



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

IMPACT OF COVID-19 ON HIGHER EDUCATION

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ABSTRACT

The COVID-19 pandemic has affected the physical, social and economic aspects of human life. All of us have moved away from the normal and are now adapting ourselves to the new normal. Prevention measures like social distancing and lockdown have led to the complete shutdown of educational institutions all over the globe. With the background of the pandemic the education system will be affected and especially the higher education system will be at stake.

This paper looks at the Impact of COVID-19 on Higher Education. It tends to study the various challenges, trends, difficulties, advantages and disadvantages of virtual education. It also provides an insight to the ground level reality of students who are pursuing higher education amidst the global crisis.

Keywords; COVID-19 (Coronavirus), Education, Higher Education, Crisis.

CHAPTER -1

INTRODUCTION

The novel coronavirus has led to complete shutdown of schools, colleges and universities all around the globe. Over 1.5 billion learners have been affected in more than 165+ countries due to the closure of educational institutions. This forced push has led us into experimenting and paving a new path for the education system. This closure has not only affected the primary and secondary levels of education but even early childhood education, higher education and even vocational training have been adversely affected. The closure of educational institutions had occurred only during times of national or international emergencies like The Great

Depression, Y2K Crisis and World War II. With the current situation in hand we have immediately shifted towards the technological and virtual learning which has tried to bridge the gap with the students due to the shutdown.

There is a great amount of effort being undertaken by the faculties of all educational institutions globally in order to provide their students the best possible learning experience during the time of crisis. They have become creative and switched from the traditional physical classrooms to virtual distant classrooms. They are now providing lessons through video conferencing and multimedia presentations. In several countries like our very own they have also introduced several television programmes and radio channels to reach students who are under-resourced. We are now on the verge of conducting online, on-demand and open-book examinations as it becomes the need of the hour. However virtual education has led to inequalities in education particularly with the students from marginalized and developing communities. Several students may not have the ability to afford even the decent amount of equipment for this virtual education system, whereas the richer students may have a slighter advantage over them. Adding to that remote and distant learning may benefit certain students who face monetary difficulties but the rest of the mass distance learning may be completely disadvantageous because both the teacher and the student may lack the sense of personalization and socialization.

It is difficult to study the inception of online education but now that we are forced to use this emergency model of technological education. It is important for both the parties the teachers and the students to learn the appropriate skill and fit into the technological education system that will fit the needs of a better tomorrow. Online education has become the order of the day and we must ensure that quality learning and teaching continues during the crisis.

CHAPTER -2

LITERATURE REVIEW

THE EDUCATION TWIN SHOCKS AND THE OPPORTUNITIES THEY BRING ALONG.

Author – Jamie Saavedra

Date, Year – 24 May, 2020

The year 2020 was not ready for the global pandemic nor was it ready for the complete shutdown of 1.8 billion children/24% of the world's population from the educational institutions. This not only has led the students to a long academic and social gap. It has also put us into a situation of how long we would take to get back to the

normal.

This does not simply mean that this lockdown was the first closures of schools, colleges and universities at the global level. There are several instances back in history where educational establishments were closed due to strikes, lockouts and other political crises. However this year has created a global shock in the education sector with the closure of educational institutions and the economic recession around the globe. It has created a twin-effect between long closures of schools and recessions like never before (The World Bank , 2020). Lockdowns are necessary to fight the pandemic but it is also leading to economic fallout and this has to be brought to a balance. In order to fulfil this gap in the education systems measures have to be undertaken to accelerate the rate of learning and reimagining the education system and following a hybrid model of education.

The global pandemic cannot be the only reason attributed to the learning crisis. Estimated by the World Bank this crisis prevailed much before the pandemic and 53% of children globally were not able to read and understand a simple text by age 10 as shown by the Learning Poverty Indicator by the World Bank. There are other several factors that are highly prevalent in third world countries where family size, wealth and parents' education also affect the opportunities of education available to an individual. There has also been a constant dropout rate where the children turn into helping hands in order to increase the economic value of the families. This however does not simply mean that the closures have led to learning losses. Several countries have switched immediately and are trying to offset these negative impacts the pandemic can bring in the education sector.

The World Bank is playing an active role in order to understand the impacts and formulate explicit policies. In the Coping Phase, they have identified that 140 countries have implemented remote learning strategies to cope with the gap in learning. They have used all modern online tools where only a few 50% of the student population gets access to. The students who belong to the marginalized sections of the community are unable to cope up with this learning gap and this brings down the effectiveness of the new policies.

The second phase we look at is the Managing Phase where the schools are continued to manage with this system without a barrier due to the possibility of the pandemic hitting the second time. Even though schools and universities may reopen, it will be a partial reopening or shift-working conditions with a possibility of being shut down again. Even though the vaccines are invented and human trials have started, the enrolments and attendance is predicted to be wavering. Students of parents who are rich or those who are better off with facilities may tend to continue

their studies online, while those who have lesser access to facilities may send their children to school.

The World Bank has also stated that this crisis can be tackled by improving and accelerating learning. The investments made by educational institutions in Radio, T.V, SMS and other types of digital content must

strengthen the foundations for an online education system. This type of learning will involve training all faculties in digital skills, AI and other digital tools. This will lead to the establishment of schools without walls where every student must have access to classes and all material that aid his study must be within a close reach to him. This type of investment will require a lot of financial resources which is way ahead of the leagues. Investing into this system at this juncture can be a very difficult and crucial cost, but this same generation that is going to save the global economy soon and underinvestment in their human capital will not be the right way to acknowledge their efforts (Saavedra, 2020).

PROTECTING EDUCATION FINANCE FROM COVID-19's TRIPLE FUNDING SHOCK

Author – Samer-al-Samarrai

Date, Year – 12 May, 2020.

With the global shock it is predicted that investments in education are likely to reduce or even become null due to the ongoing pandemic. According to the IMF projections, it is seen that planned spending in education can reduce even though they state that the economic growth is said to rebound by 2021. The middle and low income countries are said to highly suffer from lack of spending and it will automatically lead to a drop in per-capita education spending. All these would occur from the side of the producer of education.

From the consumer view of education the financial blows to education will be much heavier. The family's own spending towards education will completely reduce. Students from lower and middle income families are likely to drop out to support the financial conditions of their family rather than turning the small amount of finance towards education. These income shocks will definitely lead to lesser participation rates, similar to the financial crisis of Asia in 1997-98 where the student participation rate was only 17% in the rural areas.

In addition to the collapse of all internal funding sources, external financing to the education sector is also likely to be affected. Since the 2008-09 Global Financial Crisis development assistance to this sector has been a major helping hand and set back the numbers on track. With the pandemic several donor countries have also been affected and it will make it more difficult to receive financial assistance. The only way to better the situation will be to have sufficient fiscal space among budgets and additional spending, those countries who have smaller fiscal spaces will be pushed to make better use of resources they have at hand.

The global lockdowns have made us realize that remote learning is a part of the future curriculum and hence there will need to be flexible policies, higher level training and massive digital improvements are needed to lay a foundation for this hybrid model of learning. Investment today into this sector will narrow the gaps in education and the inequality in it (The World Bank, 2020).

