A STUDY ON THE GROWTH OF ONLINE SECTORS DURING COVID-19 PANDEMIC WITH SPECIAL REFERENCE TO EDUCATION, HEALTH AND E-COMMERCE

Project Report

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Under the guidance of

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In partial fulfillment of the requirement for the Degree of

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ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

COLLEGE WITH POTENTIAL FOR EXCELLENCE

Nationally Re-Accredited with A++ Grade

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ST. TERESA'S COLLEGE, ERNAKULAM (AUTONOMOUS)

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CERTIFICATE

This is to certify that the project titled"A STUDY ON THE GROWTH OF ONLINE SECTORS DURING COVID-19 PANDEMIC WITH SPECIAL REFERENCE TO EDUCATION, HEALTH AND E-COMMERCE" submitted to Mahatma Gandhi University in partial fulfillment of the requirement for the award of Degree of Bachelor in Commerce is a record of the original work done byMs.FarzanaFaiz, Ms.JamshiyaBasheer ,Ms. Sana Naushad, under my supervision and guidance during the academic year 2021-22.

Project Guide

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DECLARATION

We, Ms.FarzanaFaiz, Ms.JamshiyaBasheer, Ms. Sana Naushad, final year B.Com students, Department of Commerce (SF), St. Teresa's College (Autonomous) do hereby declare that the project report "A STUDY ON THE GROWTH OF ONLINE SECTORS DURING COVID-19 PANDEMIC WITH SPECIAL REFERENCE TO EDUCATION, HEALTH AND E-COMMERCE" submitted to Mahatma Gandhi University is a bonafide record of the work done under the supervision and guidance of Smt. Ottina Mendez, Assistant Professor of Department of Commerce (SF), St. Teresa's College (Autonomous) and this work has not previously formed the basis for the award of any academic qualification, fellowship, or other similar title of any other university or board.

PLACE: ERNAKULAM

DATE: 29.04.2022

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Last but not the least; we would like to thank the respondents of our questionnaire who gave their precious time from work to answer our questions.

FARZANA FAIZ

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INTRODUCTION

1.1 INTRODUCTION

COVID-19 was first detected in the city of Wuhan, China on December 2019, which quickly spread to various countries, with many reported cases. Currently the entire world is experiencing the desolation and devastation of the deadly virus, affecting more than 200 countries and over lakhs of people, with discouraging morbidity and mortality figures. The first cases of COVID-19 in India was reported on 30 January 2020 in three towns of Kerala, thereby lockdowns were announced in the state on 23 March, and in the rest of the country on 25 March.

The global pandemic has forever changed our experiences as customers, employees, citizens, humans and our attitudes and behaviours are changing as a result. The COVID-19 pandemic has accelerated digital transformations. Digital solutions are increasingly required to continue the economic and social activities. They have been critical for telemedicine, telework, e-commerce and online education, not least to keep alive our social ties but also in times of physical distancing.

Educational institutions across the world have shut down due to the pandemic. Most educational institutes have shifted to online learning platforms to keep the academic activities going. As a result, education has changed dramatically, with the distinctive rise of e-learning, whereby teaching is undertaken remotely and on digital platforms. Research suggests that online learning has been shown to increase retention of information, and take less time.

Pandemic has accelerated the adoption of digital technologies in the healthcare segment, as companies look for alternate models of delivering care and gain better insights on disease management. The traditional face-to-face patient–physician care model had to be revised in the Covid period, with digital technology and new models of care being rapidly deployed to meet the various challenges of the pandemic

People are changing what they purchase, where, and how, from conventional buying to online shopping. It increased the shopping through websites and mobile apps. Due to increasing risk of corona virus, customers are avoiding public places which increasing customers' attraction towards online shopping. Now, E-Commerce Companies have to make better policies to meet changing needs of shoppers

This project studies about the impact of different sectors during pandemic due to digitalization. It mainly focused on education, commerce and health sectors which adopted a traditional method for their function before pandemic period and now shifted towards online operations. Globally over 1.2 billion children are affected due to COVID-19 and are currently taking education remotely using digital platforms. Teaching has moved from physical to virtual classrooms at "untested and unprecedented" level. Study Shows 63-Fold Increase in Medicare Tele-health Utilization During the Pandemic. The dramatic rise in e-commerce during pandemic has increased online retail sales' share of total retail sales from 16% to 19%.

1.2 STATEMENT OF THE PROBLEM

The rapid spread of covid-19 left a massive impact on human lifestyle and experiences, which lead to the boom of a digitalized society. As a result online platform emerged to be necessity as people adjust to the new normal.

1.3RELEVANCE AND IMPORTANCE OF STUDY

COVID-19 has changed the way the world thinks, and personal hygiene and social distancing have emerged as top priorities. As a result, online platforms have become not only a necessity but more of a lifestyle change as we adjust to the new normal. The impact of virus was so strong that online education became a seemingly ubiquitous part of our growing world, whichresulted in a dramatic change in education with the distinctive rise of e-learning. Social

distancing became an integral part of our daily lives during the Covid-19 pandemic, which hindered the standard course of healthcare facilities for patients. As a result tele-health emerged as a solution to support timely access to public health. This period is a sort of inflexion point for the e-commerce industry in India as more consumers are now willing to shop online and further shows a prolonging trend in the same

1.4OBJECTIVES

- To analyse the impact of online on education, health and trading.
- To compare the behavioural pattern of society towards a digitalized environment(pre and post)
- Post pandemic effect of digital transformation

1.5SCOPE

Digital tools are increasingly being applied to support the response to the ongoing COVID-19 pandemic. Therefore the scope of this study is to analyse how the digital tools and platforms have made its impact in the society, with reference to education, health and trading platforms and also to understand people's changes in perception towards a digitalised economy after COVID-19.

1.6NEED FOR THE STUDY

Amid slowing economic activity, COVID-19 has led to a boom in e-commerce and accelerated digital transformation. In years to come, we will look back at 2020 as the year that paved th

way for a digitalized economy. Nowhere else has unprecedented and unforeseen growth occurred as in the digital and e-commerce sectors, which have boomed as a result of the pandemic. As lockdowns became the new normal, public increasingly "went digital", purchasing more goods and services online, classrooms, and face- to- face doctor- patient consultations went online. This left us a curiosity to analyse how this digital transformation has been taking place, its impact and effects.

1.7RESEARCH METHODOLOGY

The type of research followed in the study is descriptive research which is aimed at casting light on current issues or problems through a process of data collection that enables them to describe the situation more completely than was possible without employing this method.

1.7.1 SOURCES OF DATA

This study has covered both primary and secondary data collection methods:

Primary Data: The primary data was collected from the respondents through the use of structured questionnaire in the form of Google Forms shared through online media.

Secondary Data: secondary data includes information gathered from books, journals and websites, research articles and magazine articles.

1.7.2SAMPLING TECHNIQUE

Convenient sampling technique was followed for the study. One of the reasons to adopt this technique is that all are aware of the topic. Statistically to arrive at conclusions, data were analysed by using percentage analysis method and were graphically presented. MS Word and MS Excel were the software used to analyse and present the data.

1.7.3 SAMPLING SIZE

Information was collected mainly from group of people from the age of 18-25 years they forms the universe of the study. The number of sampling units from the universe is called the size of the sample. From the universe,75 units were selected and were asked about the impact of the study

1.7.4 TOOLS USED FOR THE STUDY

Pie Chart

A pie chart (or a circle chart) is a circular statistical graphic, which is divided into slices to illustrate numerical proportion. In a pie chart, the length of each slice (and consequently its central angle and area), is proportional to the quantity it represents.

Bar Chart

A bar chart or bar graph is a chart or graph that presents categorical data with rectangular bars with heights or lengths proportional to the values that they represent. The bars can be plotted vertically or horizontally. One axis of the chart shows the specific categories being compared, and the other axis represents a measured value. Some bar graphs present bars clustered in groups of more than one, showing the values of more than one measured variable.

Donut Charts

The Doughnut Chart is a built-in chart type in Excel. Doughnut charts are meant to express a "part-to-whole" relationship, where all pieces together represent 100%. Doughnut charts work best to display data with a small number of categories

1.8 LIMITATIONS

- Chances of lesser reach
- It was not possible to cover all the sections of study as it was vast.

- Many respondents don't express their original perceptions and views.
- The study is restricted to a selected sample and hence the result of the study cannot be generalised.
- There are chances of wrong data provided by the respondents.

1.9 CHAPTERISATION

- Chapter 1- Introduction
- Chapter 2 – Review of literature
- Chapter 3 – Theoretical Framework
- Chapter 4 – Data Analysis and interpretations
- Chapter 5- Findings, Suggestions and Conclusion

CHAPTER-2

REVIEW OF LITERATURE AND THEROTICAL FRAMEWORK

2.1 LITERATURE REVIEW

- **Das and Ara(2010):** examines with an increase in the number of players in the online B2C segment, competition for the top spot is expected to heat up, forcing businesses to improve service quality and invest in logistics in order to reap the benefits of rising household disposable income, rising internet subscriptions, and the infiltration of mobile commerce.
- **Reghunath(2012):** The paper analysing many aspects of e-commerce while emphasizing that, in today's world, any commercial activity, including advertising, ordering, and payment, may be carried out through the digital ecosystem. The study discusses a variety of factors that contribute to e-commerce's growth as a new convention. It has made it possible to create and exploit new business opportunities while also allowing customers to have a greater voice in the development of new products and services. E- commerce has improved internal business management performance as well as consumer connections by encouraging a business strategy that is primarily based on information.
- **Agrawal(2010):** the researcher studies the face of increasing competition in the online sector , the firms' existence will be determined by their ability to bridge current gaps in ecommerce transactions. After successfully tapping its potential in metropolitan cities, the nature of the internet has enabled e-commerce to transcend geographical boundaries and pervade multiple markets. Many ecommerce companies are expanding their reach by investing in stronger infrastructure in anticipation of increased demand. In view of the expanding number of websites offering identical goods and services, Interne is gaining more importance.
- **Deshmukh&Thampi:**examines the current and potential status of e-commerce and memorandum of business in the Indian market as well as the future. The report identifies e-commerce's advantages as ubiquity, personalization, flexibility, and immediacy. The

authors support the notion that smart phone adoption and an increase in internet user base, fuelled primarily by young, will drive e-commerce growth.

- **McGaughey,&Nebhwani(2015):**The paper details the revolutionary changes brought about by internet technologies in manufacturing, marketing, purchasing, design, production, selling and distribution, warehousing, and human resource management, as well as the revolutionary role played by earlier internet applications such as e-mail and electronic data interchange. By facilitating close contact and constant communication, internet-based technologies have enabled businesses to shorten development, purchase, and procurement cycles, maintain up-to-date product and market information significantly increase the speed of communications, and improve the quality of customer relationships.
- **BindiaDaroch, GitikaNagrath and Ashutosh Gupta (2021):** This research Paper speaks about the consumer behaviour towards online shopping which further examines various factors limiting consumer for online shopping behaviour. This Research paper ascertains the problems that consumers face during their shopping through online stores.
- **Roy (2020):** this paper studies about the mental health and stress faced by people during the pandemic. It shows more than 80% of people over 18 have shown the need for attention to their mental health as a result of the anxiety and stress experienced during the pandemic.
- **Forte(2020):**agree with this idea, stating that the pandemic has caused stress, psychological discomfort, sleep disorders, and instability, among others, in a large part of the population in this paper.
- **Dame OttolineLeyser(2021):** studies the pandemic has created unprecedented challenges for the research and innovation community with profound impacts on institutions and but at great personal cost to many, who have been working under very difficult circumstances.
- **Onyema and Deborah (2019):** examines the potentials of mobile technologies in enhancing the effectiveness of inquiry-based learning approach. Their result shows that several features of mobile devices, couple with their availability, portability and affordability makes them vital tools learning.

- **Mtega(2020):** conducted a study on the usefulness of mobile devices for teaching staff and students. Their findings show that majority of the teaching staff and students used their mobile devices to communicate with colleagues on academic issues, and to access instructional materials from the internet.
- **D Mahipa(2020):** This paper examines the growth and different segments of e-commerce in India during Covid-19. As e-commerce is one of the top growing businesses in India and provides a great market potential for investments, foreign Investors are funding e-commerce sector. The studyconcludes that there would be a prospective growth of e-commerce in India, if the Government provide a legal security and framework for e-commerce and the domestic and international trade are allowed to expand their basic rights.
- **E-Commerce Global Market Report 2021:** This report focuses on the consumer electronics e- commerce market which is experiencing strong growth. The report gives a guide to the consumer electronics e-commerce market which will be electronics e-commerce market which will be shaping and changing our lives over the next ten years and beyond, including the market's response to the challenge of the global pandemic.
- **BayadAli(2021): owing** to COVID-19, online shopping has become even more attractive, considering the restricted circumstances. This study investigates the possible correlation of COVID-19 to consumer buying behaviours of goods during Covid-19 with a specific focus on understanding consumer adaptations to the related restrictions.
- **World Trade Organisation(2020):**The implications of the COVID-19 pandemic may last for a long time, and e-commerce in goods and services will need to continue to adapt to the new environment. A similar spike in the use of teleworking services and in B2B and B2C e-commerce was also documented during the SARS (Severe Acute Respiratory Syndrome) epidemic in 2002-03, when e-commerce firms such as Alibaba and Taobao rose from relative obscurity. Similarly, COVID-19 could trigger further digitalization of society and the development of policies and rules to regulate online trade.

THEORETICAL FRAMEWORK

2.2TELEHEALTH

Tele-health refers to the remote delivery of healthcare services, including examinations and consultations, over the telecommunication infrastructure. It allows healthcare providers to evaluate, diagnose and treat patients without the need for an in- person visit. Itenables video or phone appointments between a patient and their health care practitioner, benefiting both health and convenience. More health care providers are offering to "see" patients by computer and Smartphone. In light of the Covi-19 pandemic health organizations are providing virtual appointments and are expanding their telehealth options to support the public in the era. Some of the examples of telehealth are health education, remote patient monitoring, counselling and mental health services and other services.

2.2.1IMPACTS OF TELEHEALTH DURING COVID-19

Coronavirus has caused everyone around the world to live and work in different ways, including healthcare providers. A key priority behind this progress has been to increase the reach and relevance of public services - particularly those focusing on saving lives and livelihoods. Telemedicine, healthcare services delivered through digital and other means, is proving important in the context of stretched or unavailable health systems. And, it could have a significant role in any post-COVID-19 world.

Clinicians have had to seek new ways to serve patients while not contributing to the rapid spread of COVID-19. Many health systems and medical practices found a solution in telemedicine—according to a late April survey, 85% of practices said they were performing telehealth visits, compared to only 6% before the pandemic.

The terms telehealth, telemedicine, and e-health have different connotations when used clinically or legally, but for the general public, they are usually used interchangeably to refer to care

provided in a non-face-to-face manner. Virtual visits have also been helpful in screening individuals presenting with COVID-19 symptoms.

Recently, telemedicine has become remarkably important, due to increased deployment and development of digital technologies.During the COVID-19 pandemic, mandatory social distancing and the lack of effective treatments has made telemedicine the safest interactive system between patients, both infected and uninfected, and clinicians. A few potential evidence-based scenarios for the application of telemedicine have been hypnotised.

2.2.2 TELEHEALTH SERVICES AND APPS

- **Online Registration System (ORS):**

In order to improve ease of services for citizens, Online Registration System (ORS) launched in July 2015 provides services to citizens for taking online registration & appointment, payment of fees, online viewing diagnostic reports, enquiring availability of blood online etc. in various public hospitals.

- **National Health Portal:**

With an overall objective to create awareness amongst the citizens about health, Government programmes & services in Health Sector, National Health Portal (NHP) provides information to citizens and stakeholders in different languages (currently six languages Hindi, English, Tamil, Gujarati, Bengali, and Punjabi). A voice portal, providing information through a toll-free number 1800-180-1104 and Mobile App are also available.

- **Practo:**

It is one of the popular telemedicine app in the market. Some of the key features and services it provides include a comprehensive medical directory, booking of appointments online and online consultations. It also offers subscription- based health plans. Consultation fees for sessions starts from Rs.349 and the patients also get a digital prescription along with a free follow up.

- **Lybrate:**

Another popular telemedicine e app is Lybrate available on both iOS and Android has services like online consultations appointment booking, lab test booking, apart from these there is an online 'Q and A' forum and quizzes to create awareness.

- **Mfine:**

Mfine is a healthcare platform that offers professional diagnostics and telemedicine services. It has services line at-home lab test, X-ray and scans booking, online consultation, delivery of medicines. The app also offers self- evaluation services for chronic medical conditions like diabetes, PCOC, cardiac health and others. Users can also avail the services often at AI- based assistant to know about their symptoms.

- **Tata health:**

Tata health is another telemedicine app that offers services like online consultation, appointment booking, lab test and delivery of medicines. It also has something called a Health locker, which allows users to store medical records online. The app also posts health articles for patients to give them tips to make their lives better and healthier.

- **Doctor24×7:**

Doctor 24 ×7 focuses on providing daily consultations to patients with the doctors and providing diagnosis along with a free follow up within three days of the consultation. The app has 24×7 support by doctors, claim to have treated more than five lakh patients. The first consultation through the app is free after the patient downloads their application

2.2.3 ADVANTAGES

- **Comfort and Convenience**

Telemedicine provides you to see your doctor virtually from your comfort. Virtual visits can be easier to fit into your busy schedule, and especially during the pandemic period, which help reduce the spread of virus to a very great extent. With telemedicine, you may not even have to make changes in your daily routine. This makes it the most accepting feature among the public.

