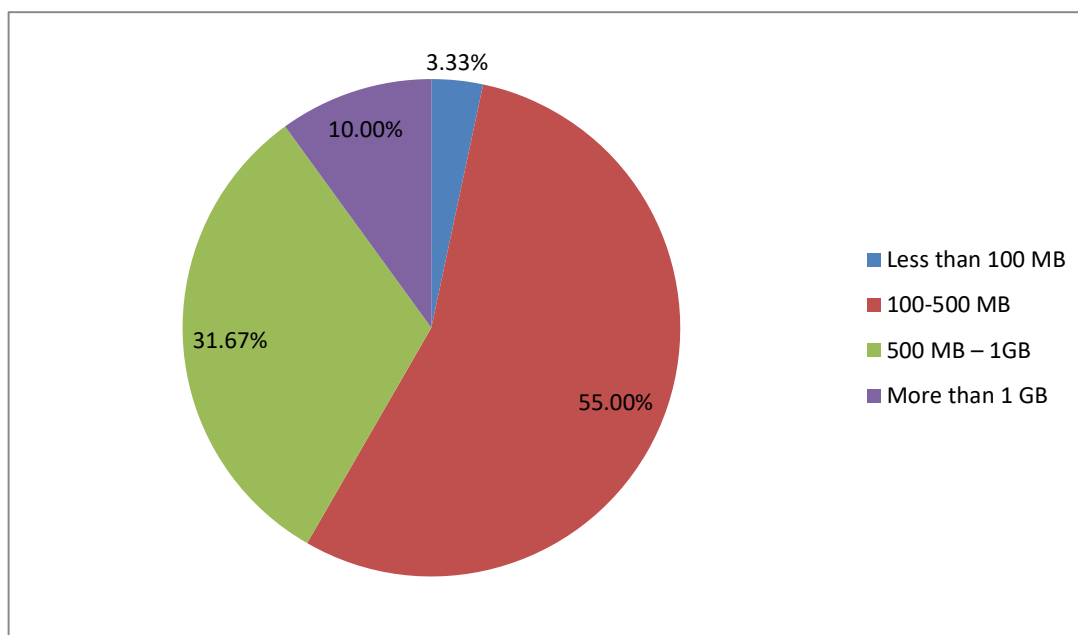
Table 4.7

Time saving

Particulars	Number of respondents	%
Strongly Agree	6	10
Agree	22	36.67
Neutral	24	40
Disagree	6	10
Strongly disagree	2	3.33
Total	60	100

(source: Primary data)

Interpretation: From the table it is clear that 40% of the respondents are neutral to the opinion that e-learning is time saving. 36.67% of them agrees and 10% of them strongly agree to this statement. 10% of them disagree and the rest 3.33% strongly disagree

Figure 4.7

Time saving
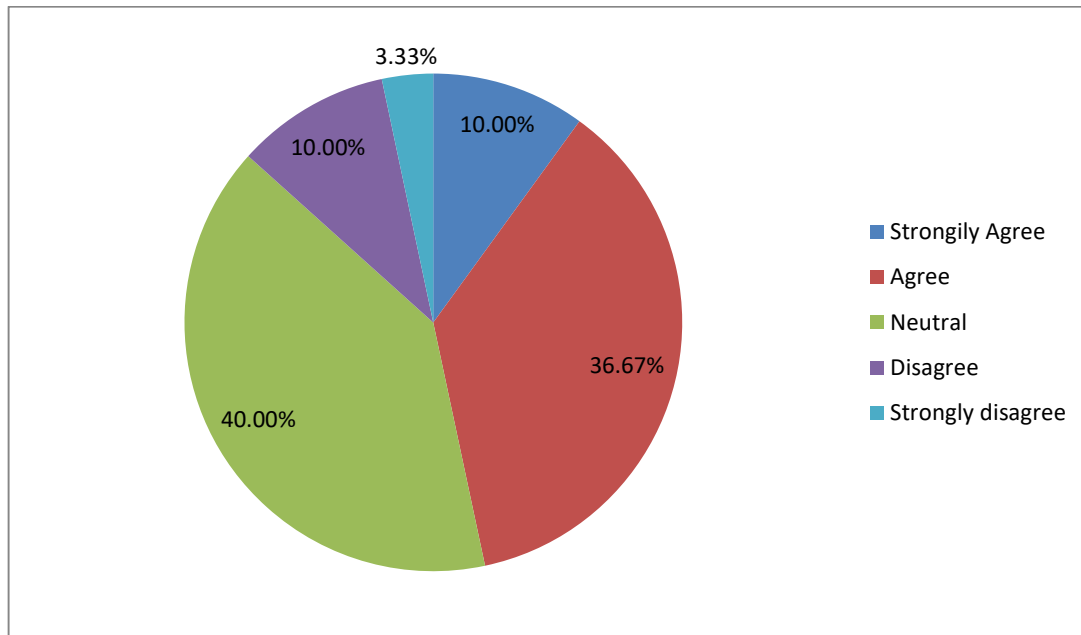
Table 4.8

Ease of learning

Particulars	No. of respondents	%
Strongly Agree	1	1.66
Agree	7	11.67
Neutral	21	35
Disagree	21	35
Strongly Disagree	10	16.67
total	60	100

(source: Primary data)

Interpretation: From the chart it is clear that 35% of the respondents are neutral to ease of learning, so as other 35% who disagrees to this opinion. !6.67%

of them strongly disagrees while 11.67% agrees to the ease of learning. The rest
1.66% strongly agrees