EDUCATIONAL CHALLENGES AND OPPORTUNITIES OF THE COVID-19**PANDEMIC**

Author – Jaime Saavedra

Date, Year – 30 March, 2020.

We are now living in the biggest shock in the period of modern history and a gigantic crisis to the education sector. The loss in learning will lead to rise in dropout rates, as pointed by The Learning Poverty Indicator. However the most affected ones are the marginalized and it tends to affect the poor more than the students who come to affluent families.

The learning however can be compensated to an extent. Higher income countries can mitigate the effects easily but mostly the middle and lower income countries the situation will be mixed and will depend completely on how the countries make use of the opportunities available at their hands. They have to place focus on minimizing or eliminating the difference in opportunities between the rural and urban regions. They need inculcate mixed media learning, that is to have a combination of modern tools and other social media tools in order to reach as many students possible in the Gen Z scenario.

Even though reaching students can be made easy, staying connected just like physical classrooms in virtual classrooms will definitely be an impossible task. The students may suffer lack of personalization and attention from their teacher and hence this will further the gap of disengagement between the teachers and students. There are several efforts being undertaken to fix the issues of social relationships by setting up mental health care counsellors and other comforts groups around the student. It will most importantly be the work of the parents and other close members to the student to keep them socially active and engaged in virtual classes with the given situation in hand.

School feeding programs are an essential aspect of the education system of the country. These feeding programs play an important role in enrollment numbers of students. Especially in our country, many students go to school to afford their most nutritious meal of the day. The particular states or countries must continue to deliver these meals to families during these times, even though it is highly impossible they must be tried at least on a minimum level or they must be converted into cash transfer programs. It is difficult to convert plans but these programs must be planned in a fluid manner to compensate the beneficiaries. In our very own country in the state of Kerala a teacher delivered the mid-day meals to the students' home individually amidst the pandemic which caught national attention and set an example for the entire country and globe as well. The Anganwadi teacher by herself hand-delivered the meals to the students, which sparked joy in all the hearts of the little ones. This must be the model that the states and countries around the globe must be following during the pandemic. These small initiatives and improvements will have a positive and long-lasting effect and strengthen the future education system in the country.

The education system today must focus on reducing the negative impact rather than pushing them towards newer methods of learning. This time of crisis can be used to improve learning systems and increase in creating opportunities for quality education for all (The World Bank , 2020).

HOW ADJUNCTS ARE IMPACTED: COVID-19

Author – Paula M. Krebs

Date, Year - 26 March, 2020

Higher educational institutions are now shifting from face to face interactions to online teaching and learning. Due to reduction in funding by states and centres in the higher education sector, shifts into this model of learning have led to hiring temporary instructors and turning away tenured positions. In addition to laying off faculties they have also cancelled events and programs for the following semesters. Institutions can use this allocated money to train the part time faculty and give them a wholesome experience of the institution and an experience to train the students. The success of a higher educational institution can be judged only when the institution is able to establish deep understanding and engagement with the students across time zones with different environments around them (University Business, 2020).

WHAT THE SHIFT TO VIRTUAL LEARNING COULD MEAN FOR THE FUTURE OF HIGHER EDUCATION

Author - Vijay Govindarajan and Anup Srivastava

Date, Year –March 31st, 2020.

With unprecedented events and shifts in society all over the world there has been a forced push of individuals into the technological world. Instances like World War-II and the Y2K crisis have proved it all. With the COVID-19 pandemic hitting the entire globe we are forced to experiment and live a new social, economic and political norm. The pandemic has affected almost every industry and the reverberations of it could be felt in the coming years. But with the education sector, there has been a sudden rise to virtual education and remote teaching.

In order to understand the effectiveness or the success of virtual education one must understand the curriculum of the course. Firstly, the curriculum has to be fragmented into what could be taught under face to face classes and what part of the curriculum could be covered with multimedia presentations or with technology. The organization must look closely and break the curriculum in such a way that the topic or themes that require lesser classroom and teacher interaction must be shifted to technological teaching and the rest which cannot be done without the presence of the faculty can be moved to virtual classrooms. But however one has to understand this from the point of view of both the parties as students and teachers who have been in physical classrooms since the last few months. The organization must understand what is more beneficial with

classroom teaching and what can be complemented with technology or by other means.

With virtual teaching coming into the picture it is also important for us to understand the digital infrastructure available at hand. There are a lot of hardware and software issues that need to be addressed in case of remote learning. Even though there are face to face classes the students who are better equipped would have an edge over the other students. They would have tools like good laptops, stable internet and much more to help them attend classes with no spree. But on the other hand it is important to take into account other students of the same class as well. The most important aspect of in-class teaching would be that even with the large class size the teacher will probably be able to judge the attention span of individual students but that would not be possible with remote learning. In a country like India highly ranked universities may have the infrastructure to support their students and staff. But certain public universities might not be able to provide the same to their students due to the lack of funds.

The most important question to answer is whether the teachers and students have enough knowledge and training to access these resources. Most of the senior faculty may now find it difficult to make presentations and teach students online, but the younger faculty can switch quicker than the latter because of their technological knowledge. However on the other hand the students may also feel left out in virtual classrooms because they have a shorter attention span and they switch between windows instead of listening to the class. I, myself being a student can focus for only 20 minutes beyond that I'm unable to sit and concentrate and end up being fidgety.

At this point of time we are forced towards experimenting this new method of teaching and learning. There has been a growing debate between the face to face education and MOOC'S. The parameters like cost of affording a four-year degree or a three-year, the idea of residing versus taking up the course in distance mode are now the questions that have to be answered. However physical education wins the game at the primary level in the higher education level it depends on the individual to take up the course physically or virtually. Finding an alternative to classroom teaching seemed to be a mighty task, but might come to reality in the near future (Srivastava, 2020).

MEASURING THE IMPACT OF COVID-19 ON HIGHER EDUCATION Author-

ICEF Monitor

Date, Year –April 15th, 2020

According to the reports of Moody Investors Services it is stated that the pandemic will have a lot of financial impacts on higher education. In a small study conducted by Moody, it was stated that most of the universities of US, Canada, Mexico, UK and Australia are on the verge of reducing the intake of students due to the outbreak of the virus. This fewer enrollments of students will lead to smaller class size and with that it will

lead to reduction in the incomes of the universities in the form of canteens, conferences, tournaments, endowments and gifts may also see a steady decline.

Even after the pandemic subsides the international flows of students between countries will depend on the intensity of outbreak and the policy laid down by every individual country. According to reports of CBS News (CBS News, 2020) several international universities majorly depend on international student enrollment and that is now expected to drop by 25% to 75%. Several private and regional universities all across the world may end up in complete shutdown due to lack of incomes and operating on margins. As the pandemic is expected to continue over the year it has impacted the education industry in terms of immediate budget impact and the forecasts for the upcoming years. It is also projected by several international universities that there will be a decline in the enrollment of international and domestic students with equal shortfalls in tuition fees. It is safe to say that COVID-19 has deteriorated the financial health of schools, colleges and universities all across the globe. They say that the hurt is deeper this time than the 1930's and the recovery will become more longer but many students may be injured or lost out of it (ICEF Monitor, 2020).