- **Control of Infectious Illness**

To help prevent the spread of COVID-19, flu and other infectious diseases, doctors can use telehealth appointments to pre-screen patients for possible infectious disease. It also saves sick people from having to come in to the office, less exposure to other people's germs helps everyone, especially those who are chronically ill, pregnant, and elderly ones.

- **Better Assessment**

Telemedicine can give some specialty practitioners an advantage because they can see you in your home environment. For example, allergists may be able to identify clues in your surroundings that cause allergies. Neurologists and physical and occupational therapists can observe you and assess your ability to navigate and take care of yourself in your home. Telemedicine is also a good way to get mental health assessment and counselling, which was a highly needed assistance during the lockdown stress period.

2.2.4 LIMITATIONS

- Telemedicine visits are not a complete substitute for in-person visits; nor they are feasible for all patients or clinical situations. For example, technology does not always work smoothly, and technical difficulties may interfere with delivery of care.
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- A Significant limitation is the inability to conduct an in-person physical examination, inaccurate dosing of weight-based drugs (e.g., chemotherapy treatments, paediatric medications) may occur due to the inability to weigh patients.
- In addition, patient and provider perceptions and experiences may differ from those experienced during an in-person visit; it is essential to be aware of these potential differences. Many traditional office elements, such as touch, physical presence, and emotional connection, can be restricted by digital technologies. Some patients may have no prior experience with video visits and prefer in-person visits over video visits. Similar preferences for in-person interactions have been noted in specialty care services.
- Telemedicine visits may not be appropriate or feasible for all patients or all clinical situations; therefore, the clinician must use telemedicine services appropriately for care to be delivered effectively and accurately. The "digital divide" can create potential disparities in access to participation to telemedicine, including for those living in rural areas with limited Internet access, older adults, and those with diverse cultural settings and socioeconomics.
- Even among individuals with adequate Internet access, it is important to clarify their comfort level with conducting a telemedicine visit; their Internet access may be limited to a public location or may incur significant monetary costs due to data charges. Older adults may have difficulty accessing telemedicine services due to inexperience with technology or physical disabilities.
- Despite these limitations, many patients continue to favour telemedicine modalities for their ease of use, convenience, cost-savings, and decrease in travel time. Covid-19 period was such a period where telehealth had its boom with high positive response to go online consultations due to the fear of virus and other diseases. There also seems to have a slight future preference to telehealth among few even after the virus threat.

2.3 ONLINE EDUCATION

The COVID-19 pandemic has adversely effected children's education. During the lockdown, when students were unable to attend schools, efforts were made to deliver education through technology-based platforms. State governments proactively initiated various programmes to ensure children do not lose out on any opportunity to learn and continue their academic progress. Government has initiated various digital learning interventions such as Radio School, Digital Learning Enhancement Programme. Educational institutions have come to a functional standstill since they had to protect their students from viral exposures, which are likely in a highly socializing student community. Various digital or Information and Communications Technology based learning tools have been deployed to ensure continuity in learning.

As the schools and colleges are shut for an indefinite period, both educational institutions and students are experimenting with ways to complete their prescribed syllabi in the stipulated time frame in line with the academic calendar. These measures have certainly caused a degree of inconvenience, but they have also prompted new examples of educational innovation using digital interventions.COVID-19 has been a trigger for educational institutions worldwide to pursue creative approaches in a relatively short notice. During this time, most of the universities have shifted to online mode using Blackboard, Microsoft Teams, Zoom, or other online platforms to continue the academics.

The educational institutions in affected areas are seeking stop-gap solutions to continue teaching, but it is important to note that the learning quality depends on the level of digital access and efficiency. The online learning environment varies profoundly from the traditional classroom situation when it comes to learner's motivation, satisfaction and interaction.

Studies explored that the student's preferences for various attributes of online classes, which will be helpful to design effective online learning environment. The results indicated that majority of the respondents are ready to opt for online classes to manage the curriculum during this pandemic. Majority of the students preferred to use smart phone for attending online learning. Using content analysis, it was found that students prefer recorded classes with quiz at the end of each class to improve the effectiveness of learning.

Educational institutions in India have also made a transition to online teaching environment soon after Union Government's decision to impose nation-wide lock-down for 21 days from 25th March, 2020 which was later extended for 19 more days. However, the major concern is about the quality of learning which is closely related with how well the content is designed and executed.

Effectiveness of learning also depends on how the content is curated to online environment and also in understanding and addressing the constraints faced by students. The study is even more relevant considering that in India the system of online education has never been tried at this scale and this is like a massive social experiment.

The results of the study are important for educational institute for two main reasons. Firstly, the shift to online mode has been an abrupt one due to unprecedented lockdown imposed to manage the COVID-19, and the institutes did not have time to design and adopt the course contents for online mode. In this context, experience of students and the learning can be incorporated to make online learning easy, efficient and productive. Second, even after lockdown is revoked, life after the COVID-19 pandemic will not be like before and online learning is here to stay, though in combination with regular offline classes. There is uncertainty about the length of the pandemic and chances of reinfections, the social distancing can become a new normal.

So, all the educational institutes need to be prepared to shift majority of the course content to e-learning platforms and modify the course structure and curriculum suitably. The results of our study can be important input in deciding on the learning environment in online platform to promote effective learning.

2.3.1E-LEARNING PLATFORMS

- The HRD ministry operates a series of web platforms that impart learning to students across the country.

- **SWAYAM Moocs:** In this courses are web based multi-media courses designed especially for students in the higher education sector. Academic credits are also provided for many of these courses.

- **E-PG Pathshala:** Is another platform on which e-books upto PG level can be accessed.

- **CBSE PODCAST:** CBSE launched a Podcast app 'CBSE- Shiksha Vani', which is available on Play Store for Android phone users.

- **National Digital Library of India:** The National Digital Library of India is an integration platform for schools, colleges, universities, teachers, students, lecturers, differently-abled pupils, and anybody who has a willingness to learn.

- **IIT Pal:** Students who are interested in getting online coaching for IIT entrance exams can access lectures on physics, chemistry, mathematics and biology on the official website of National Testing Agency.

- **Vidwan:** It is a database of experts and it provides information about experts to peers, prospective collaborators, funding agencies, policymakers and research scholars in the country.

- **E-Shodh Sindhu:** This platform provides current, as well as archival access to more than 15,000 crores, peer-reviewed journals and more.

- **E-Classes on Swayam Prabha DTH Channels:** The Ministry of Human Resource Development (MHRD) has come up with e-classes on Swayam Prabha DTH channels for school students to make sure they remain connected to studies even when they are in self-isolation.

- **UMANG mobile app:**As schools are closed amid coronavirus outbreak, students can resort to e-learning on the government's UMANG mobile app. It contains more than 1 crore e-books, audios and videos on all subjects for primary and secondary school students. This app offers the option of e-pathshala where students can access books and study material of NCERT. UMANG App can be downloaded free from app stores of Android, iOS and Windows.

2.3.2ADVANTAGES OF ONLINEEDUCATION

- **Efficiency:**

Online learning offers teachers an efficient way to deliver lessons to students. Online learning has a number of tools such as videos, PDFs, podcasts, and teachers can use all these tools as part of their lesson plans. By extending the lesson plan beyond traditional textbooks to include online resources, teachers are able to become more efficient educators.

- **Accessibility of Time and Place:**

Another advantage of online education is that it allows students to attend classes from any location of their choice. It also allows schools to reach out to a more extensive network of students, instead of being restricted by geographical boundaries. Additionally, online lectures can be recorded, archived, and shared for future reference. This allows students to access the learning material at a time of their comfort.

- **Affordability:**

Another advantage of online learning is reduced financial costs. Online education is far more affordable as compared to physical learning. This is because online learning eliminates the cost points of student transportation, student meals, and most importantly, real estate. Additionally,

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all the course or study materials are available online, thus creating a paperless learning environment which is more affordable, while also being beneficial to the environment.

- **Improved Student Attendance:**

Since online classes can be taken from home or location of choice, there are fewer chances of students missing out on lessons.

- **Suits a Variety of Learning Styles:**

Every student has a different learning journey and a different learning style. Some students are visual learners, while some students prefer to learn through audio. Similarly, some students thrive in the classroom, and other students are solo learners who get distracted by large groups.

Other advantages:

- The use of online resources thrived significantly among other resources at this time as many lecturers and students were able to search for information and materials through online blogs, papers, websites, and other related resources.
- Another benefit of the transition to online teaching is the opportunity for live cloud recordings of teachings, meetings, lectures and other interactions.
- Increase in the use of available resources. Moodle and other platforms that were under-utilised before COVID-19 became intensely utilised and widely- used during this period. It is of significance that online facilities, which were already in place in the university but were in minimal use prior to COVID-19 by both lecturers and students, proved to be extremely useful tools during the transition.

- Exposure to several sessions of training organised by the university's Software Department for lecturers on various forms of digital learning and education; and also, the sharing of materials and videos for the benefit of lecturers by colleagues and university administration.
- Upgrading of new technologies for the university : purchase of many facilities and licenses, especially add-ons, to support the university's Moodle (online learning platform) and Zoom video conferencing.
- Students and staff were able to explore different learning options using technology and other online tools for instruction and learning.
- Lecturers and the university administration explored the opportunity for the development of blended learning.
- The opportunity of working remotely, which allow both staff and students to continue engagement outside the confines of a traditional university classroom.

2.3.3CHALLENGES FACED DURING ONLINE EDUCATION

- **Lack of Motivation in Students:**

Students complain of lacking motivation due to a lack of interpersonal touch between the students and the teacher in the online classes. The need for physical interaction between the students is also a necessity for maintaining engagement which the online learning methodology has no answers for yet. Institutions need to deliver interactive lessons to students.

- **Infrastructural Problems:**

The need for a computer, adequate software, constant electricity and high-bandwidth internet is quite a big demand. In most developed nations, this infrastructure is available to the public through public libraries if they cannot personally afford it.

- **Digital Literacy and Technical Issues:**

A bigger problem is with constant technical issues faced by both teachers and students on these platforms. These problems often require technical support to rectify, causing frequent disruption in the learning flow.

- **Virtual interaction cannot mimic that of a physical one:**

The physical presence inside a classroom with a teacher and fellow peers often leads to an atmosphere that can't be replicated through virtual means. The physical model also ensures discipline as students cannot switch off webcams and doze off. Physical classrooms also allow for teachers to provide more personal attention to each student's needs.

- **Yet to convince prestigious higher learning institutions:**

The online learning sphere is yet to convince prestigious higher learning institutions to offer their courses through online/ distance learning modes. The online courses for degrees are often not accredited and mostly not recognized by the job market or other institutions. Though schools have embraced the online learning system, the higher educational institutions and the governments have yet to recognize them as legitimate methods of obtaining a professiona degree.

2.4E-COMMERCE

Commerce includes buying and selling of raw material, products, services or any kind of goods and services through an electronic medium (internet) by the consumer, retailer, and business. Whereas, e-commerce retail is the exchange of goods and services between an online retail company and consumers (generally end-users). The e-commerce transaction can be of different types such as business to Business or B2B (Cisco, Alibaba), Business to Consumer or B2C (Amazon, Walmart) and Consumer to Consumer or C2C (eBay).

In March 2020, much of the world went into lockdown, forcing many businesses to temporarily shut down. When traditional shopping becomes difficult, or may even be scary, people are increasingly inclined to shop online. Countries are gradually relaxing restrictions, but the future is still uncertain. Even businesses that are reopening have restrictions enforcing social distancing, the wearing of masks, and limits on how many customers can enter a space at one time. The fact that consumers were already embracing Amazon and other online retailers with open arms made this transition considerably easier.

2.4.1IMPACTS OF E-SHOPPING DURING COVID- 19

The factors which drive the growth of the e-commerce market before the COVID-19 pandemic include strong and steady growth of internet users and rising awareness related to online shopping, increasing online launching of products, low price due to bulk purchase and so on. In addition, an increasing number of exclusive products in the market and lower prices of goods due to the direct distribution channel and economies of scale further contribute to the growth of the global e-commerce market.

Moreover, after the COVID-19 pandemic, social distancing and staying home is further expected to push the consumers towards online shopping. However, uncertain consumer demand and supply chain issues can affect the e-commerce industry. The COVID-19 pandemic issue can also

affect big merchants such as Walmart, which are experiencing a drop in casual shopping, supply chain disruption, and an increase in purchases of essential toiletries, groceries, and other products.

2.4.2 ADVANTAGES OF ONLINE SHOPPING

The COVID-19 pandemic has changed the way people do business and consumers purchase products forever, the e-commerce industry not escaping this fate. Here are the major advantages of e-commerce during this period.

- **Many businesses were saved due to e-commerce**

For many businesses, online shopping was the saving grace that allowed them to keep their doors open during one of the worst economic periods in modern history. Without the availability of online shopping, many businesses would have had to close their doors due to bankruptcy

- **Customer confidence stays high while infection stays low**

Rather than donning masks, practicing social distancing, and risking infection, e-commerce has allowed customers to shop with confidence and convenience from the safety and comfort of their own homes.

- **Extended access to products**

During this recent time of raw material and component shortages, buying directly from manufacturers through local or international e-commerce stores has granted customers and online businesses to access previously unreachable markets.

- **Enhanced customer experience**

The advantages of e-commerce to consumers mainly deal with user experience and convenience Not only can customers shop whenever and wherever, but they also have more options to

compare products and prices. From reviews to detailed product descriptions, customers can access a range of information.

Whether it be the convenience of shopping from home, the 24/7 availability, or access to a wider range of products that simply aren't available downtown, more and more people are preferring to shop online over traditional brick-and-mortar stores.

- **E-Commerce benefits businesses**

While the benefits of e-commerce to consumers are clear, this business model can also work in favour of businesses. Not only can business owners scale their businesses quickly, but by improving and personalizing the experience that they offer their customers, they can ensure customer lifetime value and future sales.

- **Businesses can target a global audience**

Rather than being subject to the limitations of a finite localized customer base, e-commerce grants budding and established online stores the ability to reach an international customer base - meaning anybody with an internet connection is now a potential customer.

- **E-commerce benefits the government sector**

It's not only customers and businesses that can reap rewards. Since the operation of e-commerce can minimize paperwork and make it easier to organize paper-based information, it also benefits the government sector. Increased resources and efficiency mean that delivering public services, like education and healthcare, is a more achievable outcome.

- **Fewer overheads and more savings**

No rent, no building or contents insurance, and fewer staff wages all mean that e-commerce stores are comparatively cheaper to establish and maintain. These savings are great for business owners and also a tremendous bonus for customers as the savings are reflected in product and service costs.

- **Covid-19 fear or risk**

The fear or risk due to covid-19 increases the use of online shopping. People will be worry even after the quarantine ends, and many shoppers will also favour online shopping for security purposes.

- **Rapid growth of mobile devices**

There is a continuous development in the production of mobile phones and increasing awareness about the use of mobiles and internet technology leads to shoppers to search for and shop online their preferred products and services. Shoppers can make orders at all times from their favourite websites or mobile apps.

- **Scarcity of products in physical stores**

There were shortage of some products in physical stores or shops due to the lockout situation, but there were different choices for online shopping. Therefore, it is the motivator to customers to shop online.

- **Convenience and Time saving**

Another driver of electronic shopping is that shoppers do not want to go out to purchase the things and waste their time. E-retailers provide the services of delivery of products or services at our home. Purchasers would prefer buying online in the coming years rather than from shops or other offline medium. Quarantine, on the other hand, is another explanation to online buying of goods. Throughout this time, so many people have faced different problems. People do not want to go from their home to shop because of the panic of get in touch with the corona positive person

2.4.3DISADVANTAGES

- **No brick-and-mortar store to browse through**

One of the major disadvantages of digital business and online shopping is that customers can not see the product in real life. For example, if you're selling clothing and accessories, customers won't be able to try on an item first to make sure it fits. If they're unhappy with the product, it could lead to refunds, returns, and bad reviews.

- **Increased e-commerce fraud**

Fraud has always been an on going issue for the e-commerce industry. Although during the pandemic, things have only gotten worse. Both online and offline fraud has risen across all industries, and the e-commerce industry has faced many complications trying to combat fraudulent and nefarious activities.

- **Lower customer loyalty**

Spurred on by the pandemic, there are now more and more budding e-commerce stores popping up in all niches, causing a steady increase in competition. This has led to customers being spoilt with choice, making it tougher than ever to secure their loyalty and trust.

- **Shipping times**

Unlike in-person shopping, customers don't get the product immediately. In fact, shipping times are one of the worst technical disadvantages of e-commerce to consumers. While same-day shipping is offered as an option by some online businesses, customers typically receive their orders locally within 2-7 days, while international shoppers have to wait between 2-4 weeks.

- **Shipping costs**

Another drawback of shipping is that the costs have to be covered by somebody, either the business or the customer. It's up to you to balance customer satisfaction with business expenses and decide what percentage, if any, of the shipping costs will be covered by you.

- **No sales during a site crash**

Sure, you'll have the advantage of being open round the clock, but one of the more technical disadvantages of e-commerce includes site crashes. If your site unexpectedly goes down, you won't be able to process any sales. Worse yet, potential customers won't even be able to browse your product range and wish list items for later purchase.