Figure 4.8

Ease of learning
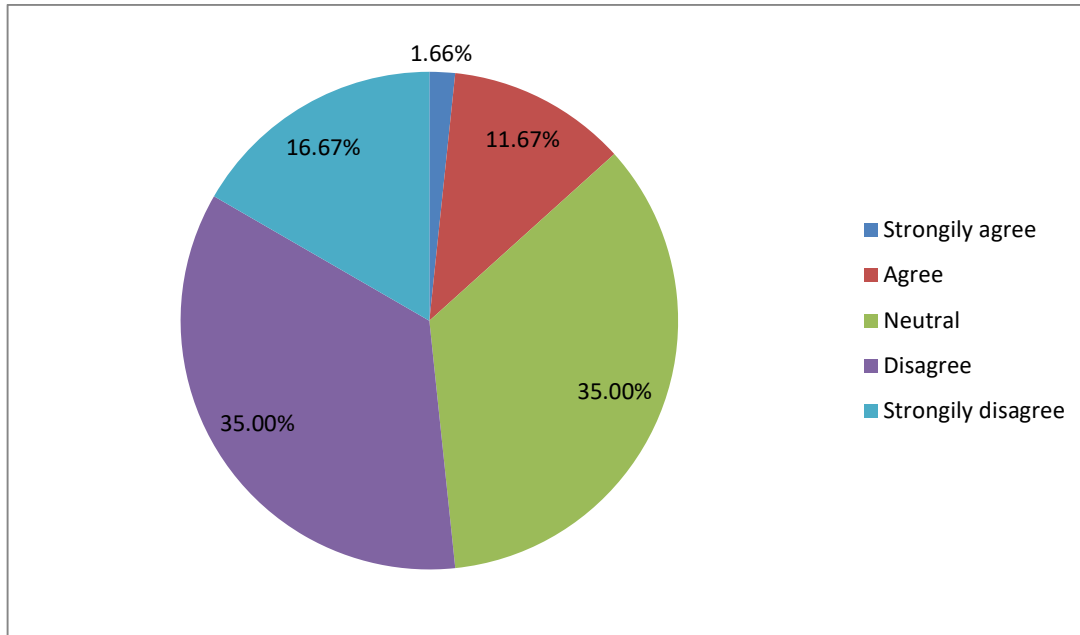
Table 4.9

Economical nature

Particulars	Number of respondents	%
Strongly agree	2	3.33
Agree	28	46.67
Neutral	22	36.67
Disagree	6	10
Strongly disagree	2	3.33
Total	60	100

(source: Primary data)

Interpretation: 46.67% of the respondents agree that e-learning is economical. 36.67% of them are neutral to this statement. 10% of them disagree and 3.33% of them are equally strongly agreeing and strongly agreeing .

Figure 4.9

Economical nature
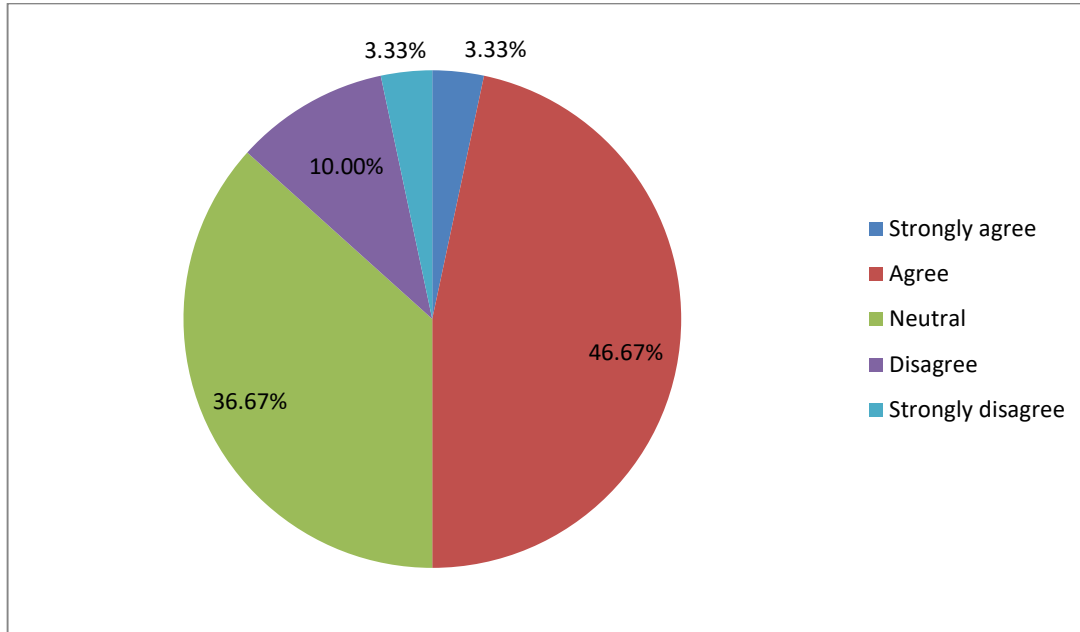
Table 4.10

Convenience for Exams

Particulars	Number of respondents	%
Strongly agree	3	5
Agree	13	21.67
Neutral	14	23.33
Disagree	18	30
Strongly disagree	12	20
Total	60	100

(source: Primary data)

Interpretation: From the table it is clear that Only 5% of the respondents strongly agrees to the opinion that e-learning is convenient for exams. 21.67% of them also agrees to his statement. 23.33% of the responses were found to be neutral .But majority of the respondents disagrees to this statement. It is about 30% of the responses. Also 20% of the responses are strongly disagreeing.