EMBRACING THE FUTURE OF LEARNING AND TEACHING

Author –Paul Feldman

Date, Year –June 5th, 2020

With the emergency “technology enabled learning and assessment” the higher education sector has performed brilliantly to come to the aid of staff and students to this remote learning culture. Though there is a huge effort undertaken by the industry there is still a strong divide between the tools like Zoom and Teams that make things easy for us and the concept of devising the curriculum on a digital mode. This does not mean that each and every course must be digitized. A clear distinction must be drawn between subjects that are based on digital curriculum and the rest that require the presence of a facilitator. This will become more beneficial and appealing to those students who have financial issues, who do not require campus residence or have personal mental and health issues.

All schools, colleges, universities, education experts, sector leaders have the right time and opportunity to reshape the experience of higher education and collect all the experience gained from lockdown and to pave the way for digital technology and to provide to the students an inclusive education environment and to prepare them for the digital world. Hence learning and teaching must be reimagined and shaped to fit the vibrant and innovative technological education system and give a robust and more flexible method of learning (Feldman, 2020).

PLANNING AND RECOVERY FORECASTS FOR INTERNATIONAL EDUCATION

Author – ICEF Monitor

Date, Year –April 1st, 2020

This article mainly focuses on International Education. Simon Marginson, the Director of Global Higher Education, University of Oxford stated that it would take five years for International Education to set back on track and increase their enrollment size. According to his analysis, he states that;

1. The international education system will shift into a buyer's market because of lesser student enrollment and a large number of universities and schools will have limited choices among these prospective students.
2. He also states that there might be a rise in intra-region mobility. As students from Asian countries who travel to Western Countries for their higher education are now having an array of appealing options to study inside their own regions. This will also benefit the students because of lesser tuition fees, scholarships and with strong and immediate employment opportunities. It will also give these students a feeling of being closer to home and not to be worried about homesickness or culture shock (ICEF Monitor, 2020).

CISCO'S WEBEX DRAW'S 350 USERS DURING THE LOCKDOWN

Author – Supanatha Mukherjee

Date, Year – April 4th, 2020

With the pandemic hit all over the world Cisco's WebEx registered a record of 324 million users in March alone. The numbers have almost doubled in America due to the lockdown as classrooms, business meetings and even church services have shifted online. As people are being restricted to travel outdoors and the work-from-home culture has been introduced all over the globe there is a rise in use of these applications.

Zoom is said to have grown into almost 200 million users since March and even Microsoft Skype is also said to have 200 million active users at the moment within the last six months. On the other hand Microsoft Team's is said to have 75 million users on a daily basis and they have conducted 2.1 million meetings in the month of April itself. But above all of this stand "is Cisco's WebEx with international growth in America, the European Region and the Asia Pacific region. But however it becomes difficult to compare the numbers between these countries as each company has its own way of calculating the attendees.

Several charges have been placed against Zoom due to lack of privacy and safety issues. Several meeting attendees felt lack of encryption and other attendees crashing unknown meetings. Cisco's WebEx on the other hand has complete encryption, includes features like teleconferencing and is much older than its rivals. This can also be one reason attributed to the growth of WebEx meetings over other apps (The Economic Times, 2020).

EDUCATION TRENDS POST COVID-19

Author – Sandeep Goyal

Date, Year – May 14th, 2020

With the closure of educational institutions all over the world a whopping 72% of the world's student population is being affected due to the virus. This shutdown of schools, colleges and universities has led to several social and economic backlashes. Looking at the education sector alone since the schools are shut several people have been sacked off from their jobs. The non-teaching faculties like the Librarian, Nurse, Housekeeping Staff, Canteen Staff and even Boarding Staff from several institutions have lost their jobs because of the lack of physical presence in the campus.

On the other hand students from marginalized communities or students in government run institutions have become vulnerable to this situation. But the UNESCO has anticipated certain trends that are likely to occur after the pandemic comes to a halt. Some of the most relevant ones to my study are;

1. Interruption in the learning process because of the gap. This might affect the marginalized students more because they do not have access to learning other than physical learning in school.
2. In a country like India, at the primary level many children in the rural areas go to school on a regular basis because of the mid-day meals offered in school. With that being said, most of the children now who depended on the school for one square meal will be prone to have lesser nutritional levels.
3. In urban areas most of the parents are working and with schools operating on a virtual level they will probably have to let go of their jobs in order to take care of their wards and this might add up to loss in incomes, stress and underperformance. Most students may feel alone with parents who travel out to work. This might push the students into a pressurized environment and they at a young age will have to balance the scale of education and household chores.
4. Looking at the rural conditions in our country many students may discontinue or stop their education because of the complete shutdown of schools during the lockdown and with the growing economic crisis they will eventually drop out of schools to support their families.
5. This shutdown can also lead to increase in exploitation and violation. The younger girls may be sexually abused due to staying indoors, students might turn towards taking up jobs to support their families and this will lead to increase in exploitation.

CLEANING AND JANITORIAL STAFF: COVID -19**Author** – AmTrust Financial**Date, Year** – 15 June, 2020

Cleaning, janitorial, housekeeping services are a vital part of an organization. In educational establishments cleaning, maintenance, lab attendants and other minor office staff form an important part of an educational organization. In some cases janitorial companies also provide some construction and some exterior building services.

Initially education institutions used these cleaning crews to keep the campus spick and span even after students were sent back home. However with rise in the case and lockdowns imposed in the country people were being asked to stay at home and take safety in their shelter. In educational institutions all of these janitors and cleaning crews are being removed from their jobs which has led to an increase in unemployment and they do not have security of having their jobs anytime soon. However there are also other crews like transport, lab attendees and other non

teaching staff who are just being removed from their jobs without even giving them the option to work remotely. It is also said that 51% of these workers say they did not even get paid sick leave, says the Bureau of Labour Statistics (BLS). However certain controls like conducting job assessments, encouraging proper sanitation etiquette etc. can be implemented by the employers to ensure the health and safety of the staff and decrease the spreading of the infection and reduces unemployment (AmTrust Financial, 2020).

THE COVID-19 COST OF SCHOOLS CLOSURES**Authors** - George Psacharopoulos, Harry A. Patrinos, Victoria Collis and Emiliana Vegas. **Date,****Year** – 30 April, 2020.

UNESCO reported that 192 countries shutdown schools and universities which affected almost 90% of the learning community of the world. The questions like how long will the closures last; who will be affected and how the leaning would take place in this gap are questions that need to

be answered at the outset. The most evident fact is that a certain amount of learning would be lost and this will be felt mostly among the vulnerable and marginalized sections of the society. Losing out on education can lead to loss in future economic and social benefits. It is reported that the World War-II crisis had negative impacts on the lives of the individuals even after 40 years. Preliminary evidence has projected that loss in education can lead to drop in 12.7% of future earnings of annual GDP. It is also stated that school closures around the globe can lead to loss of almost 10 million. These projections just help educational establishments and governments to make informed choices and control the economic downfall that the pandemic has in store for us (George Psacharopoulos, 2020).