- **Disrupted postal services**

As the COVID-19 pandemic has been playing out, postal services from around the world have been pushed to the limit. This has resulted in slowed or delayed shipping, increases in shipping rates, and decreased shipping options. Sometimes, shipping has been completely halted. For example, during December 2021, USPS halted their international mail services for some destinations because of COVID-19 related service disruptions.

2.4.4E-SHOPPING PLATFORMS

- **Amazon**

Amazon is one of the biggest online stores with a global presence. It not only provides a variety of product choices but also provides a great user experience and splendid customer service. Besides putting prominence to personalization, Amazon also monitors user's browsing and purchase patterns in order to provide them recommended products for future purchases. It operates in India as a marketplace rather than a retailer.

- **Flipkart**

Flipkart is an Indian based e-commerce venture and over the years, it has garnered a lot of interest in the minds of Indian consumers. It has opened up the scope for Indian e-retail market in a tremendous way. It started out as an online bookstore and now it has a gamut of products ranging from: books, apparels, electronics, digital music, home care and beauty. Moreover, it has now become a mega marketplace.

- **Shopclues**

Shopclues is the latest addition to the top e-commerce websites in India. Unlike Amazon and Flipkart, Shopclues is a market place that focuses on unstructured categories of home, electrical, fashion, and daily utility items. The mass market of shopclues comes from tier 2 and tier 3 cities and most of its business comes from smaller cities. Shopclues helps give brands from unstructured markets a voice of its own.

- **PayTm**

PayTm is the second largest e-commerce platform in India and has also made its way to the list of unicorn start-up's. Primarily started as a mobile wallet, in 2016, PayTm entered the e-commerce industry with PayTm Mall. As the name suggests, it is an online market place for products ranging from electronics to daily consumer needs.

CHAPTER-3

DATA ANALYSIS AND INTERPRETATION

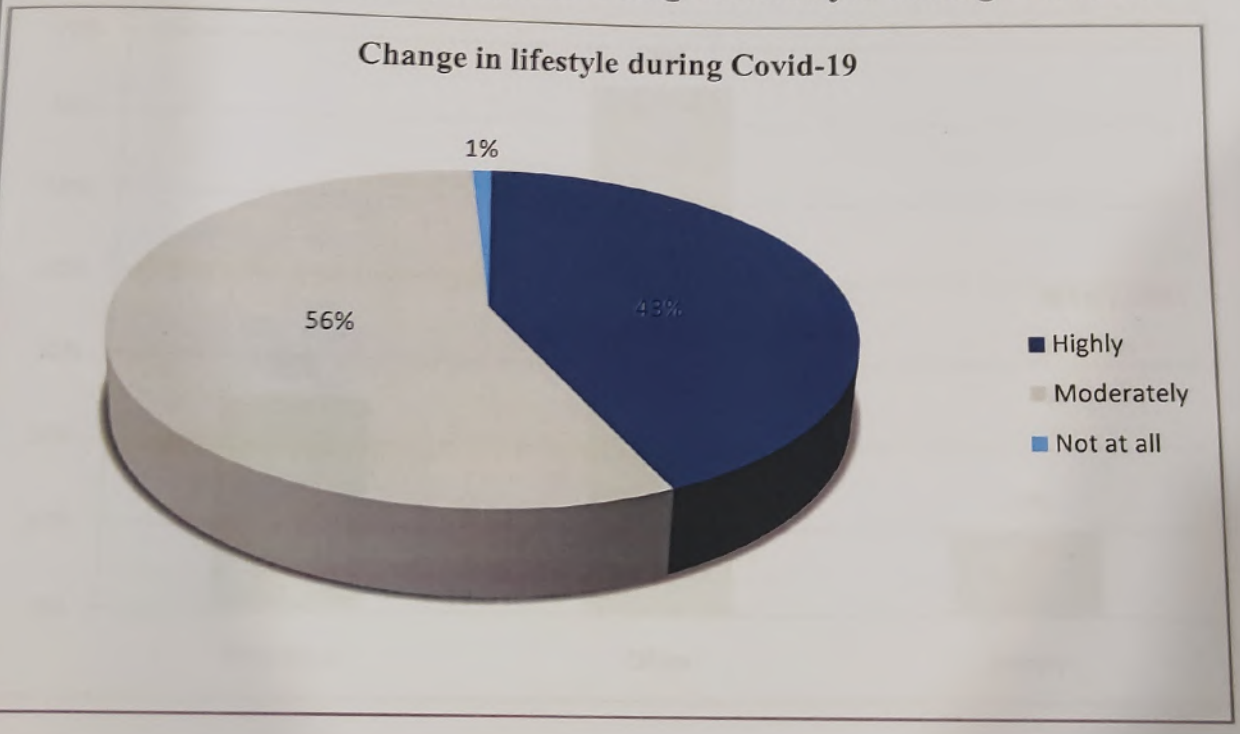
ANALYSING THE CHANGE IN LIFESTYLE DURING COVID-19

Table 3.1:Analysing the change in lifestyle during Covid-19

Lifestyle change	No.of respondents	Percentage
Highly	32	43
Moderately	42	56
Not at all	1	1
TOTAL:	**75**	**100**

Source: Primary Data

Figure 3.1: Analysing the change in lifestyle during Covid-19



Interpretation: From the pie chart it is clear that majority of people have a moderate change in their lifestyle at the same time less than half has a drastic change.

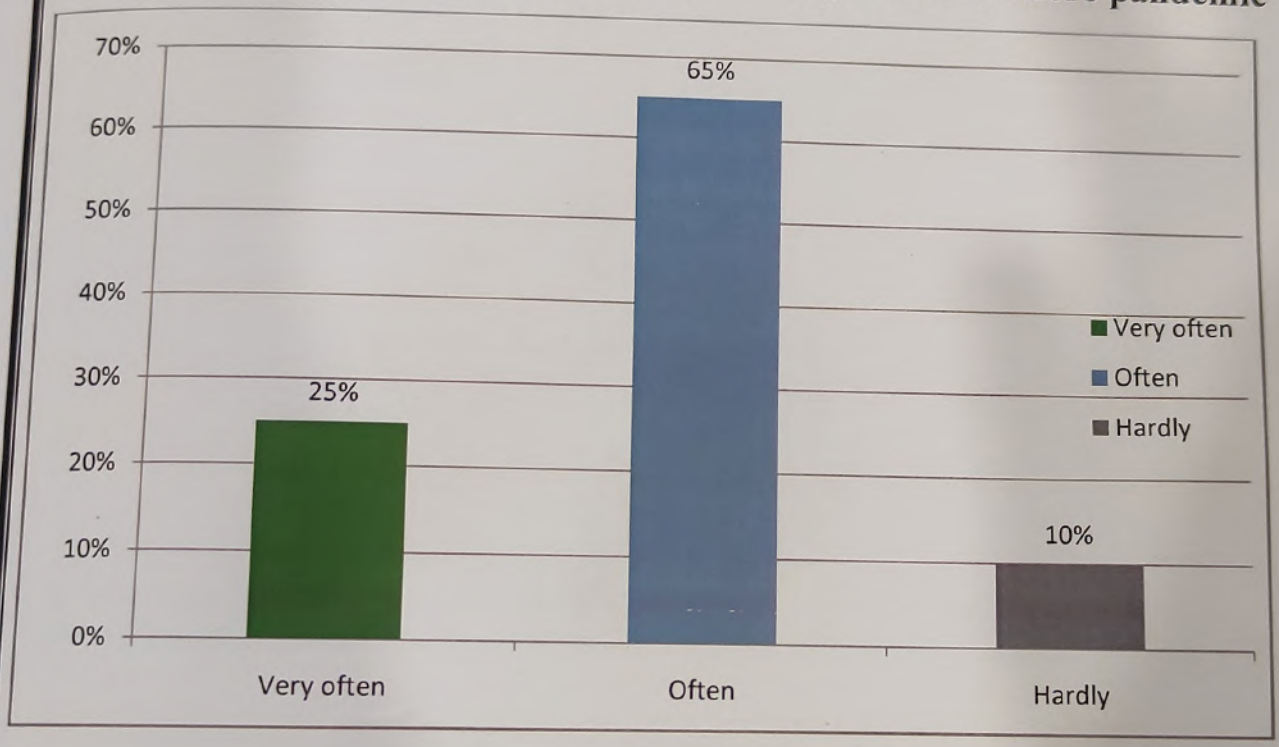
ANALYSING THE USAGE OF ONLINE PLATFORMS BEFORE PANDEMIC

Table 3.2: Analysing the usage of online platforms before the pandemic

Usage	No. of respondents	Percentage
Very often	19	25
Often	49	65
Hardly	7	10
TOTAL	**75**	**100**

Source: Primary Data

Figure 3.2: Analysing the usage of online platforms before pandemic



Interpretation: From this response it was found that before pandemic majority of population were using online platforms in an often manner and only small fraction of people were hardly using online platforms.

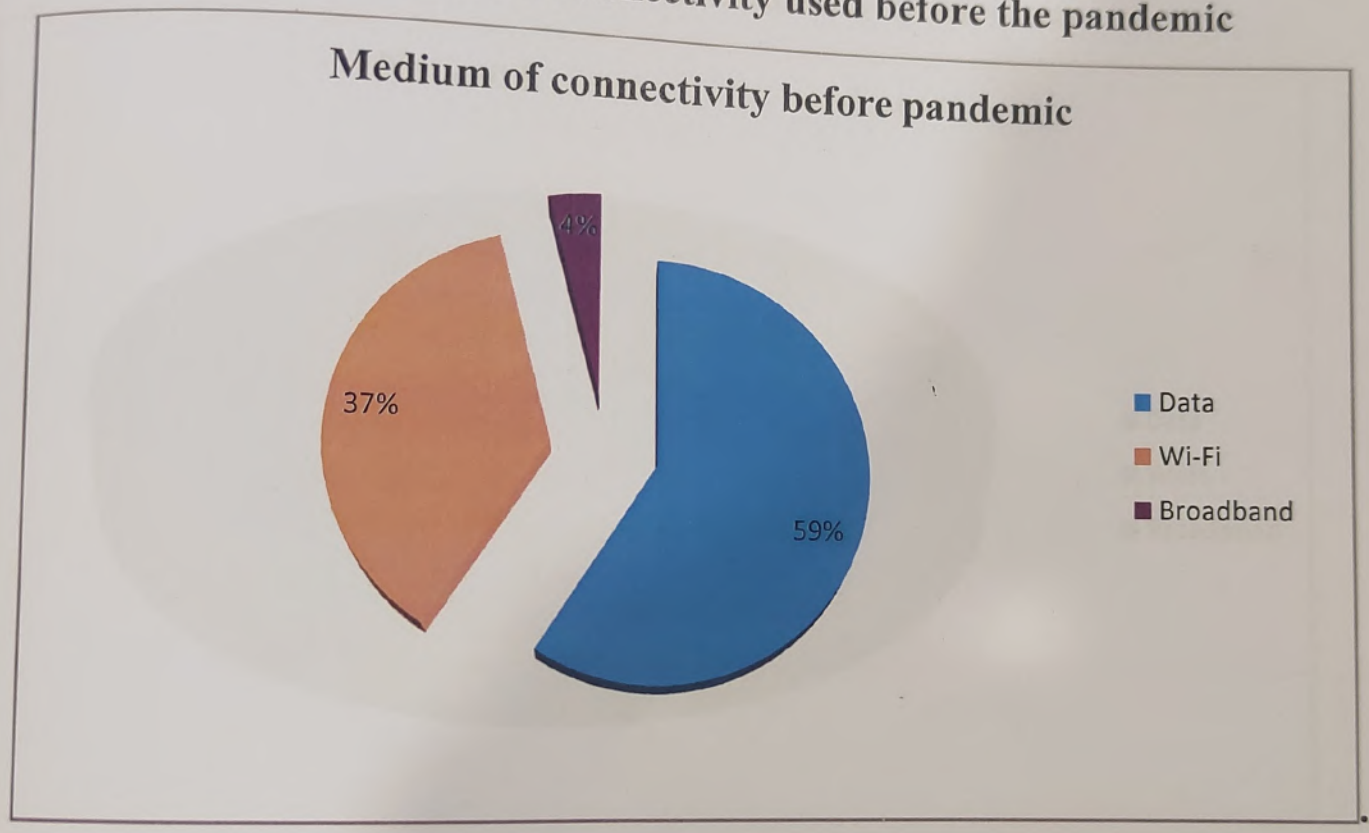
NETWORK CONNECTIVITY USED BEFORE PANDEMIC

Table 3.3: Network connectivity used before the pandemic

Mode	No.of respondents	Percentage
Data	44	59
Wi-Fi	28	37
Broadband	3	4
TOTAL	**75**	**100**

Source: Primary Data

Figure 3.3:Network connectivity used before the pandemic



Interpretation: It is very clear from the above figure that 59% of the respondents used data for their network connectivity as network usage was less before the pandemic.

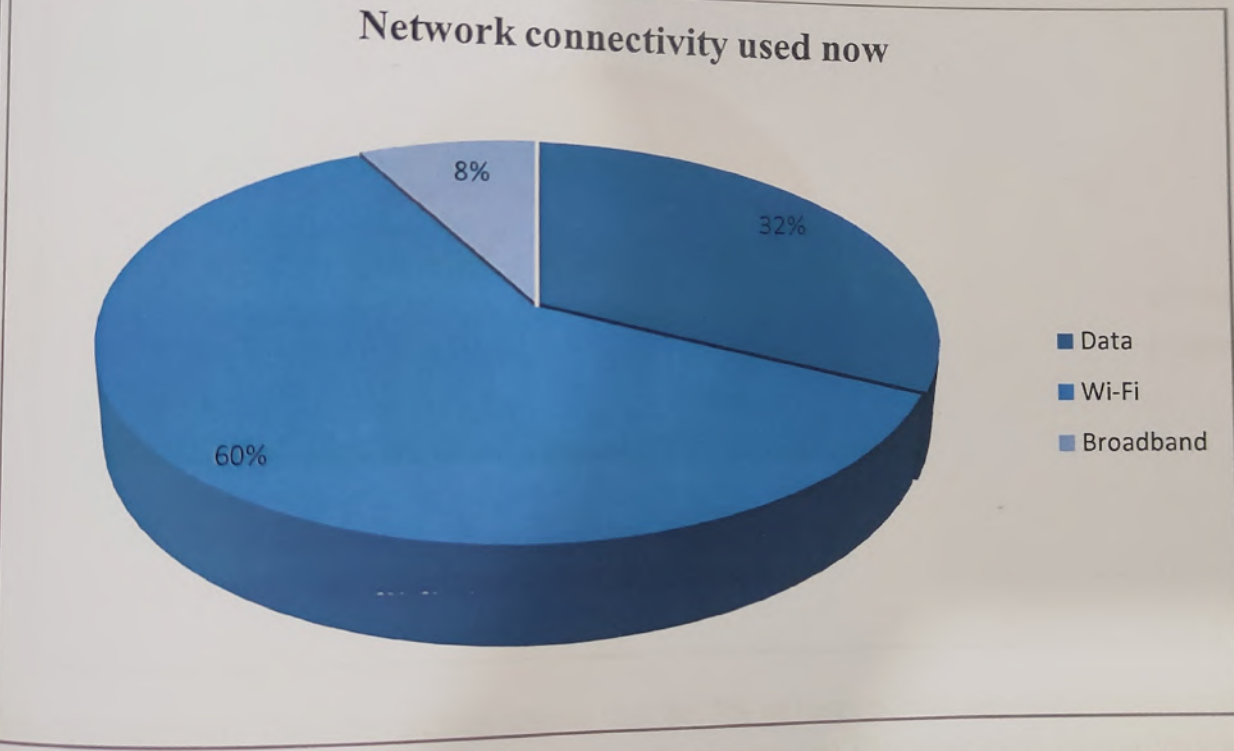
NETWORK CONNECTIVITY USED NOW

Table 3. 4:Network connectivity used now

Mode	No.of respondents	Percentage
Data	24	32
Wi-Fi	45	60
Broadband	6	8
TOTAL	75	**100**

Source: Primary Data

Figure 3.4: Network connectivity used now



Interpretation: From this response we can analyse that Wi-Fi connections are being widely used than data as during covid period people were required to go online.