Figure 4.10

Convenience of Exams
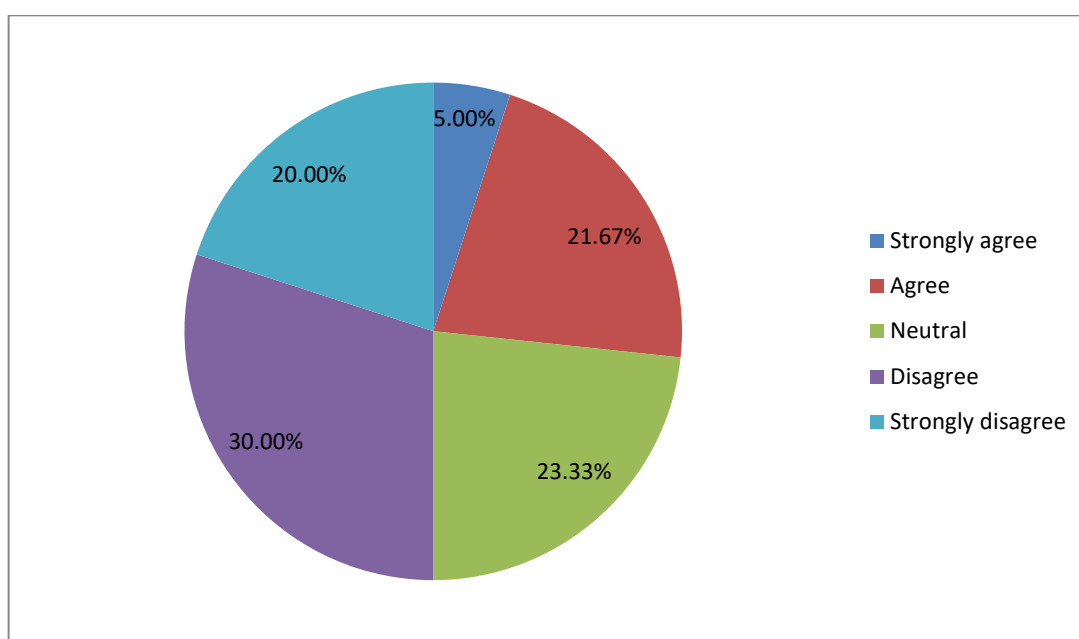
Table 4.11

Suitable for students living far away

Particulars	No. of respondents	%
Strongly Agree	17	28.33
Agree	31	51.67
Neutral	8	13.33
Disagree	2	3.33
Strongly Disagree	2	3.33
total	60	100

(source: Primary data)

Interpretation: from the table it is clear that 28.33% of the respondents strongly agrees that e- learning is suitable for distant students. 51.67% of them also agrees to this statement. 13.33% of the respondents are neutral to this statement while 3.33% of the respondents are equally disagrees and strongly disagrees the statement.

Figure 4.11

Suitable for students living far away
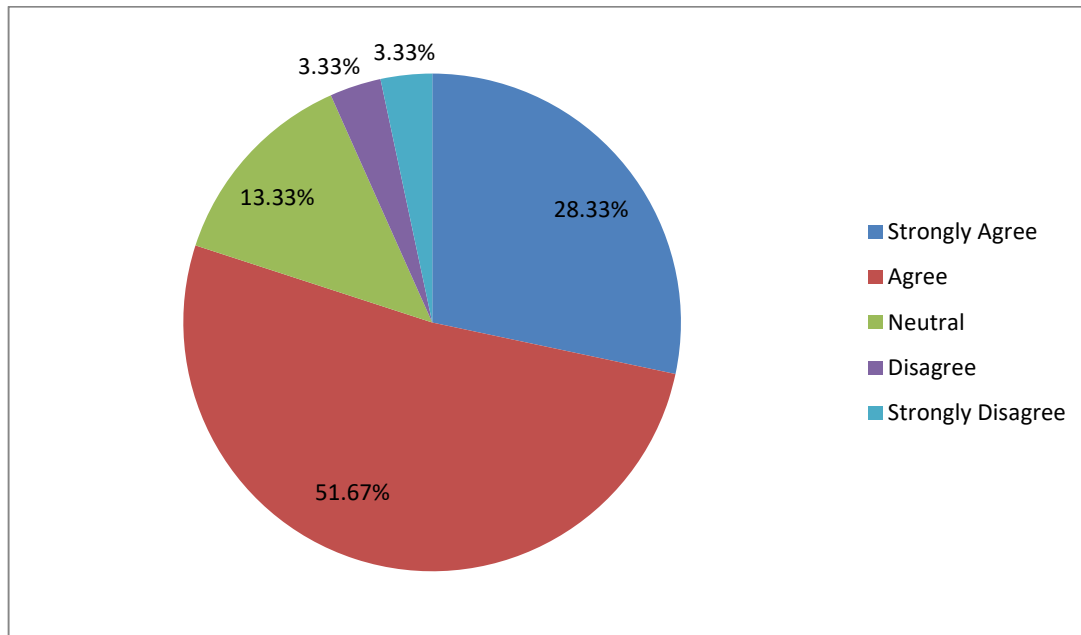
Table 4.12

Proper Listening

Particulars	No. of respondents	%
Strongly Agree	5	8.33
Agree	4	6.67
Neutral	20	33.33
Disagree	19	31.67
Strongly Disagree	12	20
Total	60	100

(source: Primary data)

Interpretation: From the table it is clear that 8.33% of the respondents strongly agrees that e-learning ensures proper listening of students to the portions taken.6.67% of them agrees to this statement too. But majority of the respondents of 33.33% are neutral to the above statement. 31.67% of the respondents disagrees to this statement and also rest 20% of them strongly disagrees to this statement.