ONLINE CLASSES TURNING A NIGHTMARE FOR TEACHERS. Author –

Puja Awasthi

Date, Year – 23 May, 2020

The schools, teachers, parents and guardians were not prepared to handle online learning with the global pandemic prevailing around us. The faculty is not only overworking to meet the learning demands but also facing abusive behaviour from the students and from the surroundings around them. Teachers have reported cases of verbal abuse, languages and expressions from the students which have also led to mental trauma to the teachers. “Many teachers are concerned about what they wear and how they sit in front of the camera,” says Agarwal, the head of the association of school catering to 140 schools having students from various socio-economic backgrounds. Despite all the rising abuse cases, the irony lies in the fact that not even one formal complaint has been filed until now on the same. Schools are setting up in-house apps to monitor students and efforts have been taken constantly to improve student learning. In spite of multiple efforts like these students still misbehave and cause a lot of stress to the teachers at times even the teachers have to face demands by parents who linger around their kids when the classes take place.

The Child Welfare Committee has laid down certain advisory rules and regulations for all the actors of education and how everyone must follow certain protocols to create ease and peace in learning. They have also stated that interference of parents in classes and misbehaviour can leave behind a poor permanent record. It is important to understand that amidst the global pandemic the teachers are not only battling with the technological difficulties but also with the unruly behaviour of the students which could leave impressions in them that could last beyond the lockdown (Awasthi, 2020).

PARENTS DEMAND FEE-WAIVER DURING LOCKDOWN.**Author – PTI****Date, Year – 6 April, 2020.**

Since the shutdown of schools and colleges the annual fees still has to be paid to the respective institutions. Parents are now demanding reduction in transportation and other miscellaneous fees like library fees, sports fees, building development funds and so on. Several parents have been writing to the Directorate of Education to waive the school fees, but it is important to think from the institution point of view because even they would have to meet their basic demands like salary of staff, rent and so on. The Government, experts and industry leaders are trying to formulate several plans and policies to tackle the tricky situations. However, it is difficult to arrive at concrete rules and suggestions because both the schools as well as the parents have genuine concerns on their side respectively. The only way to deal with this situation is to increase government spending

and investment. At this point of time it is highly difficult to increase spending with the sensitivity around the world. The governments and other educational establishments can start relief in different slabs giving importance to different criteria like urban versus rural schools, high-end and medium range schools and so on (Financial Express , 2020).

THE INDIAN INTERNET INFRASTRUCTURE IS NOT PREPARED FOR THE ONLINE TEACHING AND LEARNING.

Author – PTI

Date, Year – 21 April, 2020.

The paradigm shift into online learning has become mandatory due to the COVID-19 situation around the globe, but the internet infrastructure is not ready for it. Reports from the London based QS have stated that connectivity and signal issues are the most prevalent crisis faced by students while attending online classes. It was also pointed out that the internet infrastructure in India is not in a qualitative state to ensure sound delivery of online classes. This reason holds good for the state and private players as well because both of them have not overcome these technical challenges. Online learning has become a distant dream due to inherent problems in the internet infrastructure. This has an impending effect on the higher education sector where the government spending is less and there are fewer state players and the only recourse will be to function online until the conventional methods of learning come back into practice (PTI, 2020).

CHAPTER 3

RESEARCH METHODOLOGY

FIELD OF STUDY

This paper focuses on the “Impact of COVID-19 on Higher Education”. It studies the problems, challenges and gives solutions for the conflicts faced by students during this crisis.

RESEARCH DESIGN

This paper follows the “Descriptive Research Design”. The Descriptive Research Design is a method that studies the characteristics of the population or phenomenon that is being studied. This methodology focuses

more on the “what” of the research subject rather than the “why” of the research subject.

The reason this method has been chosen is that it uses both numerical and verbal methods of analysing data. It is also quantitative in nature and facilitates the use of statistical tools in analysing the sample. It is a very flexible method as it helps in using the data for further research (Bhat, 2019).

RESEARCH INSTRUMENT

The research instrument that has been chosen for this study is the “SEMI-STRUCTURED INTERVIEW SCHEDULE”. Semi-structured Interviews are used to gather focused, qualitative textual data. This method offers a balance between the flexibility of an open-ended interview and the focus of a structured survey. The questionnaire has been prepared with a mix of open ended and close ended questions and hence the Semi Structured Interview Schedule fits into the design perfectly. By using this method it was easy to collect data that was required quickly and the interviewees were prompt in their answers. The questionnaire was framed with ease in language at the same time keeping the questions as concise as possible. Hence the Semi Structured Interview Schedule helped the researcher to

POPULATION

Population or Universe is the aggregate of all the elements possessing certain specified characteristics which need to be studied and defined prior to the sample population. The precise definition of the universe for a particular study is set by the research question, which specifies who or what is of interest. The universe may be individuals, groups of people, organizations, or even objects. For example, research about voting in an upcoming election would have a universe comprising all voters. There are a total of 1.5 billion learners virtually spread over more than 165 countries. A whopping 1.7 million learners are from India alone. A word of caution with these numerals is that they are an estimate only and have been taken from official government websites; it is also mandatory to mention that these numerals may be subject to changes (Dutta, 2009).

SAMPLING TECHNIQUE

The sampling technique used in this paper was “CONVENIENCE SAMPLING”. Convenience sampling (also known as availability sampling) is a specific type of non-probability sampling method that relies on data collection from population members who are conveniently available to participate in study. Convenience sampling is a type of sampling where the first available primary data source will be used for the research without additional requirements. In other words, this sampling method involves getting participants wherever you can find them and typically wherever is convenient. In convenience sampling no inclusion criteria identified prior to the selection of subjects. In this paper the researcher used 7 samples for the study from the

total demographic group of 100 samples. (Dutta, 2009).

DATA ANALYSIS

The data used by the researcher was through online forms. The data was collected with the help of a questionnaire consisting of almost 30 questions with a perfect mix of both open ended and close ended questions

REPRESENTATION OF DATA

The data in this paper has been represented in the form of tables and charts. The numeric data has been represented in the form of charts, bar graphs, histograms etc. The other verbal data has been represented appropriately in definitive tables.