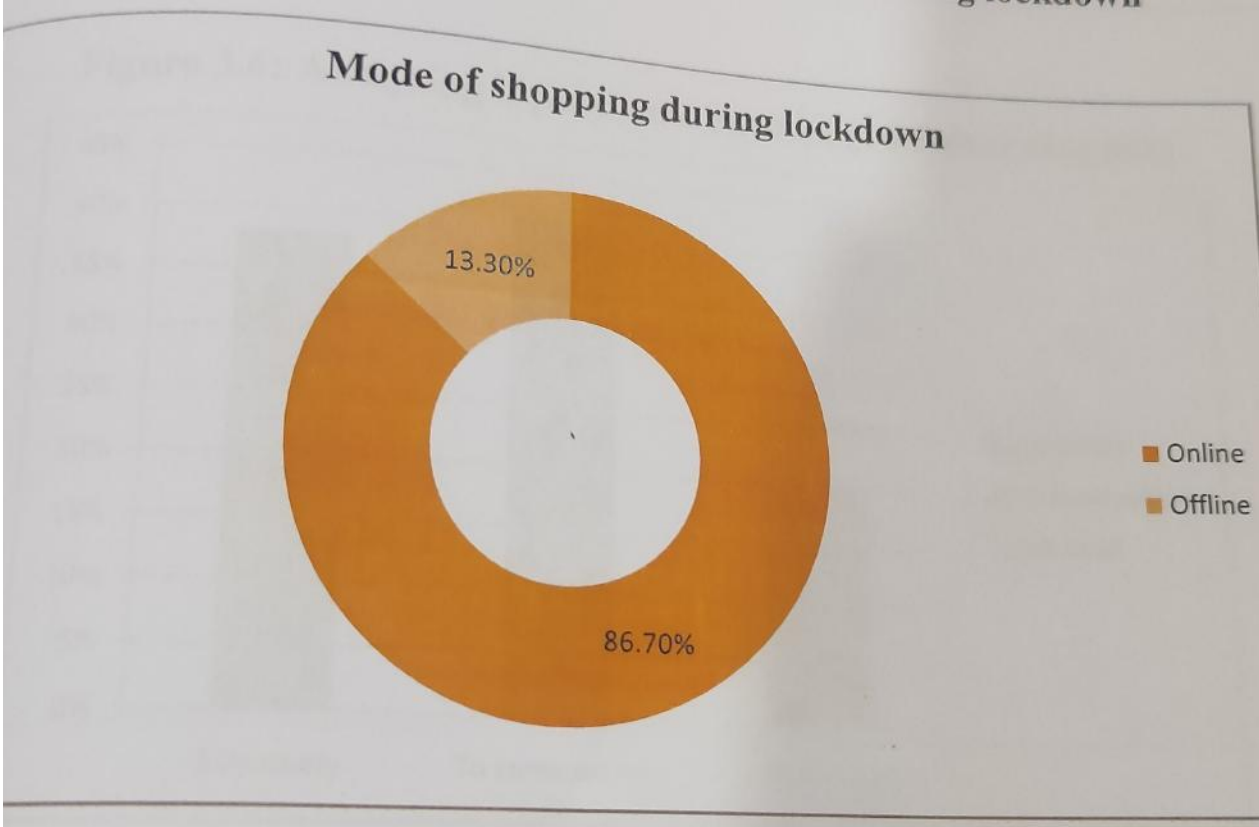
COMFORTABLE MODE OF SHOPPING DURING LOCKDOWN

Table 3.5: Comfortable mode of shopping during lockdown

Mode opted	No. of respondents	Percentage
Online	65	86.7
Personal	10	13.3
TOTAL	**75**	**100**

ource: Primary Data

Figure 3.5: Comfortable mode of shopping during lockdown



etation: The above chart shows that 86.7% of respondents are comfortable with the ode of shopping and only a minority chose personal shopping even during lockdown.

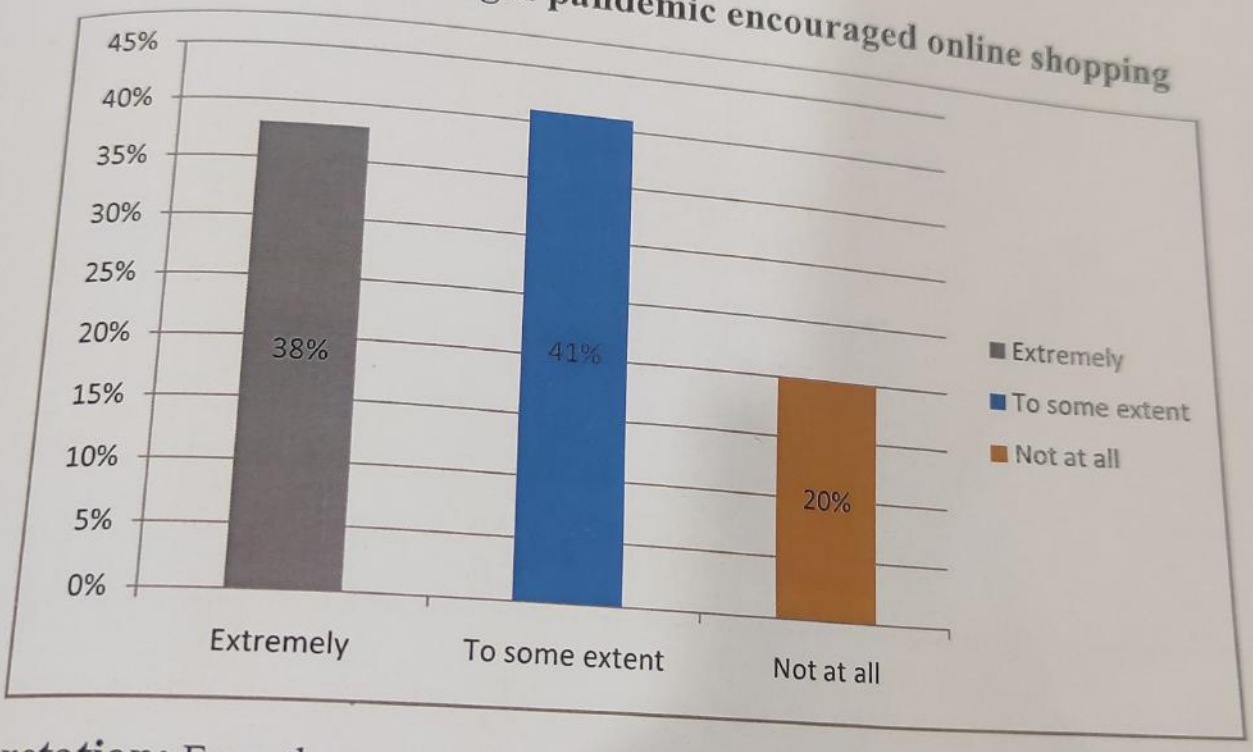
ANALSYINGIF PANDEMIC ENCOURAGED ONLINESHOPPING

Table 3.6: Analysing if pandemic encouraged online shopping

Opinion	No. of respondents	Percentage
Extremely	29	38
To some extent	31	41
Not at all	15	20
TOTAL	**75**	**100**

Source: Primary Data

Figure 3.6: Analysing if pandemic encouraged online shopping



erpretation: From the response it was found that somewhat 38% respondents were mely and 41% respondents to some extend shifted towards online shopping during emic.

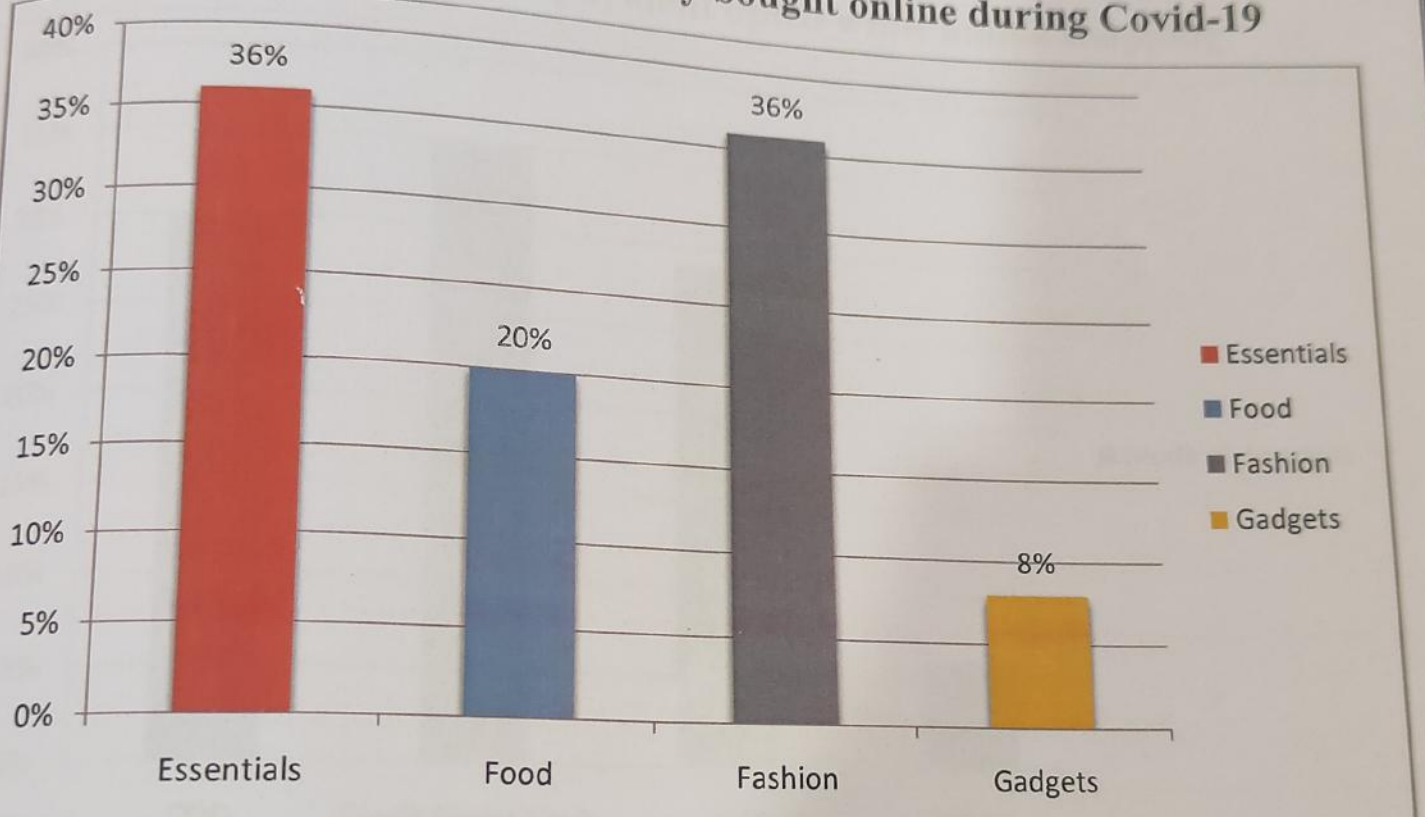
PRODUCT FREQUENTLY BOUGHT ONLINE DURING COVID-19

Table 3.7: Product frequently bought online during Covid-19

Products	No. of respondents	Percentage
Essentials	27	36
Food	15	20
Fashion	27	36
Gadgets	6	8
TOTAL	75	**100**

Source: Primary Data

Figure 3.7: Product frequently bought online during Covid-19



erpretation: From the information gathered somewhat equal no.of respondents(36%) ght essentials and fashion products through online mode during pandemic, 20% of ondents bought food and only 8% on gadgets. This shows people are not willing to bear the

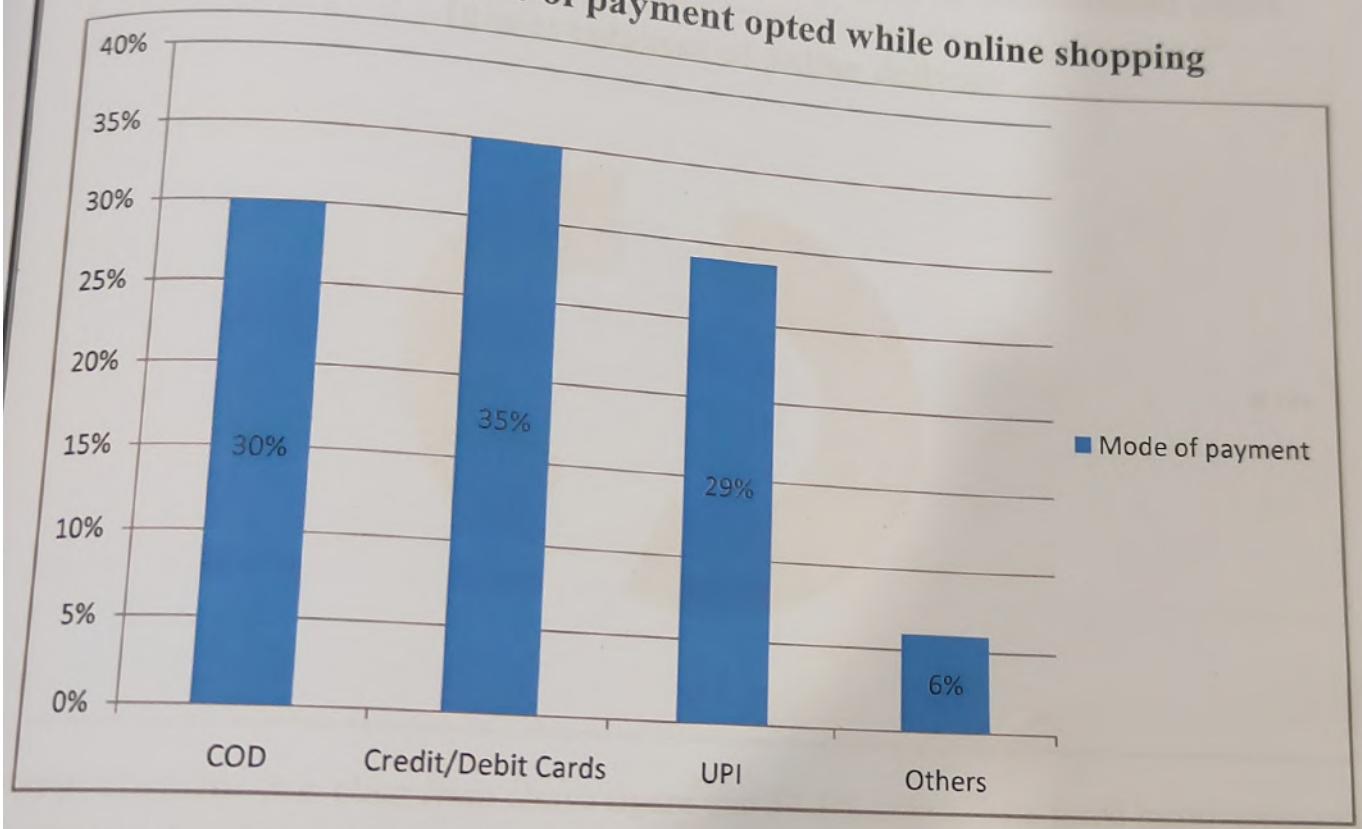
MODE OF PAYMENT OPTED WHILE SHOPPING

Table 3.8: Mode of payment opted while online shopping

Mode	No. of respondents	Percentage
COD	23	30
Credit/Debit cards	26	35
UPI	21	29
Others	5	6
TOTAL	75	100

Source: Primary Data

Figure 3.8: Mode of payment opted while online shopping



terpretation: The above data shows 35% respondents choose Credit/Debit cards instead of sical transfer of money which shows people are more aware of the spread of virus. But 30% ple still prefer to take up the risk by using COD.

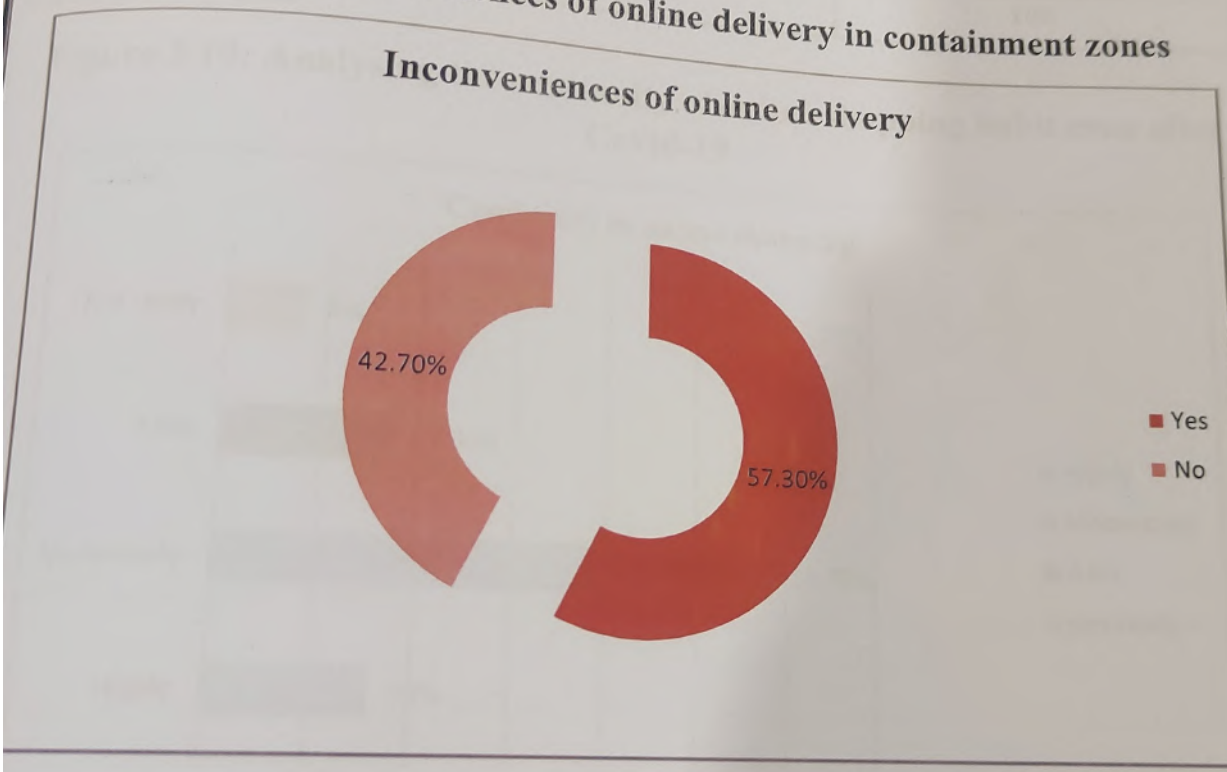
INCONVENIENCE OF ONLINE DELIVERY IN CONTAINMENT ZONES

Table 3.9: Inconvenience of online delivery in containment zones

Opinion	No. of respondents	Percentage
Yes	43	57.3%
No	32	42.7%
TOTAL	75	100

Source: Primary Data

Figure 3.9: Inconveniences of online delivery in containment zones



pretation: It is clear from above figure that 57.3% respondents faced inconvenience in ry of ordered items in containment zones and 42.7% was convenient with it.