Figure 4.12

Proper Listening
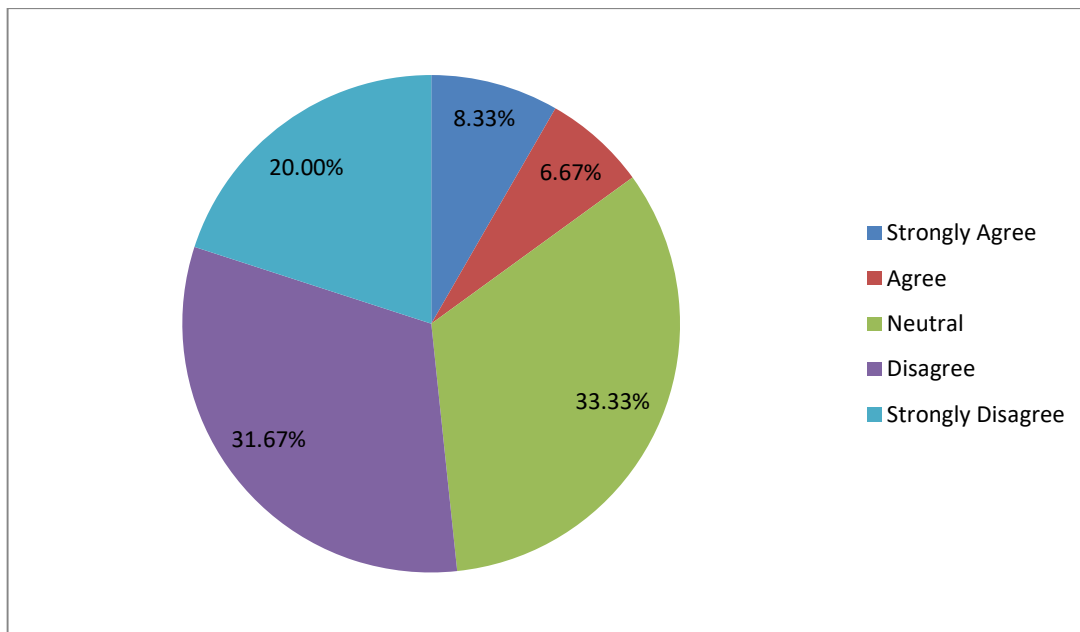
Table 4.13

Easy Submission of Assignments

Particulars	Number of respondents	%
Strongly agree	11	18.33
Agree	33	55
Neutral	11	18.33

Disagree	2	3.33
Strongly Disagree	3	5
Total	60	100

(source: Primary data)

Interpretation: From the table it is clear that majority of the respondents of about 55% agrees to that the submission of assignments are easy. Also 18.33% of them strongly agrees to this statement. Same number of respondents are neutral to the statement while 3.33% of them disagrees and the rest 5% strongly disagrees to statement.

Figure 4.13

Easy Submission of Assignments.
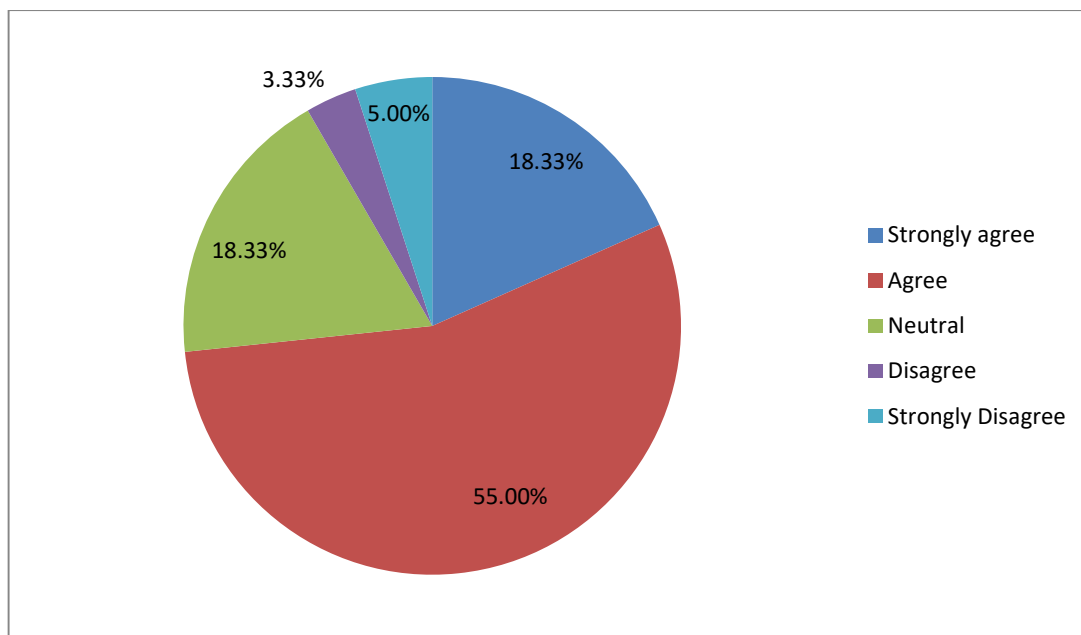
Figure 4.14

Low Interaction with Teachers

Particulars	Number of respondents	%
Strongly Agree	22	36.66
Agree	27	45
Neutral	9	15
Disagree	1	1.67
Strongly Disagree	1	1.67
Total	60	100

(source: Primary data)

Interpretation: From the chart it is clear that 36.66% of the respondents strongly agrees that e-learning results in the low interaction with teachers. 45% of the respondents also agrees to this statement. 15% of them have a neutral opinion. A negligible no. of respondents of about 1.67% of them disagrees and strongly disagrees to this statement.