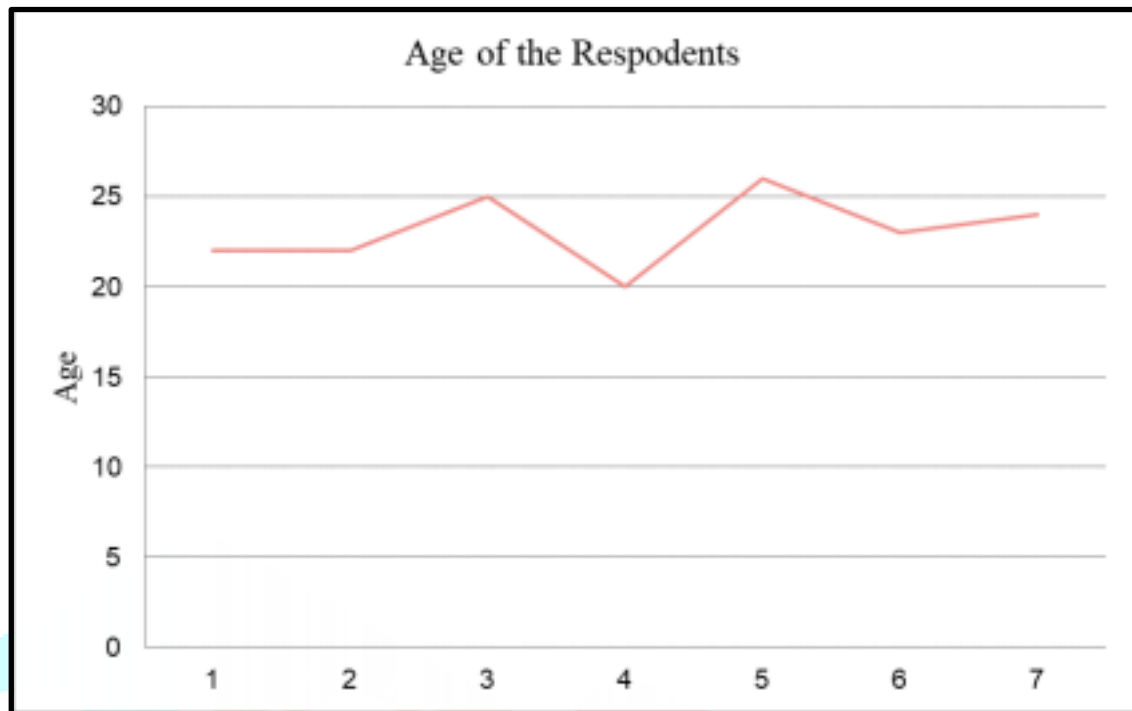


CHAPTER-4

SURVEY FINDINGS AND STATISTICS REVIEW

This primary information for this paper was collected through the questionnaire method. The total numbers of respondents in this survey were seven (7). The questionnaire consisted of a mix of both open-ended and closed-ended questions.

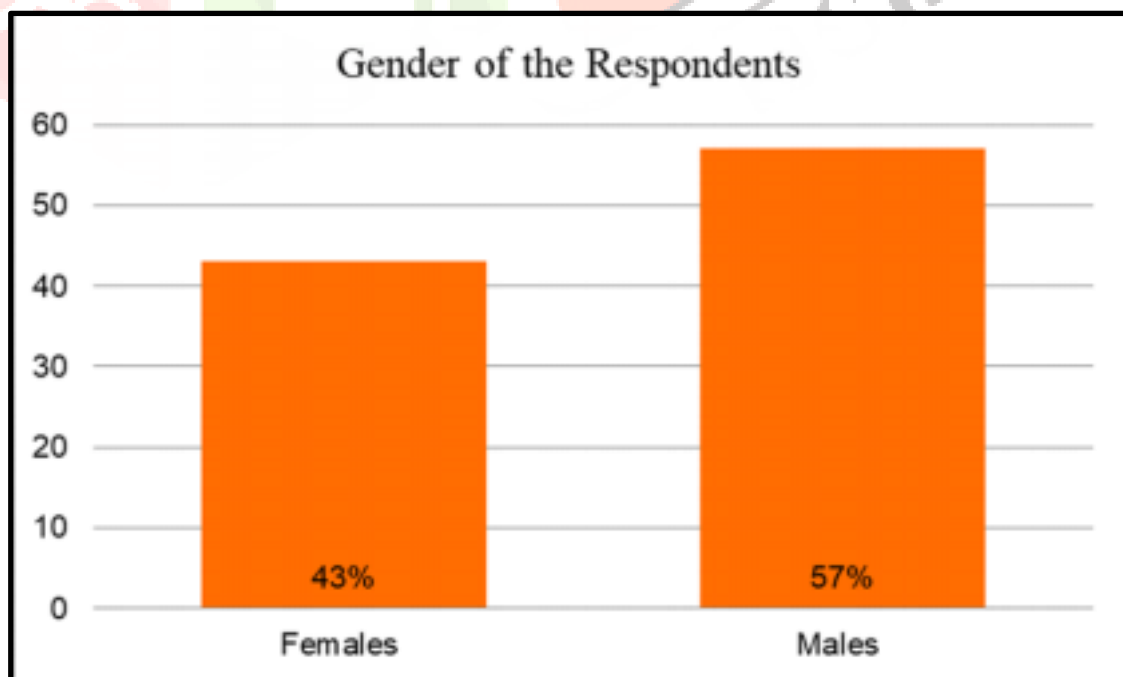
AGE OF THE RESPONDENTS



All the respondents in the survey fall into the ages of 20-30. Out of the total respondents a considerable amount (28.7%) of them belonged to the age 22. The rest of the respondents belonged to the similar category.

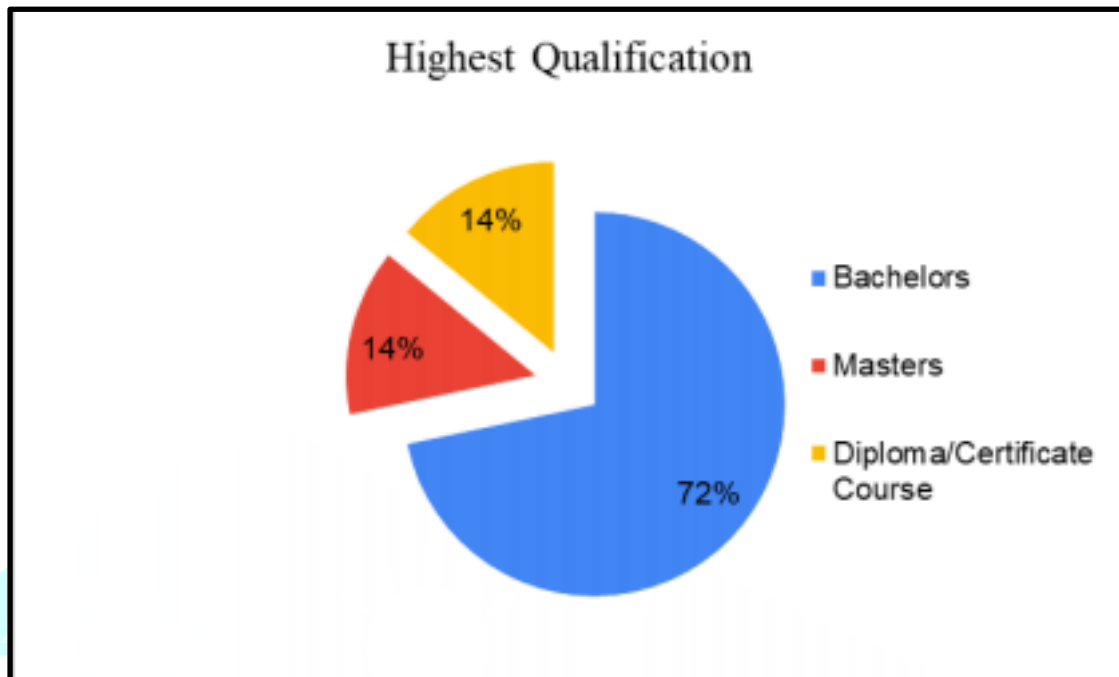
GENDER OF THE RESPONDENTS

A little more than third (43%) of the respondents were female and a little more than half (57%) of the respondents were males. Hence it is clearly seen that the number of male participants is more than the female participants.