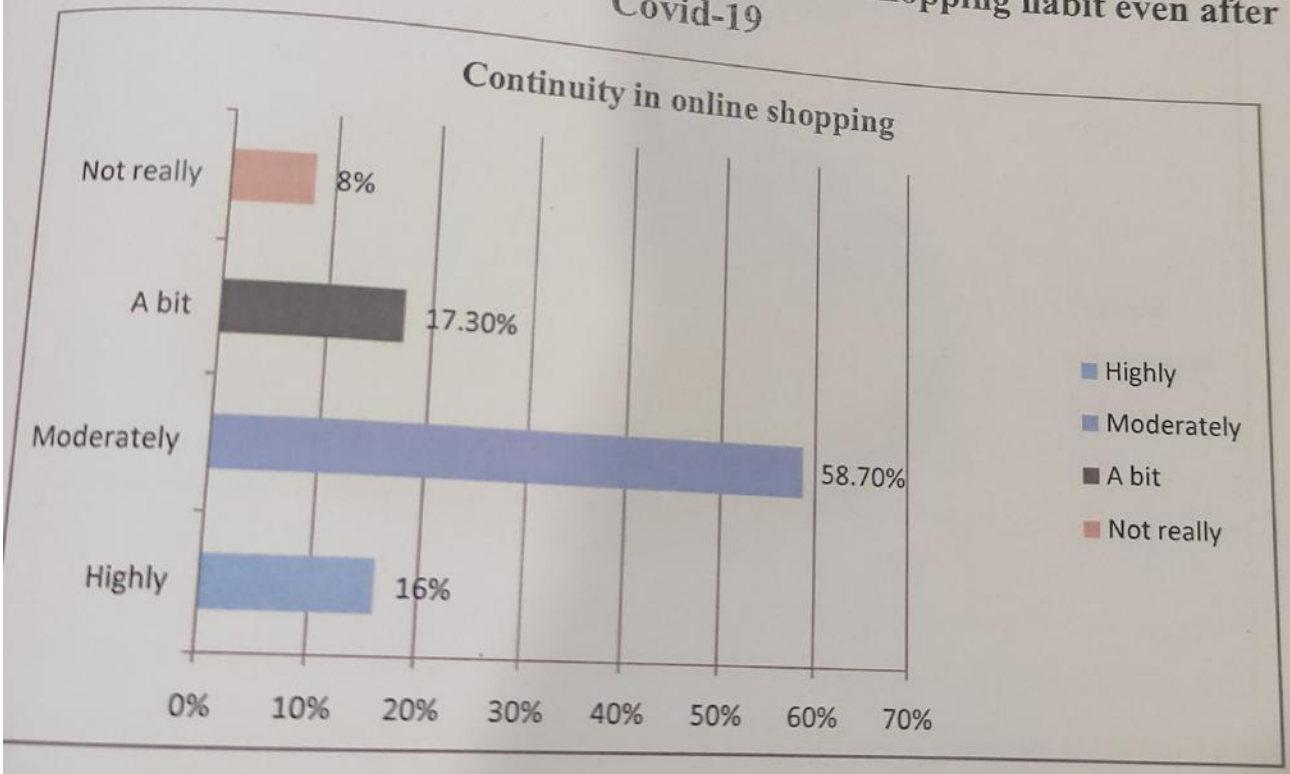
ANALYSING THE CONTINUITY OF ONLINE SHOPPING HABIT EVEN AFTER COVID-19

Table 3.10: Analysing the continuity of online shopping habit even after Covid-19

Responses	No. of respondents	Percentage
Highly	12	16
Moderately	44	58.7
A bit	13	17.3
Not really	6	8
TOTAL	75	100

Source: Primary Data

Figure 3.10: Analysing the continuity of online shopping habit even after Covid-19



pretation: Majority of respondents are ready to continue online mode of shopping even ndemic and rest of the people are not certain about the continuity in their shopping mode.

SOCIETY'S PERCEPTION OF RECOMMENDING ONLINE SHOPPING FURTHER

Table 3.11: Society's perception of recommending online shopping further

Recommended	No. of respondents	Percentage
Always	19	25.3
Sometimes	53	70.7
Not at all	3	4
TOTAL	75	100

ource: Primary Data

Figure3.11: Society's perception of recommending online shopping further

etation: Here 70.7% of people are of the opinion that they might recommend e- platforms further, but few people even now wish to continue traditional mode of without any shift.

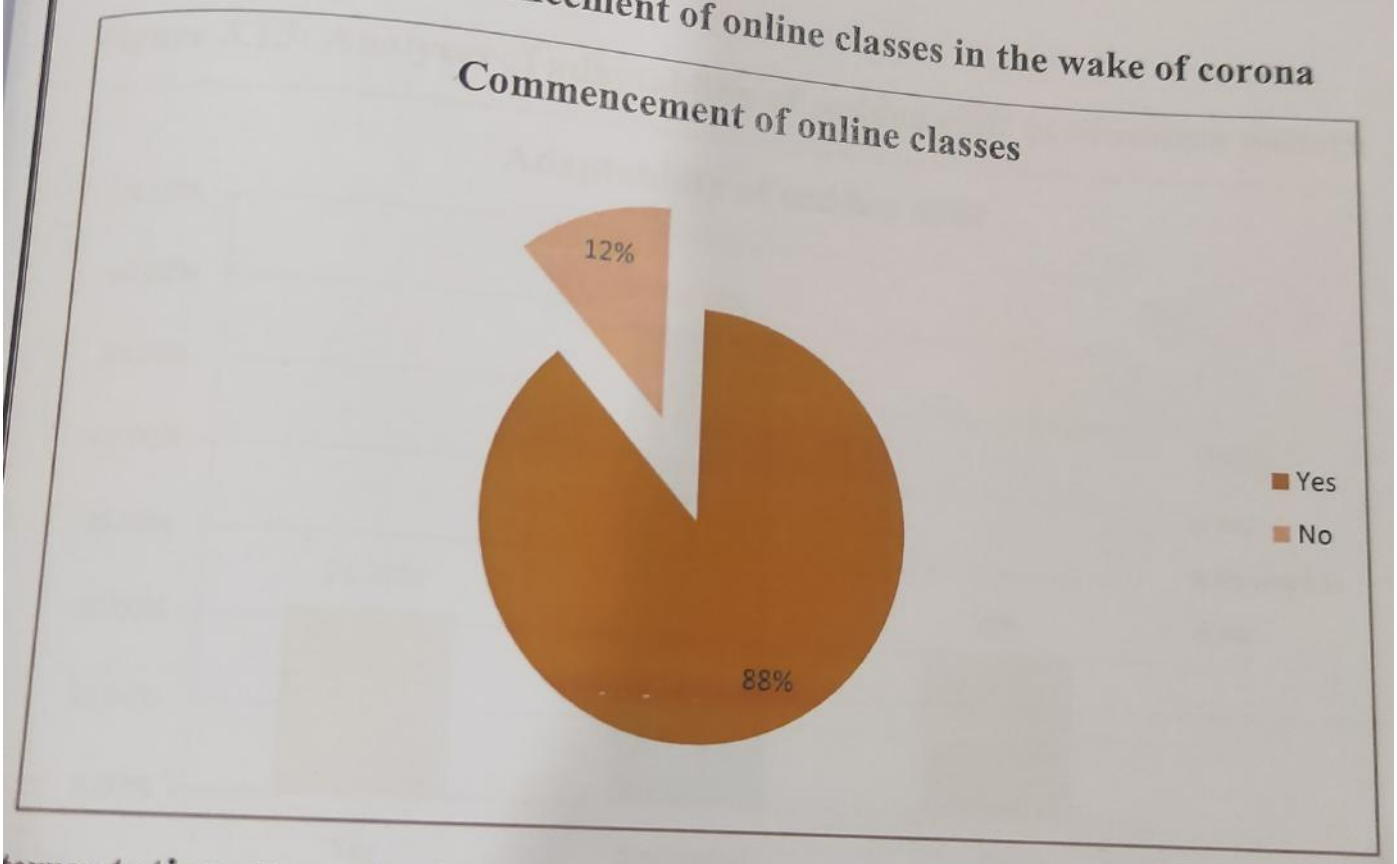
COMMENCEMENT OF ONLINE CLASSES IN THE WAKE OF CORONA

Table 3.12: Commencement of online classes in the wake of corona

Response	No. of respondents	Percentage
Yes	66	88
No	9	12
TOTAL	75	100

Source: Primary Data

Figure 3.12: Commencement of online classes in the wake of corona



terpretation: From the above figure about 88% of educational institutions shifted toward ne mode by the wake of corona whereas rest continued to be offline itself.

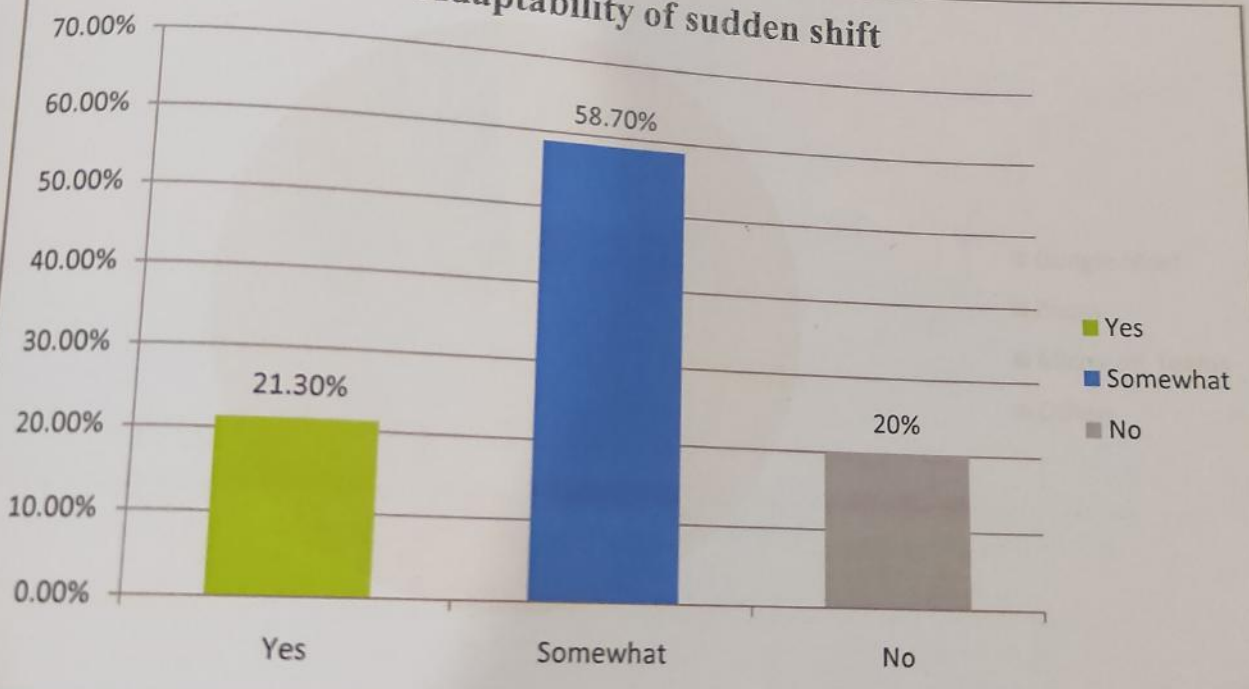
ANALYSING IF SUDDEN SHIFT IN EDUCATION PATTERN WAS ADAPTABLE

Table 3.13: Analyses of adaptability of sudden shift in education pattern

Responses	No. of respondents	Percentage
Yes	16	21.3
Somewhat	44	58.7
No	15	20
TOTAL	**75**	**100**

Source: Primary Data

Figure 3.13: Analyses of adaptability of sudden shift in education pattern



rpretation: Since the education should go on, a majority of 58.7% was slightly adaptable udden shift in education, 21.3% was extremely happy and 20% was not in a mindset to p with it.

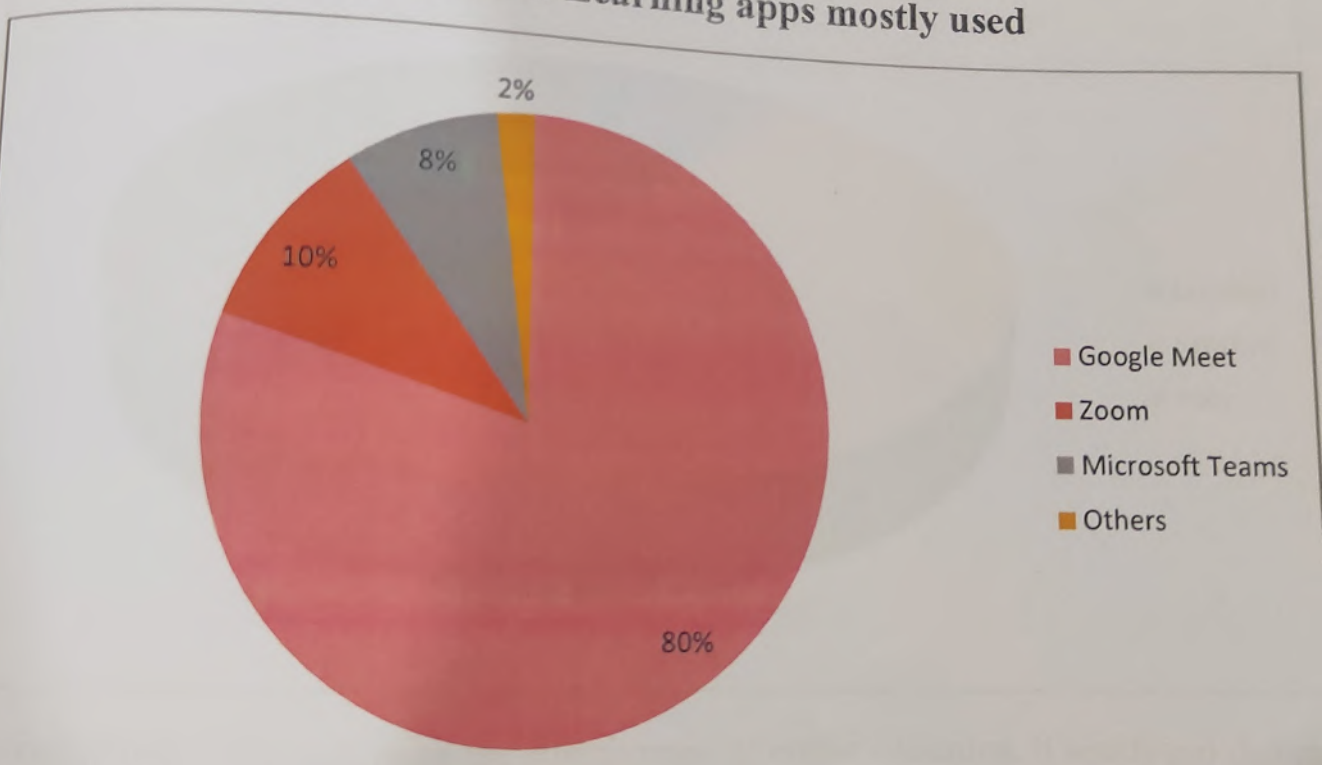
E-LEARNING APPS MOSTLY USED

Table 3.14: e-Learning apps mostly used

Apps	No. of respondents	Percentage
Google Meet	62	80
Zoom	9	10
Microsoft Teams	3	8
Others	1	2
TOTAL	**75**	**100**

Source: Primary Data

Figure 3.14: e-Learning apps mostly used



rpretation: From the response it is clear that most of respondents prefer to use Goog
(80%), followed by Zoom (10%), Microsoft Teams (8%), and others (2%).