Figure 4.14

Low Interaction with Teachers
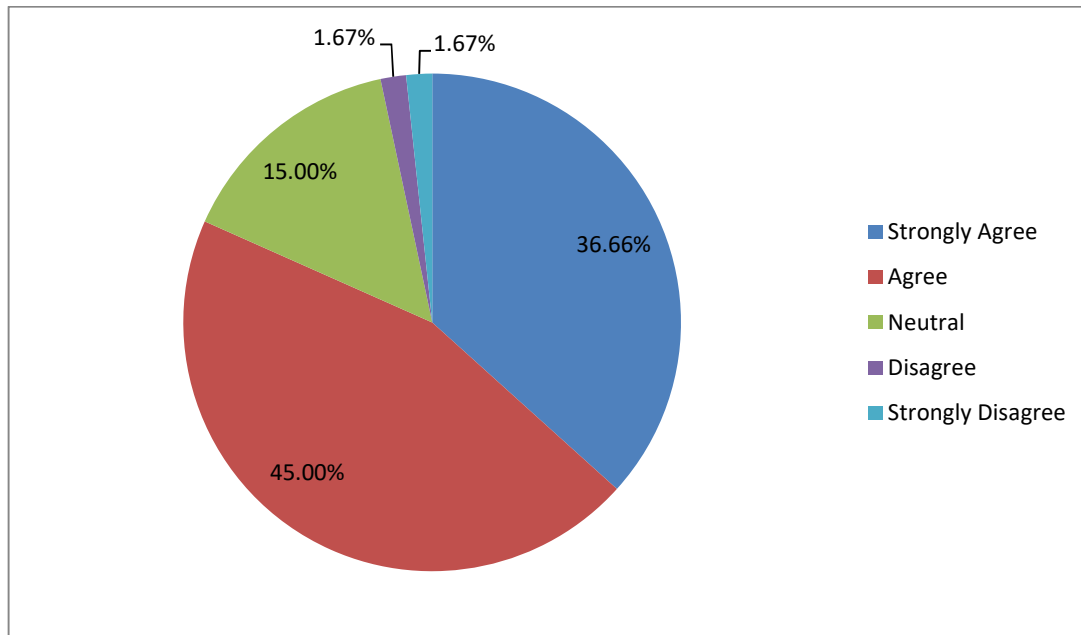
Table 4.15

Health issues among Students

Particulars	Number of respondents	%
Strongly agree	22	36.66
Agree	25	41.67
Neutral	9	15
Disagree	3	5
Strongly disagree	1	1.67
Total	60	100

(source: Primary data)

Interpretation: From the table it is clear that majority of the respondents agrees or strongly agrees to the opinion that e-learning causes health issues among students. 46.67% of them agrees and 36.66% of them strongly agrees to the above statement. 15% of them are having a neutral opinion. 5% of them disagrees and the rest 1.67% of them strongly disagrees to the statement.

Figure 4.15

**Health issues among Students**
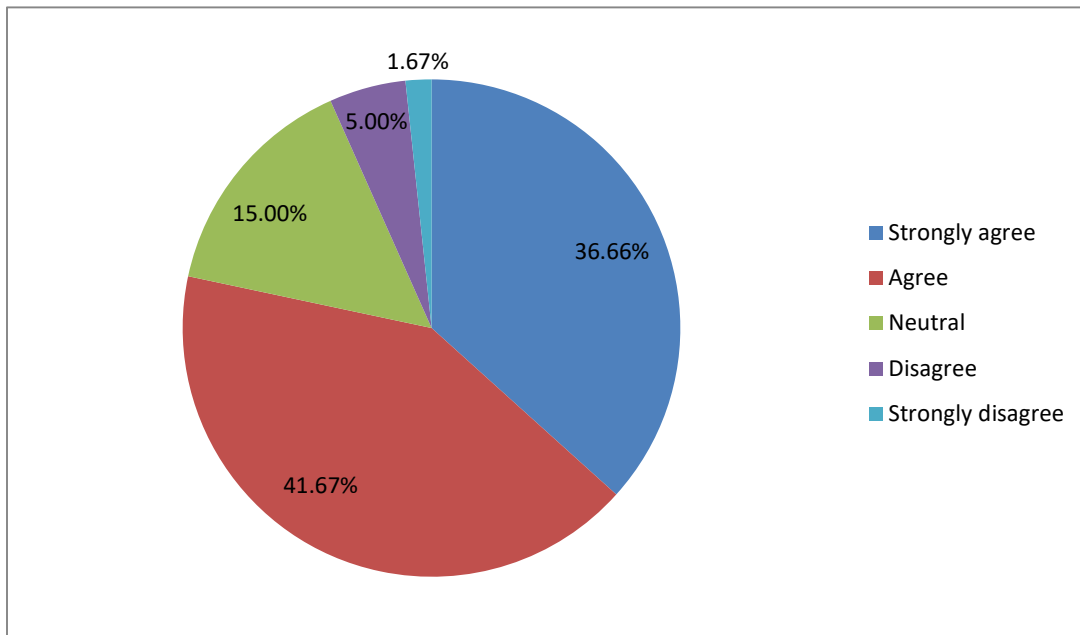
Table 4.16

Time Management of Students

Particulars	Number of respondents	%
Strongly Agree	7	11.67
Agree	14	23.33
Neutral	23	38.33
Disagree	10	16.67

| Strongly Disagree | 6 | 10 |
| Total | 60 | 100 |

(source: Primary data)

Interpretation: From the table it is clear that 11.67% of the respondents strongly agree that e-learning enables better time management for the students. 23.33% of them also agrees to this statement. 38.33% of the respondents have a neutral opinion. 16.67% of them disagrees and the rest 10% of them strongly disagrees to the statement.