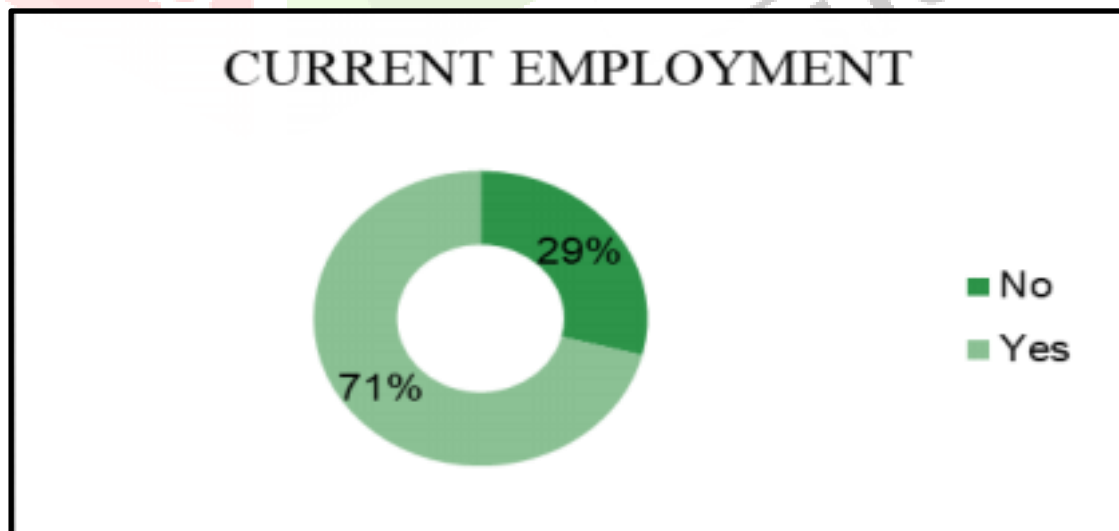
HIGHEST CURRENT QUALIFICATION

This question focused on the current qualification of the respondent. The majority of the respondents (72%) had completed their Bachelor's Degree-UG. A small amount of the respondents (14%) had completed their Master's Degree-PG and Diploma respectively.



CURRENT EMPLOYMENT STATUS

This question was asked in order to understand if the respondents have been simultaneously working and studying together. Almost a majority of the respondents (71%) are employed and have also opted to study along. On the other hand a considerable amount of the respondents (29%) do not have jobs but they are currently pursuing their course.

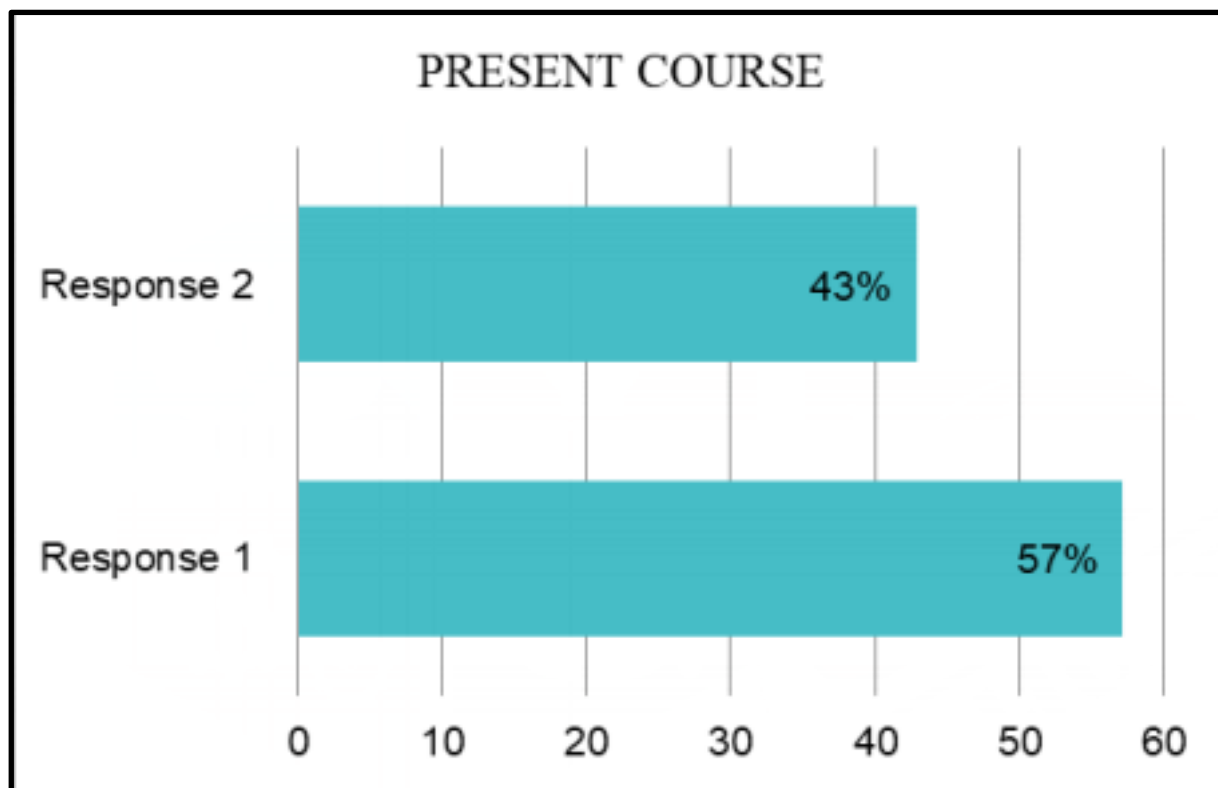


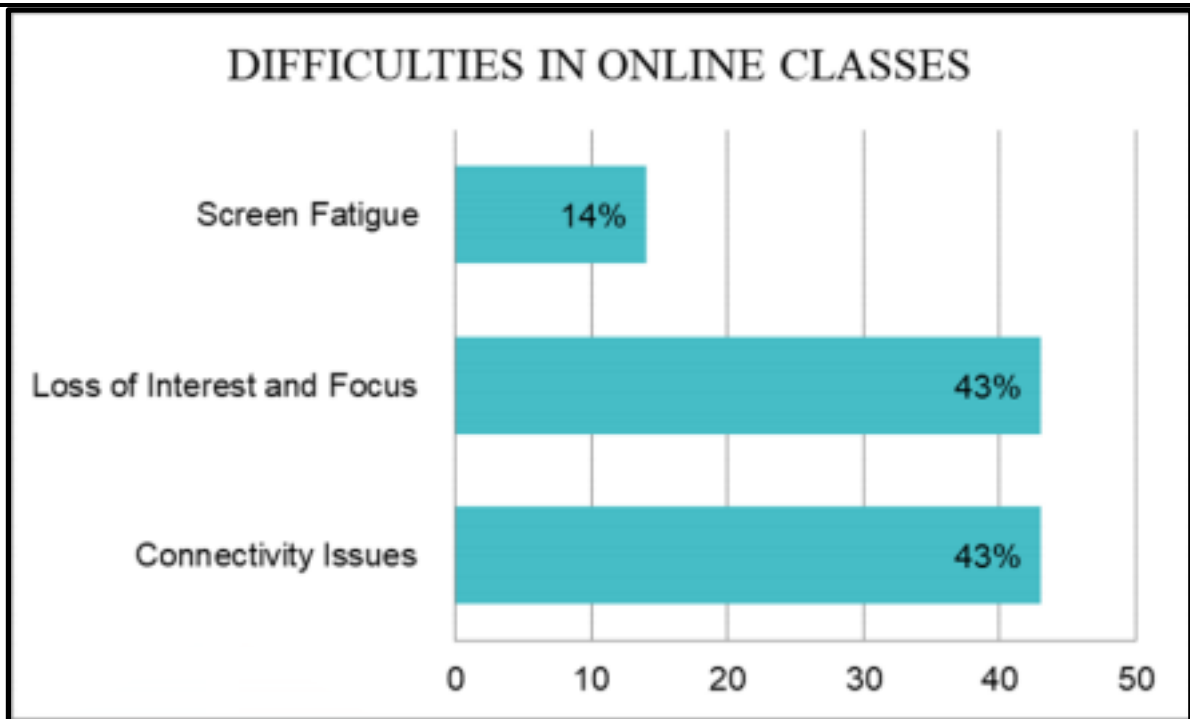
CURRENT COURSE

This question mainly focused on why the respondent had opted for the course. The question being open-ended the researcher has boiled down the all the answers from the respondents and created two responses namely;