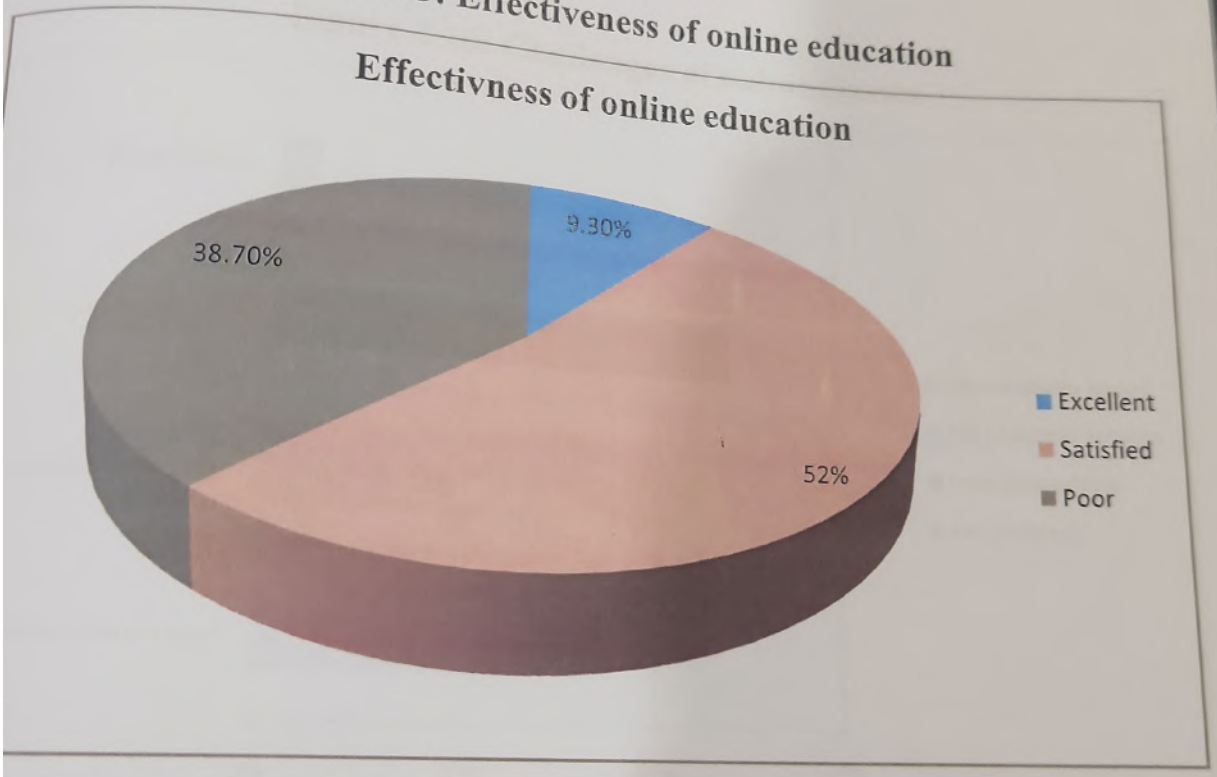
EFFFECTIVENESS OF ONLINE EDUCATION

Table 3.15: Effectiveness of online education

Response	No. of respondents	Percentage
Excellent	7	9.3
Satisfied	39	52
Poor	29	38.7
TOTAL	75	100

Source: Primary Data

Figure 3.15: Effectiveness of online education



etation: After analysing the effectiveness of online education, it was found that more the respondents (52%) are satisfied, 38.7% find it poor and only a minority (9.3%) find it.

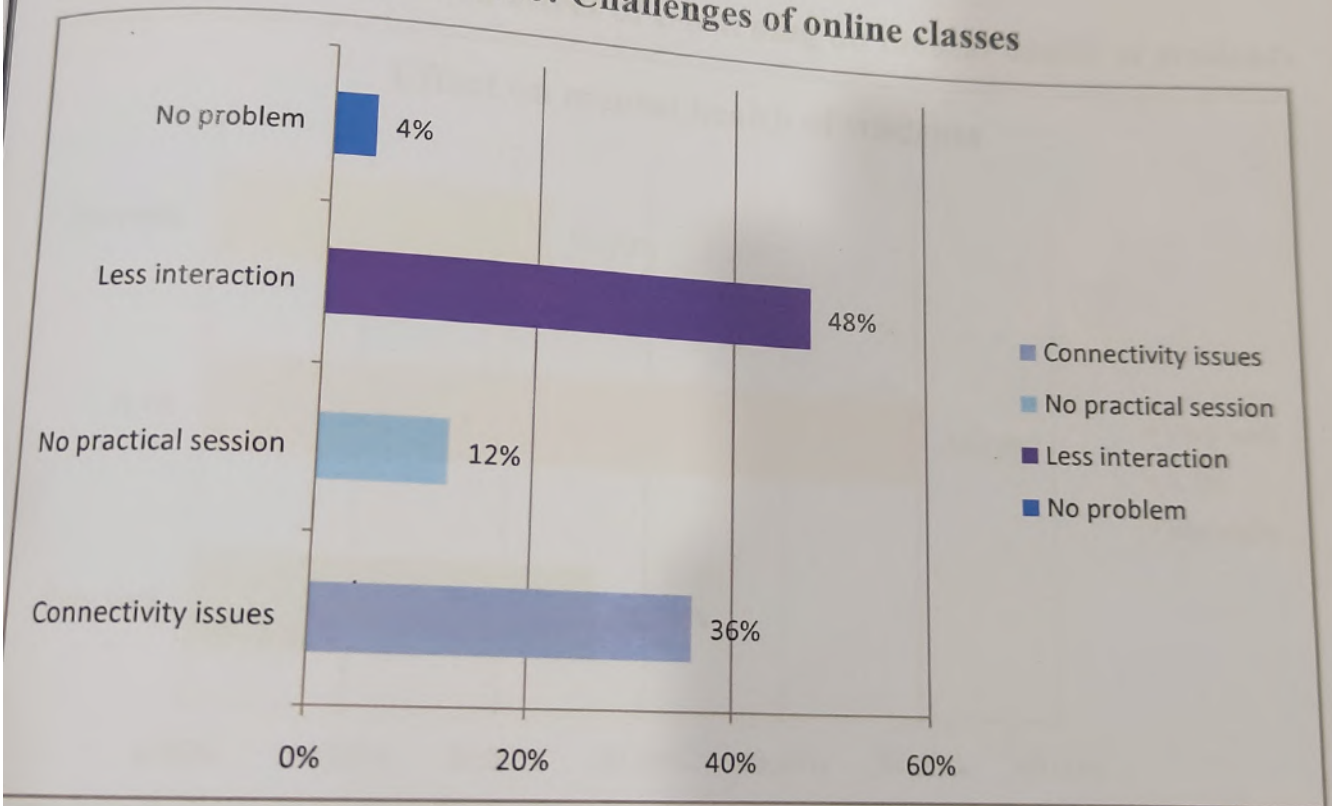
CHALLENGES OF ONLINE CLASSES

Table 3.16: Challenges of online classes

Challenges	No. of respondents	Percentage
Connectivity issues	27	36
No practical sessions	9	12
Less interaction	36	48
No problem	3	4
TOTAL	75	100

Source: Primary Data

Figure 3.16: Challenges of online classes



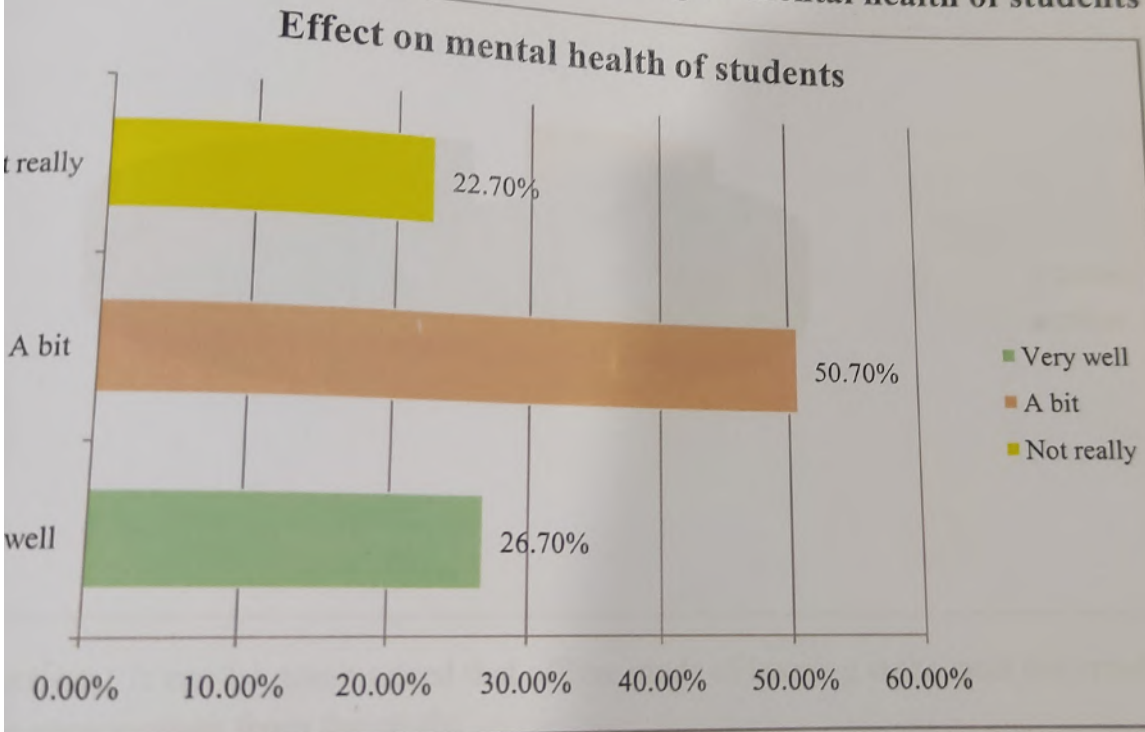
rpretation: Understanding the challenges of online classes, responses received show that
nteraction was the most challenging issue for students followed by connection problems an
ctical classes.

Table 3.17: Analyses on effect of e-learning on mental health of students

Responses	No. of respondents	Percentage
Very well	20	26.7
A bit	38	50.7
Not really	17	22.7
TOTAL	75	**100**

: Primary Data

ure 3.17: Analyses on effect of e-learning on mental health of students



tion: It is evident from the above data that most of the students have gone through tal stress during the pandemic online classes.

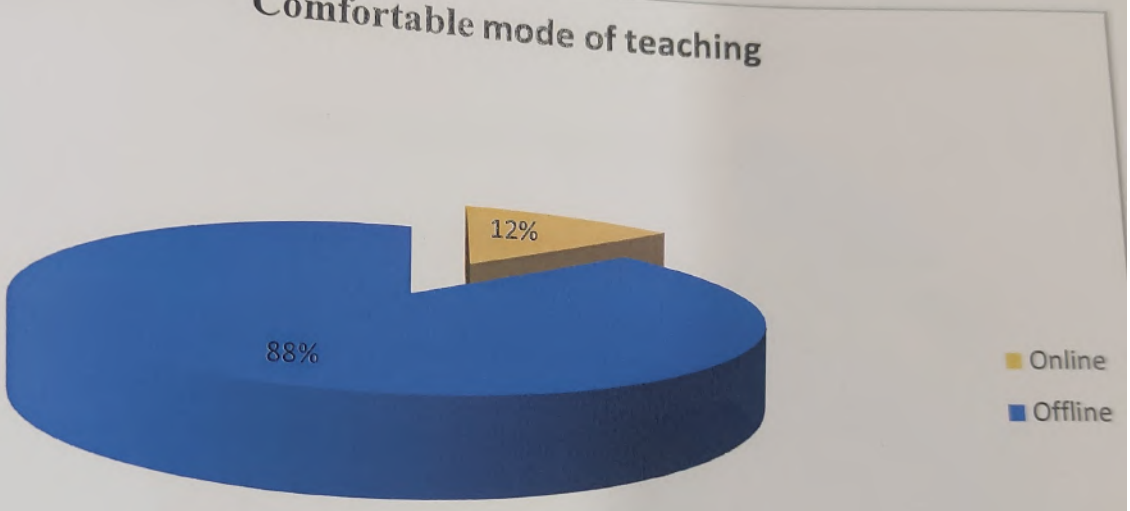
COMFORTABLE MODE OF TEACHING

Table 3.18: Comfortable mode of teaching

Mode	No. of respondents	Percentage
Online	9	12
Offline	66	88
TOTAL	75	**100**

Source: Primary Data

Figure 3.18: Comfortable mode of teaching



Interpretation: It can be summarised that offline mode of learning is the most preferred by the respondents from the study.

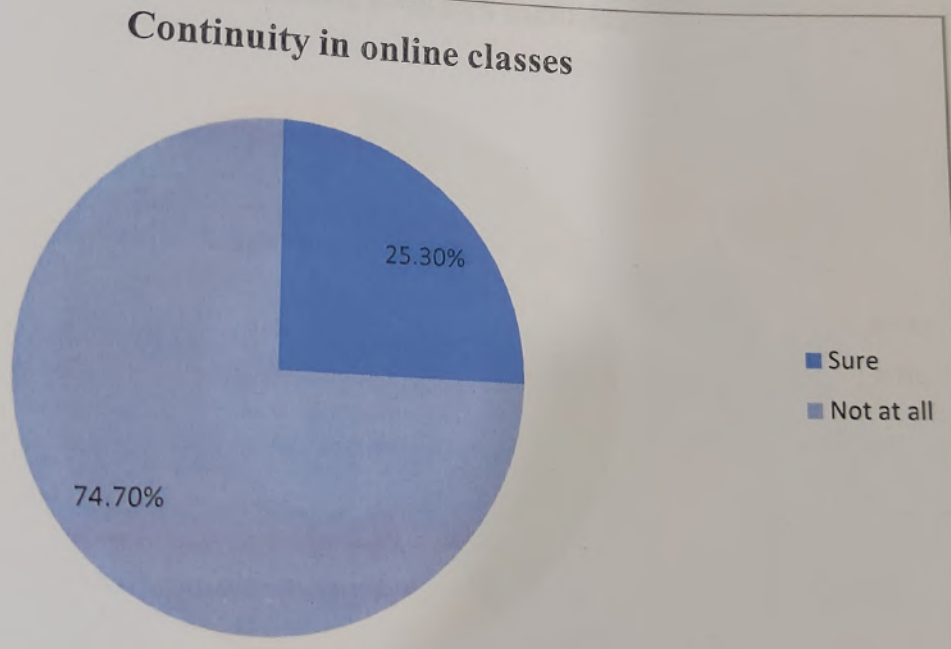
RESPONSE AS TO WHETHER CONTINUE WITH ONLINE CLASSES

Table 3.19: Analysing the response to continue online classes

Response	No. of respondents	Percentage
Sure	19	25.3
Not at all	56	74.7
TOTAL	75	**100**

ource: Primary Data

Figure 3.19: Analysing the response to continue online classes



retation: From the above, it is very clear that students recommend to resume with lasses than online classes as they find many difficulties with it.

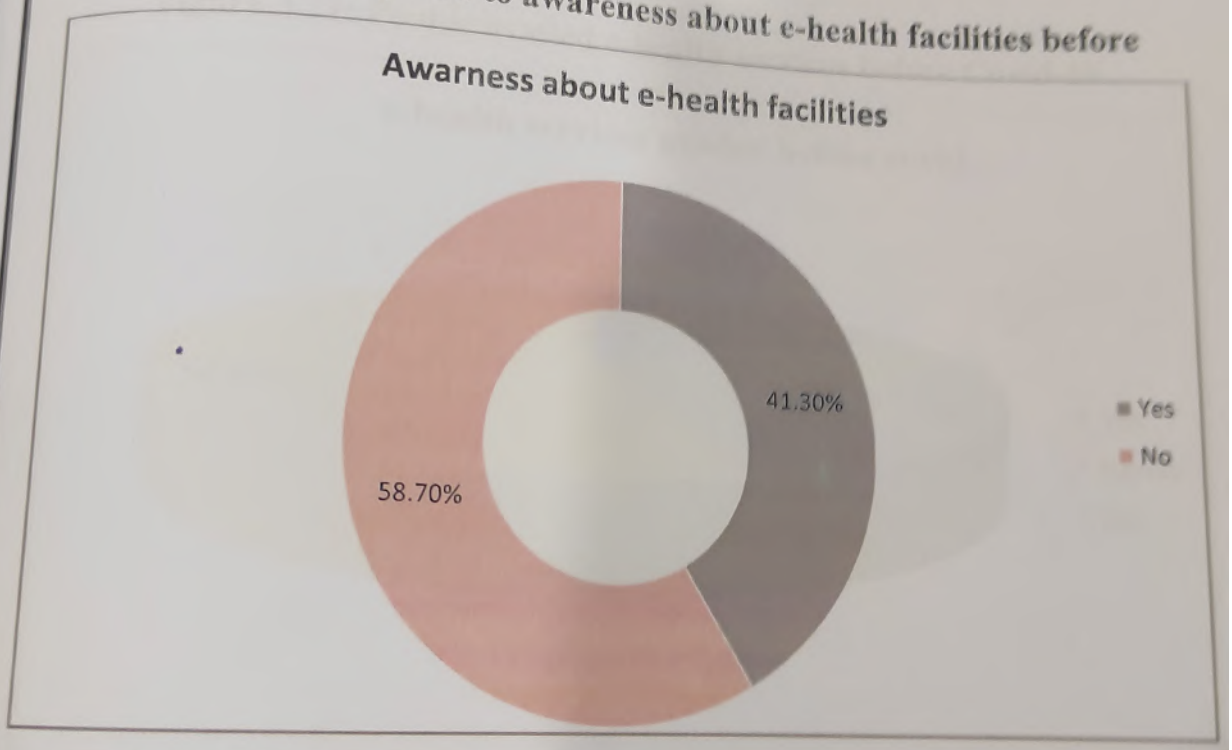
AWARENESS ABOUT E-HEALTH FACILITIES BEFORE COVID-19

Table 3.20: Response to awareness about e-health facilities before

Response	No. of respondents	Percentage
Yes	31	41.3
No	44	58.7
TOTAL	75	100

Source: Primary Data

Figure 3.20: Response to awareness about e-health facilities before



Interpretation: Evaluating the awareness about e-health facilities before covid it was found that majority people were not aware about it.