Figure 4.16

Time Management of Students
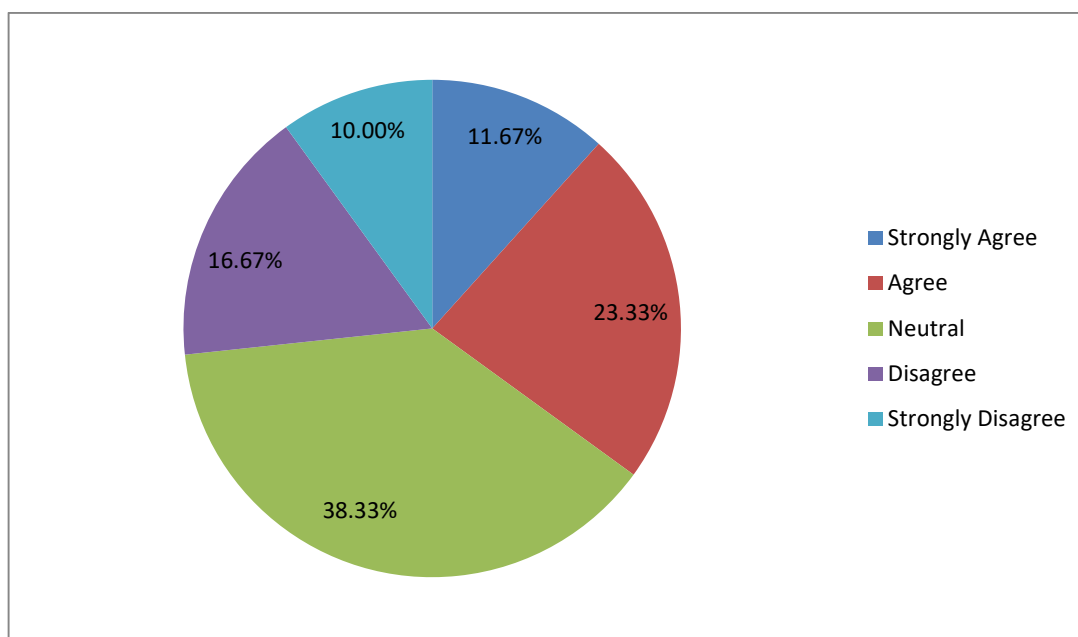
Table 4.17

Increase of Mental Stress

Particulars	Number of respondents	%
Strongly Agree	17	28.33
Agree	24	40

Neutral	12	20
Disagree	5	8.33
Strongly Disagree	2	3.33
Total	60	100

(source: Primary data)

Interpretation: From the chart it is clear that 28.33% of the respondents strongly agree to that e-learning increases the mental stress among students. 40% of the agrees to this statement. 20% of them have a neutral opinion. 8.33% of the respondents disagree to the above statement and the rest 3.33% of them strongly disagrees.

Figure 4.17

Increase in Mental Stress
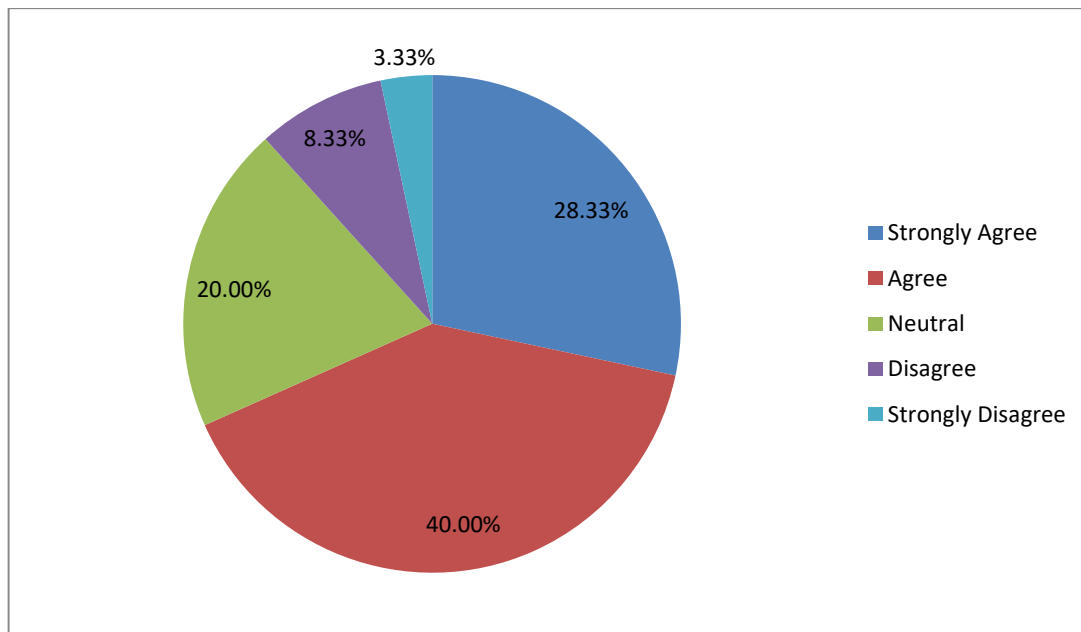
Table 4.18

Ability to use Online Tools

Particulars	Number of respondents	%
Strongly Agree	9	15
Agree	32	53.33
Neutral	16	26.67
Disagree	2	3.33
Strongly Disagree	1	1.67
Total	60	100

(source: Primary data)

Interpretation: From the table it is clear that more than half of the respondents of 53.33% agrees that students have the ability to use online tools. 15% of them also agrees' to this statement. 26.67% of them are having a neutral opinion. A negligible number of respondents of about 3.33% disagrees' and 1.67% strongly disagrees' to this statement.