- Response -1 Career Purpose
- Response -2 Subject Purpose

A little more than two-fifth of the respondents (43%) had stated Response -1 as they took up the current course to get better jobs and higher wages. A little more than half of the respondents (57%) had mentioned that they took up their current course in order to increase their skill and knowledge in the particular field and subject.



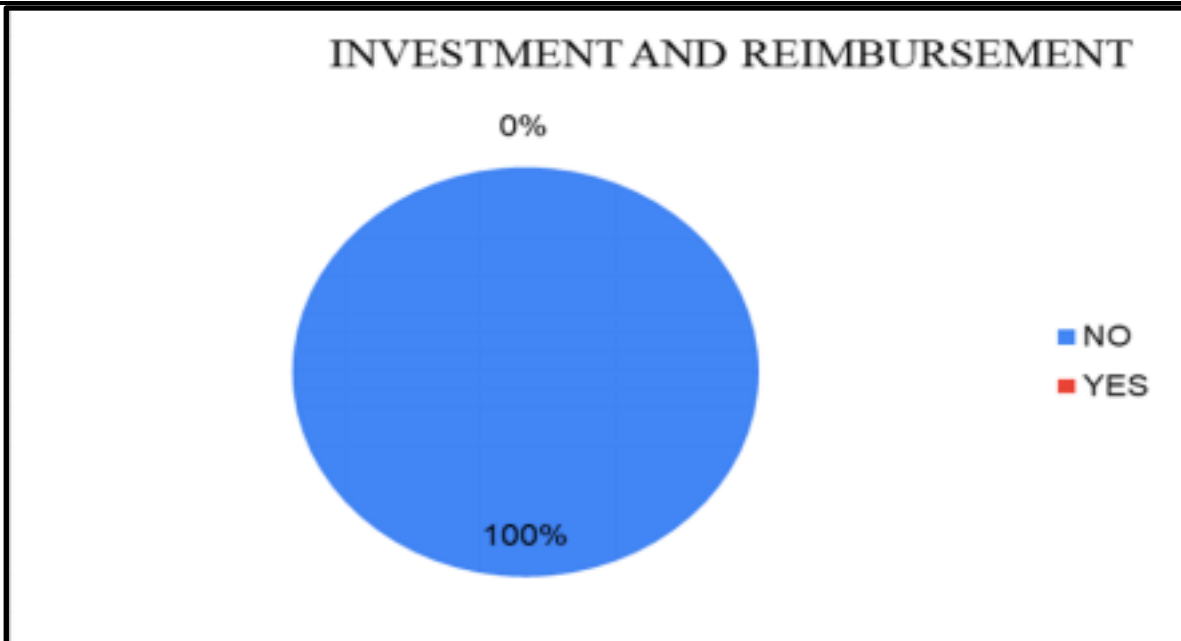


DIFFICULTIES IN ONLINE CLASSES

There are several advantages and disadvantages of online classes. Students who are rich and have better infrastructure can afford to have gadgets to help them but the rest of the students may not have the same access to resources and hence their learning gets affected. Out of the total respondents a small amount of the respondents (14%) stated they faced screen fatigue due to online classes. The rest of the respondents (43%) stated that they faced severe connectivity issues and poor internet. A little more than two-fifth of the respondents (43%) have stated that they tend to lose interest and find it hard to focus on online classrooms.

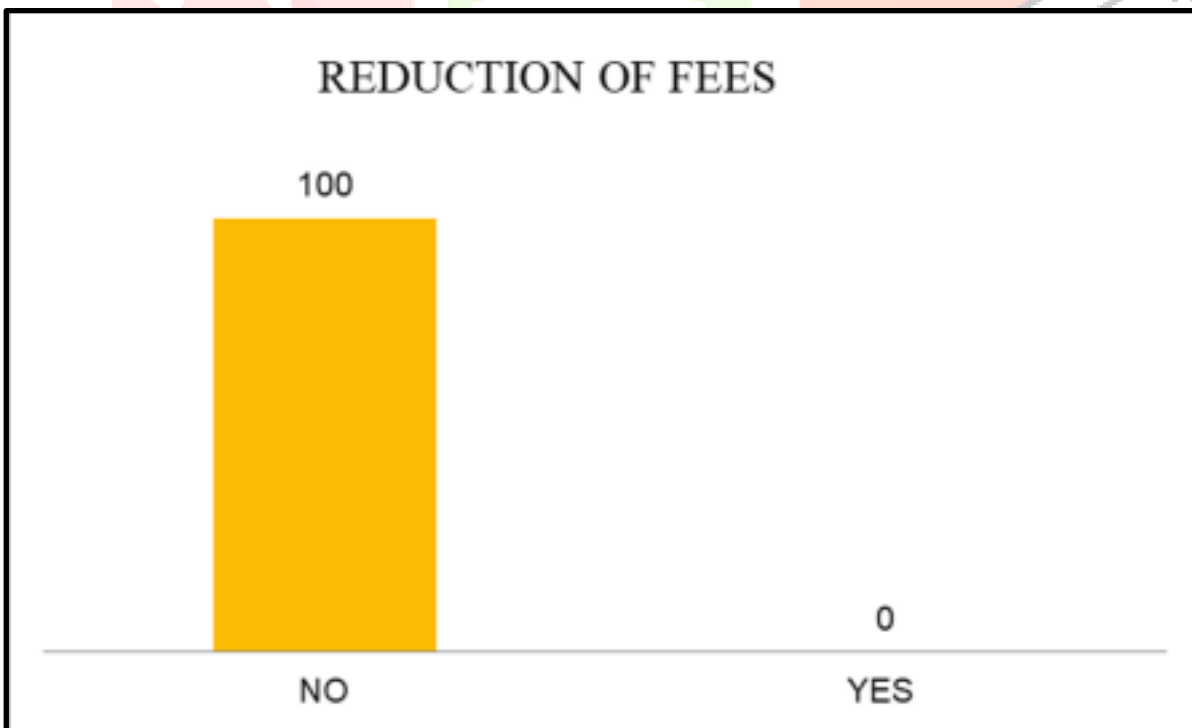
INVESTMENT AND REIMBURSEMENT ON GADGETS

With this sudden shift into technological education several students have made short-term and long-term investments into procuring gadgets to aid their learning. In the last few months students across primary, secondary and higher levels of education have invested into buying devices like laptops, web-cameras, secure and stable internet connection. These investments are largely not being reimbursed by the respective educational institutions. In the same way almost all of the respondents (100%) have stated that they have invested to buy equipment for their online classes but none of it will be refunded or reimbursed by the educational institutions. This holds well not only for higher education, but across all the levels of learning no institution has ever reimbursed.