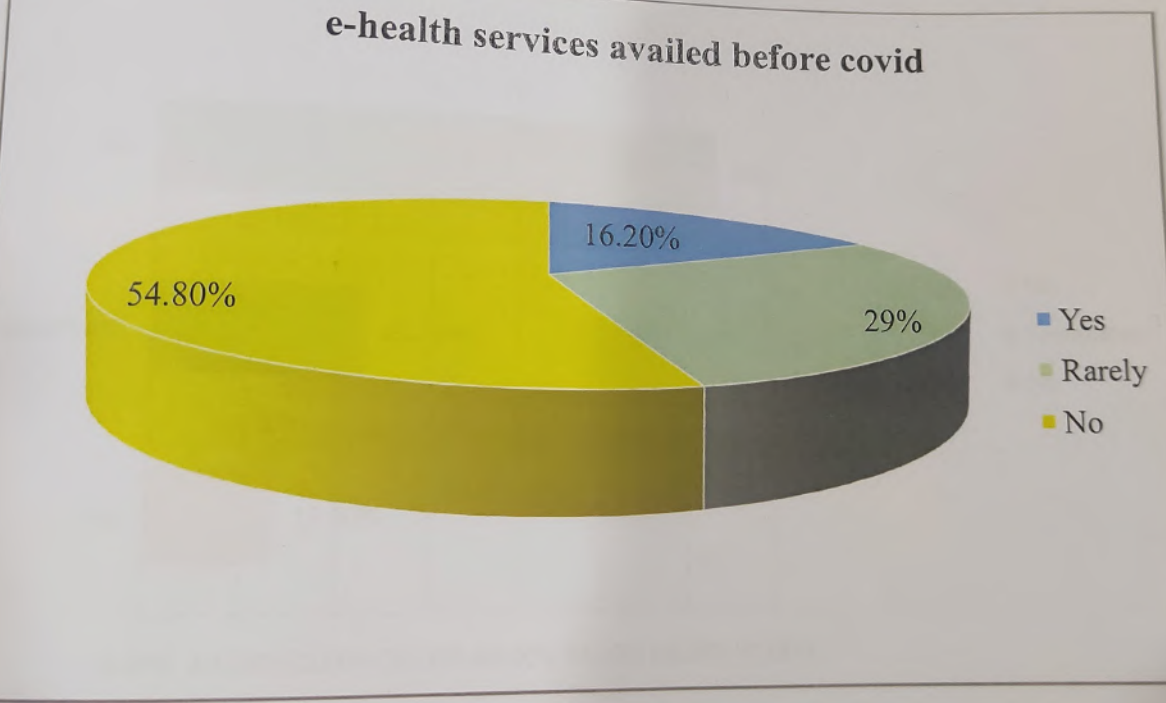
ANALYSING IF PEOPLE AVAILED E-HEALTH SERVICES BEFORE COVID-19

Table 3.21: People availed e-health services before Covid-19

Response	No. of respondents	Percentage
Yes	10	16.2
Rarely	18	29
No	47	54.8
TOTAL	75	**100**

Source: Primary Data

Figure 3.21: People availed e-health services before Covid-19



pretation: Being unaware of the e-health services before covid most of the respondents t made use of it, but still 29% have rarely made use of it.

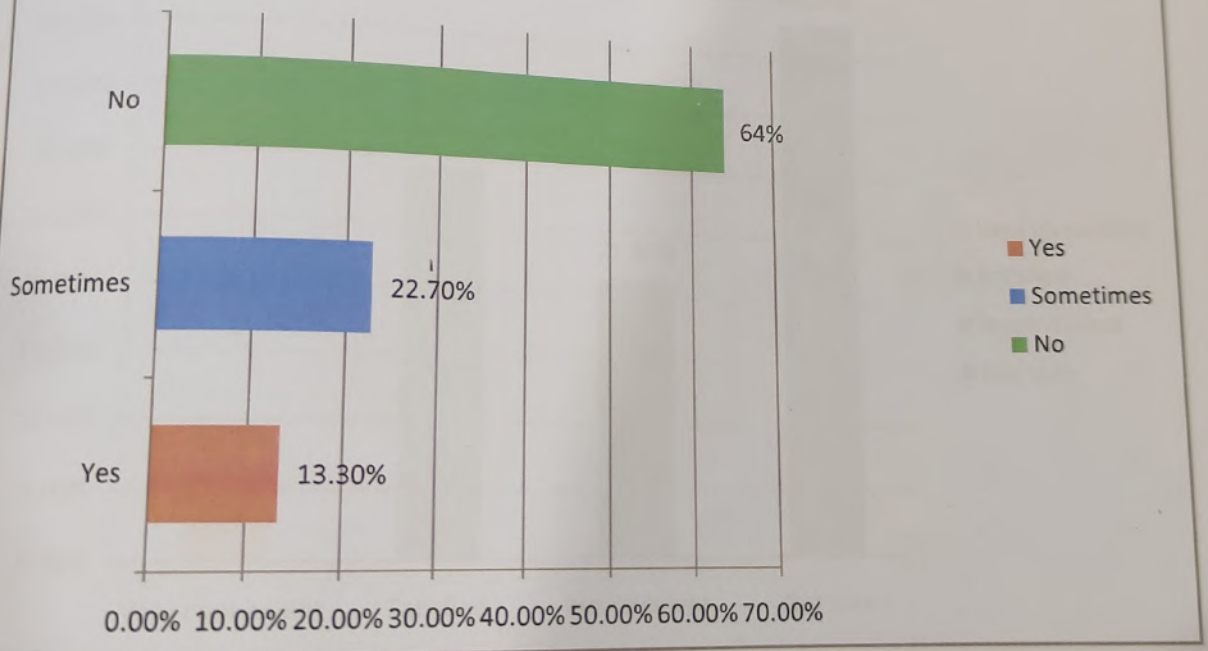
ANALYSING IF PEOPLE ARE AVAILING E-HEALTH APPS PRESENTLY

Table 3.22: Availing e-health apps presently

Response	No. of respondents	Percentage
Yes	10	13.3
Sometimes	17	22.7
No	48	64
TOTAL	75	100

Source: Primary Data

Figure 3.22: Availing e-health apps presently



rpretation: Presently it is understood that 64% of the respondents are not willing to adapt
w medium of consultation

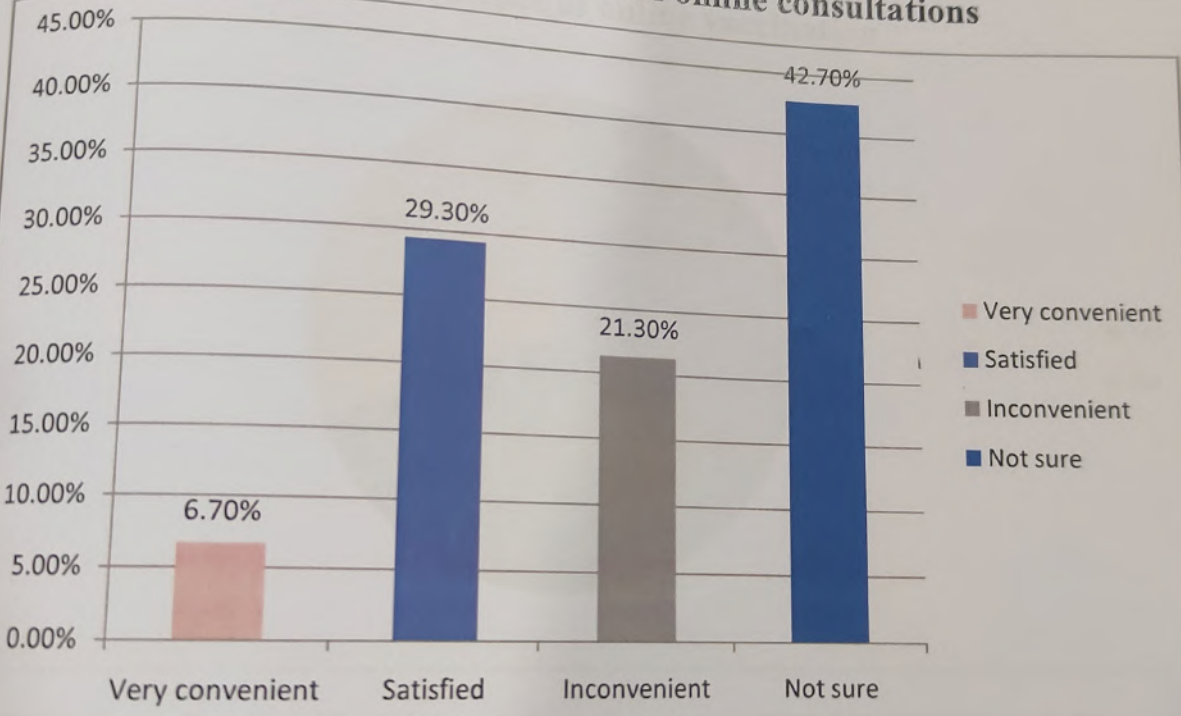
HELPFULNESS OF ONLINE CONSULTATIONS

Table 3.23: Helpfulness of online consultations

Response	No. of respondents	Percentage
Very convenient	5	6.7
Satisfied	22	29.3
Inconvenient	16	21.3
Not sure	32	42.7
TOTAL	75	**100**

Source: Primary Data

Figure 3.23: Helpfulness of online consultations



rpretation: After analysis, it was found many people are not sure of the helpfulness of nline consultation, though 29.3% find it helpful.

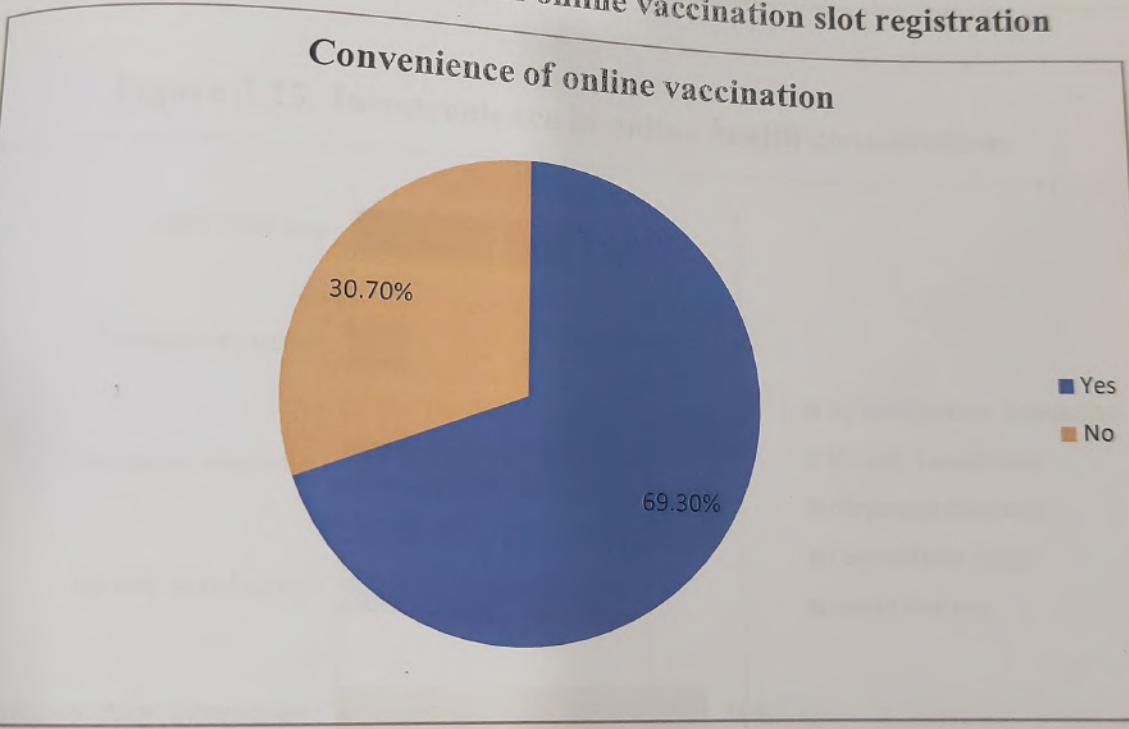
CONVENIENCE IN ONLINE VACCINATION SLOT REGISTRATION

Table 3.24: Convenience of online vaccination slot registration

Response	No. of respondents	Percentage
Yes	52	69.3
No	23	30.7
TOTAL	75	**100**

Source: Primary Data

Figure 3.24: Convenience of online vaccination slot registration



pretation: People (69.3%) found the online vaccination slot registration to be a ient system of registering vaccines.

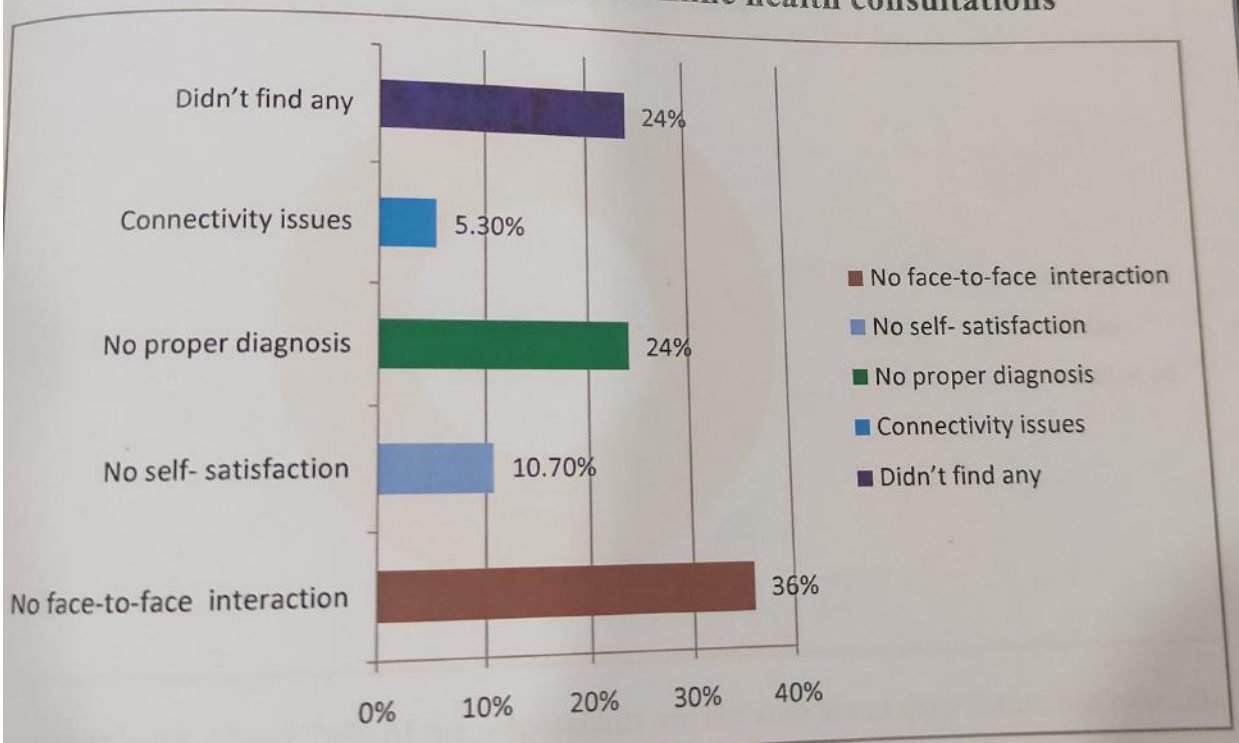
INCOVENIENCE OF ONLINE CONSULTATIONS

Table 3.25: Inconvenience in online health consultations

Response	No. of respondents	Percentage
No face-to-face interaction	27	36
No self- satisfaction	8	10.7
No proper diagnosis	18	24
Connectivity issues	4	5.3
Didn't find any	18	24
TOTAL	75	**100**

ource: Primary Data

Figure 3.25: Inconvenience in online health consultations



pretation: Respondents find less physical interaction (36%) and no proper diagnosis as the most inconvenient feature of online consultation.

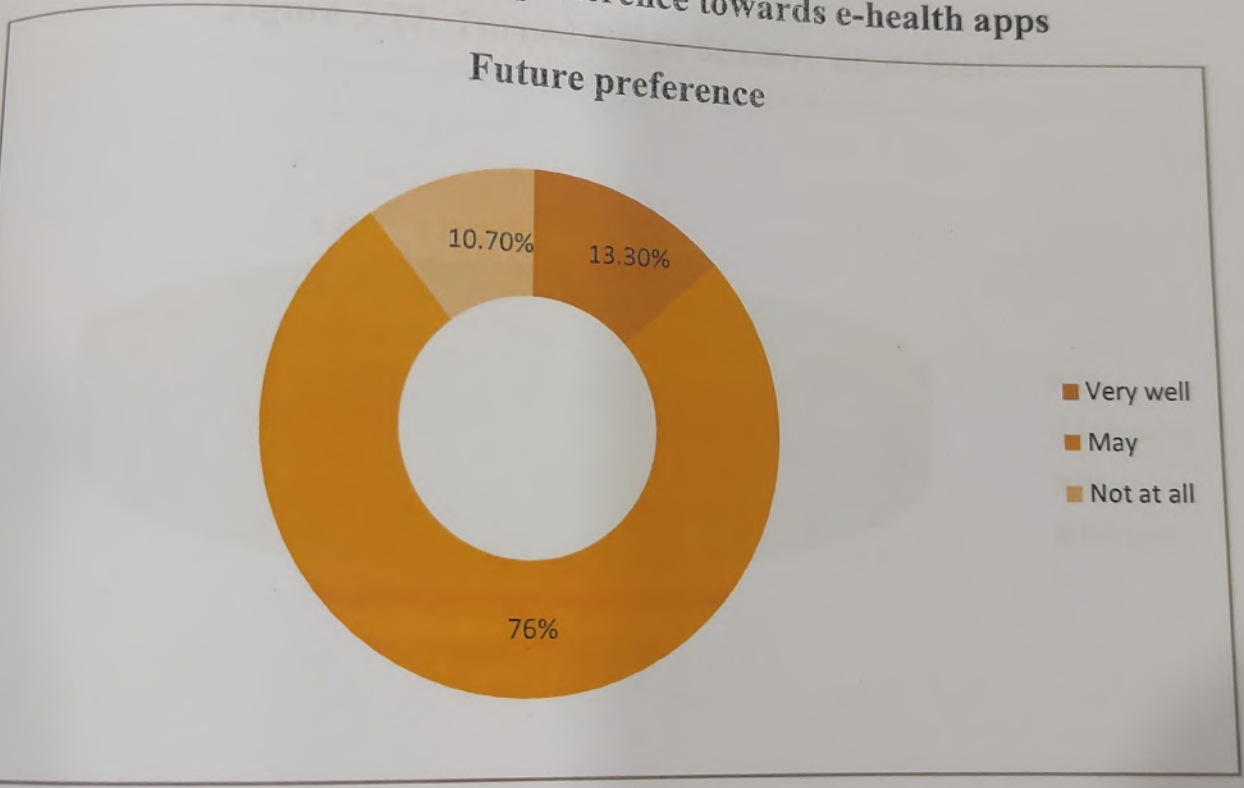
RATE OF FURTHER USE OF E-HEALTH APPS IN THE FUTURE

Table 3.26: Future preference towards e-health apps

Response	No. of respondents	Percentage
Very well	10	13.3
May	57	76
Not at all	8	10.7
TOTAL	**75**	**100**

Source: Primary Data

Figure 3.26: Future preference towards e-health apps



erpretation: About 76% of the respondents are not sure about their future use e-health s as they find no personal interactions and proper diagnosis.