Figure 4.18

Ability to use Online tools
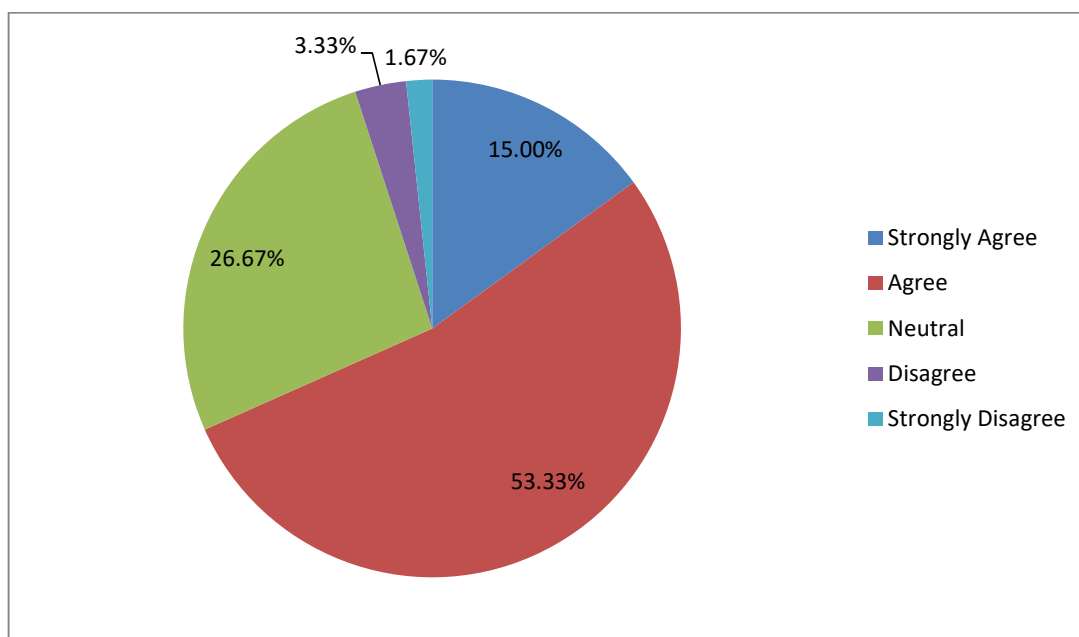
Table 4.19

Disability to Respond to Teachers

Particulars	Number of respondents	%
Strongly Agree	7	11.67
Agree	13	21.67
Neutral	34	56.66
Disagree	6	10
Strongly Disagree	0	0
Total	60	100

(source: Primary data)

Interpretation: From the table it is clear that 11.67% of the respondents strong-
ly agrees' that they have disability to respond to teacher's questions. 21.67% of

them also agrees to this statement. Majority of them about 56.66% have a neutral opinion. The rest 10% of them disagrees the statement. No respondent is strongly disagreeing.

Figure 4.19

Disability to respond to teachers
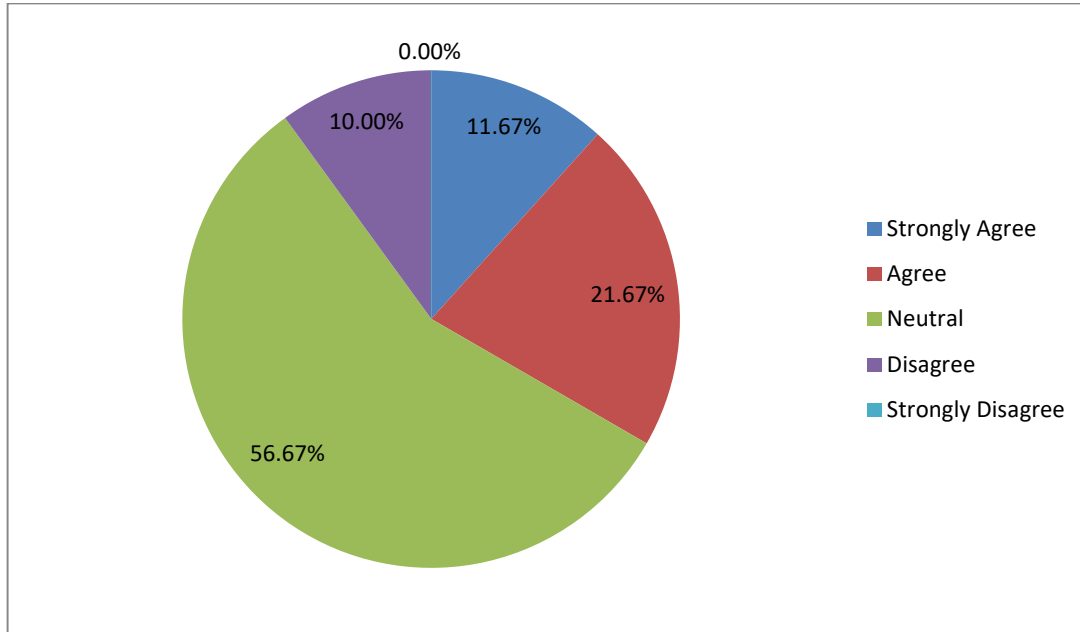
Table 4.20

Connectivity problems due to Poor Range

Particulars	Number of respondents	%
Strongly Agree	20	33.33
Agree	24	40
Neutral	11	18.33
Disagree	5	8.33
Strongly Disagree	0	0
Total	60	100

Interpretation: From the table it is clear that 33.33% of the respondents strongly agree that they face connectivity problems due to poor range. 40% of them agrees to the statement. 18.33% of them have a neutral opinion. The rest 8.33% of them disagrees to the statement. There are no respondents who strongly disagrees this statement.

Figure 4.20

Connectivity problems due to Poor Range
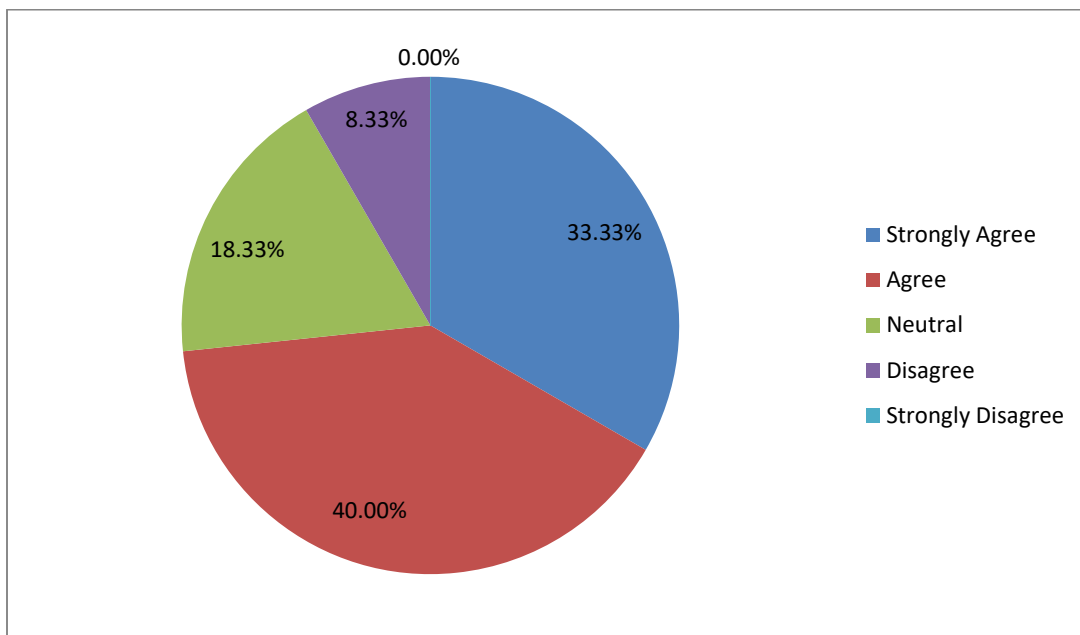
CHAPTER 5