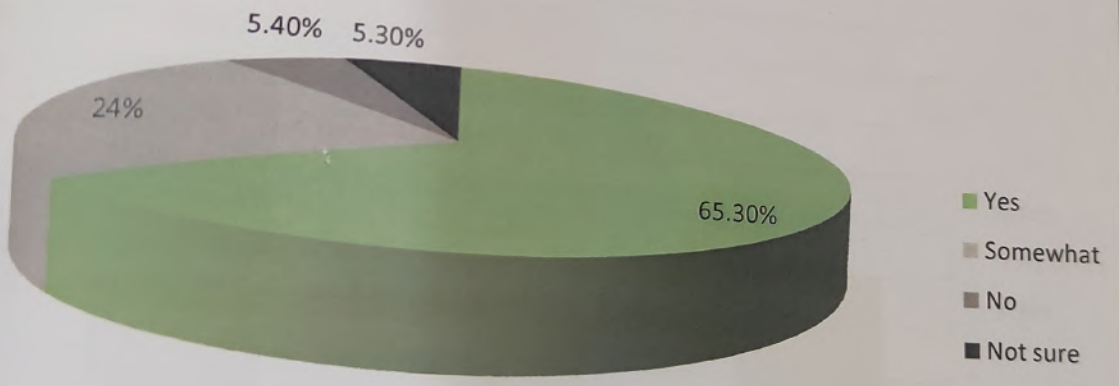
UNDERSTANDING IF PEOPLE HAVE BECOME MORE DIGITALIZED THAN BEFORE

Table 3.27: Turned out to be more digitalized

Responses	No. of respondents	Percentage
Yes	49	65.3
Somewhat	18	24
No	4	5.4
Not sure	4	5.3
TOTAL	**75**	**100**

ource: Primary Data

Figure 3.27: Turned out to be more digitalized



tation: It can be concluded from the above that majority have turned to be more than before.

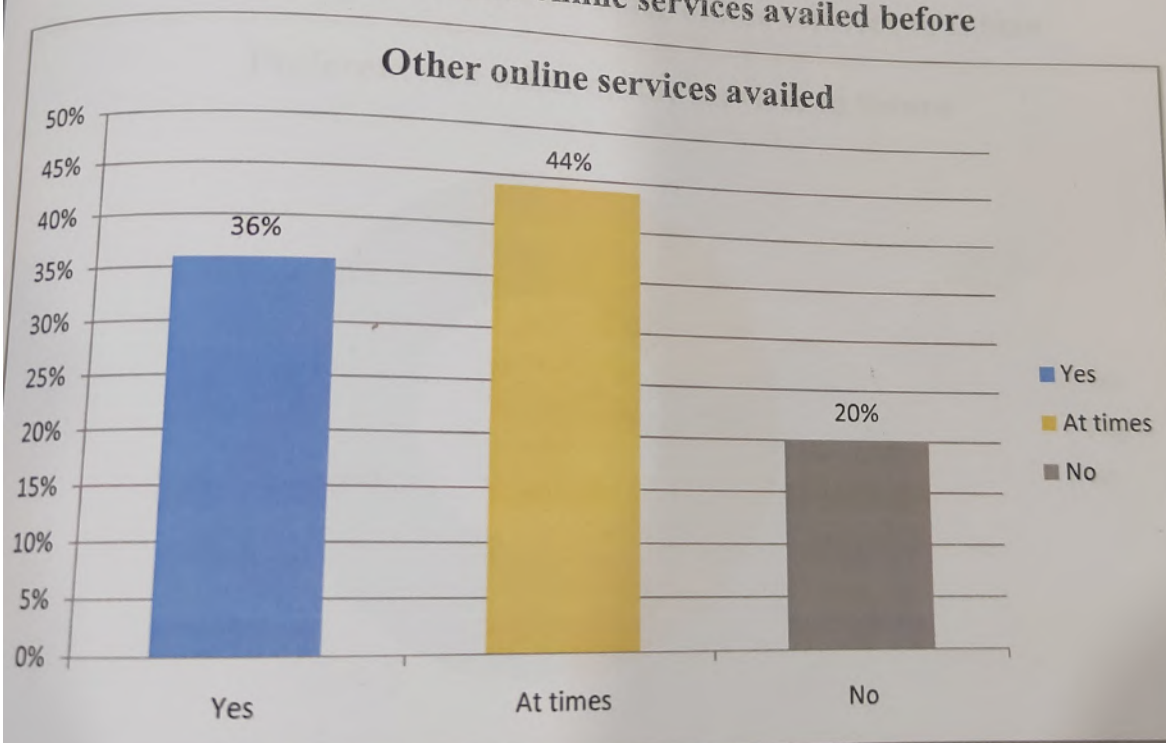
EVALUATING IF OTHER ONLINE SERVICES WERE AVAILED BEFORE

Table 3.28: Other online services availed before

Response	No. of respondents	Percentage
Yes	27	36
At times	33	44
No	15	20
TOTAL	75	**100**

Source: Primary Data

Figure 3.28: Other online services availed before



pretation: After analysing, only occasional use of online services were found as the
e..

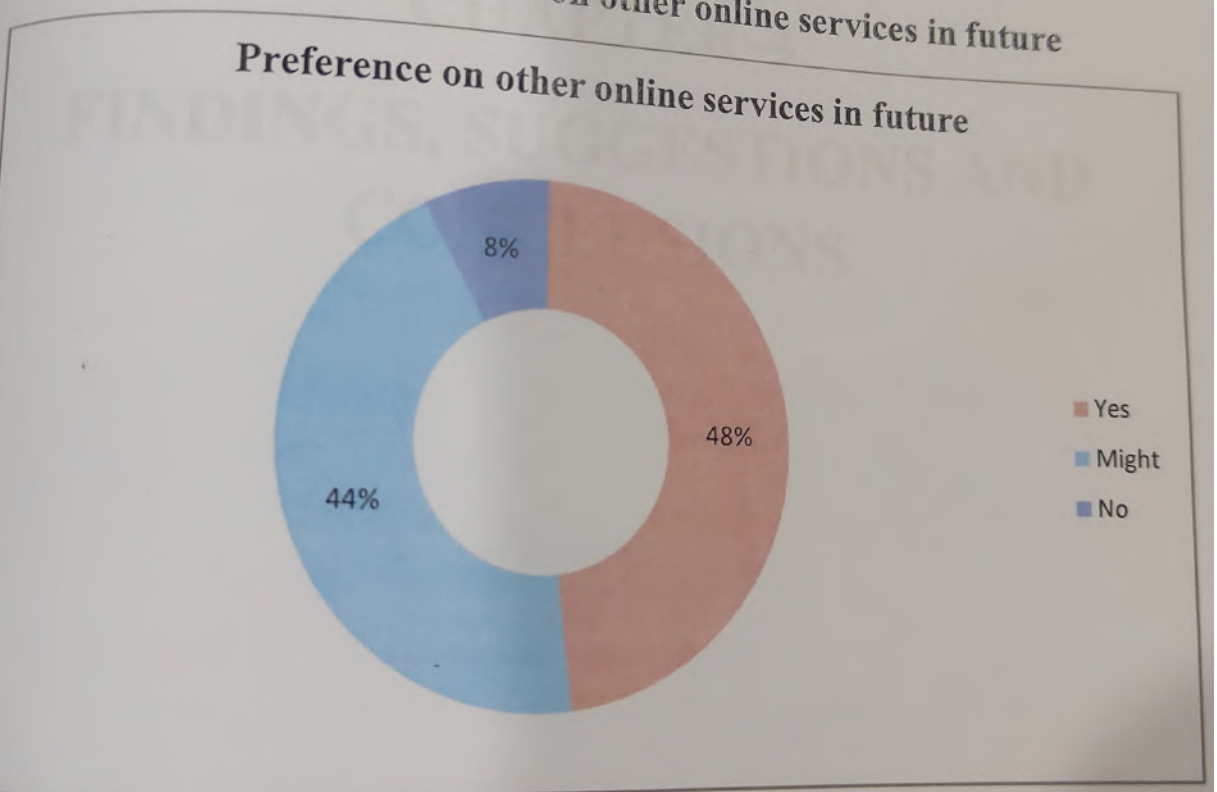
PREFERENCE TO MAKE USE OF OTHER ONLINE SERVICES HEREAFTER

Table 3.29: Preference on other online services in future

Response	No. of respondents	Percentage
Yes	36	48
Might	33	44
No	6	8
TOTAL	75	100

Source: Primary Data

Figure 3.29: Preference on other online services in future



erpretation: There shows a future trend in the use of online services by the respondents

CHAPTER-4

FINDINGS, SUGGESTIONS AND CONCLUSIONS

4.1FINDINGS

The study focuses on the growth of online sector such as e-commerce, tele - health and e-learning in the wake of COVID-19. The online sectors was one of the most effected sector during the outbreak.

- ✓ In the study it was found many people had change in their lifestyle pattern due to covid restrictions and lockdowns.
- ✓ From the study it is evident that people who preferred data as a mode of connectivity now go for Wi-Fi connections with an increase in the use of online platforms.
- ✓ Pandemic was a strongest factor that help develop the online sectors as people fear the spread of disease, which is evident from the survey as most of them started to purchase even the essentials online.
- ✓ Even the payment mode people choose are online, avoiding cash on delivery.
- ✓ The survey reveals that respondents are ready to continue online shopping habit even after the pandemic which they earlier refused to go for.
- ✓ During covid most of the educational institutions went online which was not much adaptable to students and teachers as it was a sudden shift.
- ✓ Google Meet was one of the most preferred platform by students as well as teachers for continuing with the academics
- ✓ Less face to face interaction and poor connectivity issues made online educations less satisfied and ineffective among the respondents.
- ✓ Another analysis found e-learning affects students mental health to a very great extent as they are devoid of personal attention and interaction which was earlier possible in physical classroom.
- ✓ As a result from the survey it is evident that offline mode is the most acceptable and convenient method of learning by the respondents. Also there shows a tremendous response in disagreement with continuing online classes.

E-health was another platform that got a boom during the covid period. Even when aware of the e-healthcare facilities before the pandemic, people never attempted to try such a method of medical consultations.

- During pandemic this showed a slight change as people's fear of virus made them consult online.
- No physical interaction between patients and their physicians made online consultations inconvenient and less sure about proper diagnosis of the disease.
- At the same time online vaccination slot registration proved the most convenient method for the respondents during the pandemic.
- Analysis show a tendency among respondents to might continue with online medical consultations and facilities as they are still not sure of its diagnosis and quality.

4.2SUGGESTIONS

- People could have benefited more from a digitalized environment during Covid-19, if they were provided with adequate knowledge about the same earlier.
- Awareness about e-health facilities should have been imparted in them in advance so that people could have coped up with the them during the pandemic, and could have made its implementation more easier. A combination of online and offline healthcare will be more commonly practiced in the future according to the study.
- It is seen that online learning has been shown to increase retention of information, and take less time to impart education among students. In spite of these advantages, online learning was not much acceptable among students at its initial stage due its inefficiency.
- Steps should be taken to provide internet access to people everywhere, as during the pandemic scenario availability of internet across people were found to be an issue and also it could have made the digitalised environment more effective during lockdown.
- Chances of people getting mislead to fraudulent websites and privacy issues are high In e-commerce, especially during Covid-19 period which boosted e-commerce sector.
- Also Illiterate people should be considered while the full economy is adapting to online mode.

6.3 CONCLUSION

For the Covid-19 pandemic, we envisage a dramatic shift in digital usage with impacts on all aspects of work and life. How this change plays out remains largely dependent on our responses to and shaping of the emerging trends. In this paper, we have outlined what we see as some key trends that will have substantial impact in the future.

The social distancing measures necessitated by COVID-19 have led to an increased need for internet and mobile data services and sharp increases in business-to-consumer and business-to-business e-commerce sales.

This project report has been prepared with a view to analyse the effect and impact of growth in online sectors during the COVID-19 pandemic. From the analysis it is evident that before the pandemic only a small proportion of the society preferred to use online platforms when compared to the pandemic period where, most people chose online mode for their living. To adjust with the pandemic series people started opting online mode of shopping, went online consulting and learning methods. From the survey it is clear that people who preferred traditional system of purchase, now buy even the essentials through online. Even after pandemicpeople show their desire to go for digitalized platforms because currently they are familiar with this environment.

When coming to online education, most of the students faced difficulties while shifting from the traditional to the new normal system of learning. From this study it is revealed that the effectiveness of online education was only satisfactory among the students by the reason of less physical interaction, connectivity issues and no practical sessions. With the pandemic, when the internet has become the only tool available to students for interaction, it has led to mental breakdown for at least a small portion of students. Despite, students prefer offline mode of education .

The use of e- health has accelerated dramatically during the coronavirus pandemic based on both on quantitative and qualitative data collected. This research explores how the pandemic

influences the practices of e-health from the perspective of users. Earlier people were not much aware about the e-health facilities provided in online platforms. corona virus has paved the way for it to some extent. Even now people refuse to avail tele health facilities. traditional hierarchical interaction patterns between patients and physicians have been corrected in many cases through mutual consultation on treatment and recovery plans, but still there exists dissatisfaction among the patients in their diagnosis system.

From this study point we can conclude that those who occasionally preferred online services before the pandemic, now shows a future trend in the use of online platforms due to digitalised environment .

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ANNEXURE

QUESTIONAIRE

1. Have your lifestyle changed during Covid-19 pandemic?
   - Yes
   - No
2. Rate your usage of online platforms before the pandemic.
   - Often
   - Very often
   - Not often
3. Which system of network connectivity did you use before the pandemic?
   - Data
   - Wi-F
   - Broadband
4. Network connectivity used now:
   - Data
   - Wi-Fi
   - Broadband
5. Which was the comfortable mode of shopping during lockdown?
   - Online
   - Personal
6. Do you think that Covid-19 has encouraged you to increase your online mode of shopping?
   - Very much
   - Moderate
   - Not much
7. Which product type have you bought online since the start of the outbreak?
   - Essentials

- Food
- Fashion
- Gadgets

9. Mode of payment opted while online shopping:

- COD
- Credit /Debit Cards
- UPI
- Others

9. Have you faced any inconvenience in online delivery in containment zone?

- Yes
- No

10. Will you continue your habit of online shopping even after Covid-19?

- Yes
- No

11. How far will you recommend online shopping?

- Highly
- Maybe
- Not at all

12. Did your educational institutions commence online classes in the wake of corona?

- Yes
- No

13. Were you able to adapt the sudden shift in education pattern?

- Yes
- Somewhat
- No

4. E-learning apps mostly used:

- Google Meet
- Zoom
- Microsoft teams
- Other

5. How effective is online education?

- Excellent
- Satisfied
- Not satisfied

6. Challenges faced duringonline classes:

- Connectivity issues
- No practical sessions
- Less interaction
- No problem

7. Did E-learning affect your mental health?

- Yes
- No

Which method of teaching do you find comfortable?

- Online
- Offline

Would you like to continue online classes?

- Yes
- Not at all

ere you aware of the online healthcare facilities before Covid-19?

- Yes
- No

21. If Yes, have you made use of it?

- Yes
- No

22. Do you make use of e-healthcare apps presently?

- Yes, I do
- No

23. How helpful was online consultations?

- Very satisfied
- Satisfied
- Not satisfied

24. Was online vaccination slot registration convenient?

- Yes
- No

25. Which one of the following do you find as an inconvenience in online consultations?

- No face-to-face interaction
- No self- satisfaction
- No proper diagnosis
- Connectivity issues
- Didn't find any

26. How far will you encourage the use of online healthcare apps in the future?

- Highly
- Moderate
- Not at all

27.Do you feel that you are becoming more digitalized than before?

- Yes, I do
- Somewhat
- Not much

28.Have you made use of any other online services earlier?

- Yes
- No

29. Would you like to make use of other online services now on?

- Yes
- No