FINDINGS, SUGGESTIONS AND CONCLUSIONS

5.1 FINDINGS

1. It is inferred that most of the respondents belong to the 2nd year batch of B.Com followed by 1st year batch and 3rd year batch.(Table 4.1)

2. It is inferred that majority students of commerce department are females and males are a few in number.(Table 4.2)

3. It is inferred that Mobile phone is the device which is mostly used by the students for e-learning purpose and other devices are negligibly or not used by them. (Table 4.3)

4. It is inferred that Google Meet is the application mostly preferred over others by students for online classes. Other applications are used by small number of students only(Table 4.4)

5. Majority of the students use Mobile data for internet connection.(Table 4.5)

6. Most of the respondents require a data of about 100-500 MB per day for e-learning purpose. Some require more than 500 MB and may limit up to 1 GB. (Table 4.6)

7. It is inferred that most of the respondents are neutral to the statement that e-learning is time saving. Almost equal but least number of person agrees to this statement.(Table 4.7)

8. Most of the respondents are equally neutral and disagreeing on the element of ease of learning in e-learning.(Table 4.8)

9. Most of the students agrees that e-learning is economical.(Table 4.9)

10. It is inferred that most of them disagree that e-learning is convenient for exams.(table 4.10)

11. Majority of the students agree that e-learning is suitable for students living far away. (Table 4.11)

12. Majority students are neutral that e-learning enables proper listening for students. Almost the same number students disagree to this statement. (Table 4.12)

13. It is inferred that most of them agree to the easy submission of assignments. (Table 4.13)

14. Most of the students agree that the interaction with the teachers are low (Table 4.14)

15. It is inferred that most of the students agree and nearly to that amount of students strongly agree that e-learning results in increased health issues among students. (Table 4.15)

16. Majority of the students are neutral to the opinion that e-learning enables proper time management for students. (Table 4.16)

17. Most of the students agree to the opinion that e-learning causes mental stress among students. (Table 4.17)

18. It is inferred that most of the students agree that they have the ability to use online tools, (Table 4.18)

19. Most of the students have neutral opinion that they find it difficult to respond to teachers. (Table 4.19)

20. It is inferred that most of the students agree that they face connectivity issues due to poor range. The number of respondents who strongly agree to this statement are not so small. (Table 4.20)

5.2 SUGGESTIONS

1. Some of them suggested that the time for e-learning is to be reduced so that can avoid huge consumption of data.

2. Most of them suggested that the learning processes are to be made easy.

3. Most of them suggested that e-learning should be made exam friendly.

4. Most of them suggested that e-learning should be enabled for students living far away and who cannot get access to the institutions very often.

5. Most of them suggested that e-learning should be developed in such a manner that every student could listen properly.

6. Most of them suggested e-learning for the submission of assignement.

7. Majority of them suggested to increase the interaction between teachers and students in the e-learning process.

8. Most of them recommend to reduce the duration for e-learning since it results in increased health issues among students.

9. There should be a proper care taken by the teachers and parents to reduce the mental stress among students.

10. Some of them suggest that e-learning tools are to be made more user friendly.

11. The response rate to teachers' questions and the interaction between students and teachers are to be increased.

12. The teachers who are incharge should take care the limitations of some students who face connectivity issues due to poor range.

13. Most of them suggested to use the applications which does not require huge amount of data to work and which can give quality output.

5.3 CONCLUSION

This project helps the researcher to know about the students' perception towards 'e-Learning'. Majority of the students are not satisfied with e-learning as a tool for study. Most of the students are not satisfied with learning process. They are dissatisfied with the interaction with their teachers and doubt clearing. They are also very opposing to e-learning that it causes health problems and increased mental stress among students. They also included that e-learning is not exam friendly and has a lot of connectivity issues which hinder the natural flow of learning. But despite of all these limitations, they also added that e-learning is very helpful in submitting of assignements and they are at the same time economical and time saving.. From the project it is identified, that most of the students are not satisfied with e-learning.

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APPENDIX

Students' level of Perception Towards E-learning

Questionnaire

1. Name
2. Class & year
3. Gender

   a)Male b)Female c)Others

4. By what means do you access your classes?

   a) Mobile phone b) Laptop c)Desktop d)others

5. Which application is used?

    a) Google meet   b)Zoom meeting   c)College Moodle

6. How do you get access to internet?

   a)Mobile data   b)wifi   c)cable data

7. How much is your data usage for online classes per day ?

   a)less than 100MB   b)100-500 MB   c)500 MB-1 GB   d)More than 1GB

What is your opinion

Q no.	Parameters	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
8.	Time saving					
9.	Ease of study					
10.	Economical nature					
11.	Convenient for exams					
12.	Suitable for students living far away					
13.	Proper listening					
14.	Easy submition of assignements					
15.	Low interaction with teachers					
16.	Increase of health issues					
17.	Better time management					
18.	Increase of mental stress					
19.	Ability to					

	use online tools				
20.	Unable to respond to teacher's questions				
21.	Connectivity problems due to poor range				