REDUCTION OF FEES

Though classes have shifted into the online mode several institutions have not reduced their fees and still have been collecting the fees without a revision in it. Though the governments have advised educational institutions to reduce the fees for the academic year 2020-21, in reality many institutions have not changed their fees. When being asked the respondents if they had any reduction in their fee structure almost all of the respondents (100%) stated that their institution did not announce any reduction or waiver of fees and that they have to pay the entire amount just like the pre-COVID times.



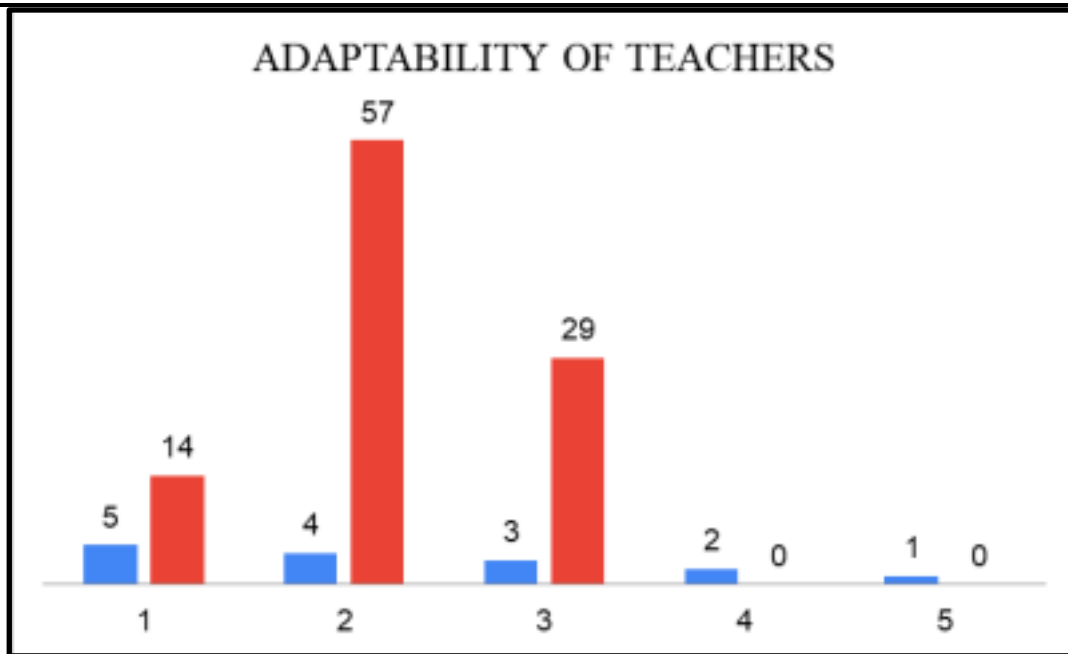
LOSS OF JOBS AND SALARIES

It is an evident fact that with the unprecedented crisis there is a rise in the unemployment rates and many individuals are being sacked from their organizations due to the monetary constraints. A vast majority of the respondents (86%) showed that they were worried due to loss of jobs and reductions in incomes. Whereas a small number of the respondents (14%) stated that they were not worried about the loss of jobs or decreased wages. There can also be several reasons because 86% of the respondents were students who are working currently and have jobs, but on the other hand the rest 14% of the respondents were still students and they were not worried about employment.



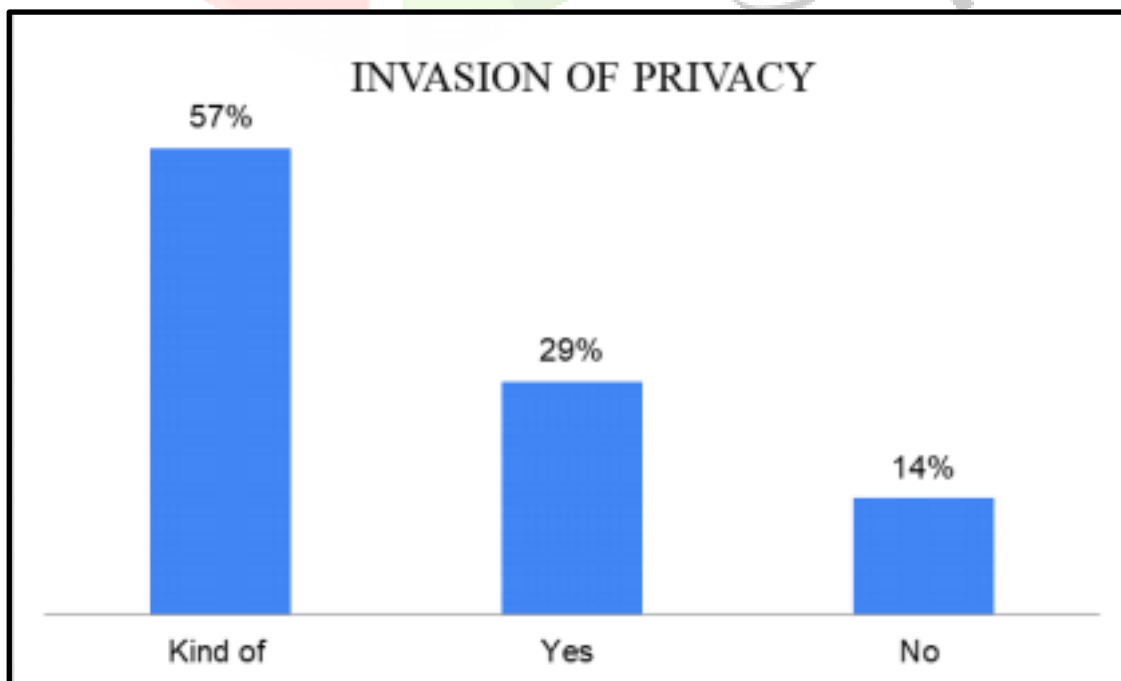
ADAPTABILITY OF TEACHERS\

This question was aimed at understanding the adaptability of teachers into online learning and teaching. Most of the older generation teachers may find it a tedious task to shift towards the online mode of learning. Whereas the younger generation teachers may require lesser time and shift easily towards this current mode of teaching. This question being close-ended in itself was based on a ranking model with 5 being the highest rank and 1 being the least rank with lowest adaptability rate. In the graph below, the blue bars depict the ranks from 5 to 1 and the red bars depict the ranking given by the respondents. A small number of the respondents (14%) have ranked grade „5“ and told that their faculties have quickly adapted into online teaching. A little more than half of the respondents (57%) have ranked their teachers as grade „4“ which means that their teachers are good enough and adapted a little easily into the online mode. A considerable number of respondents (29%) have ranked their teachers as grade „3“ which simply means that their teachers were lagging behind into adapting this technological method of teaching.



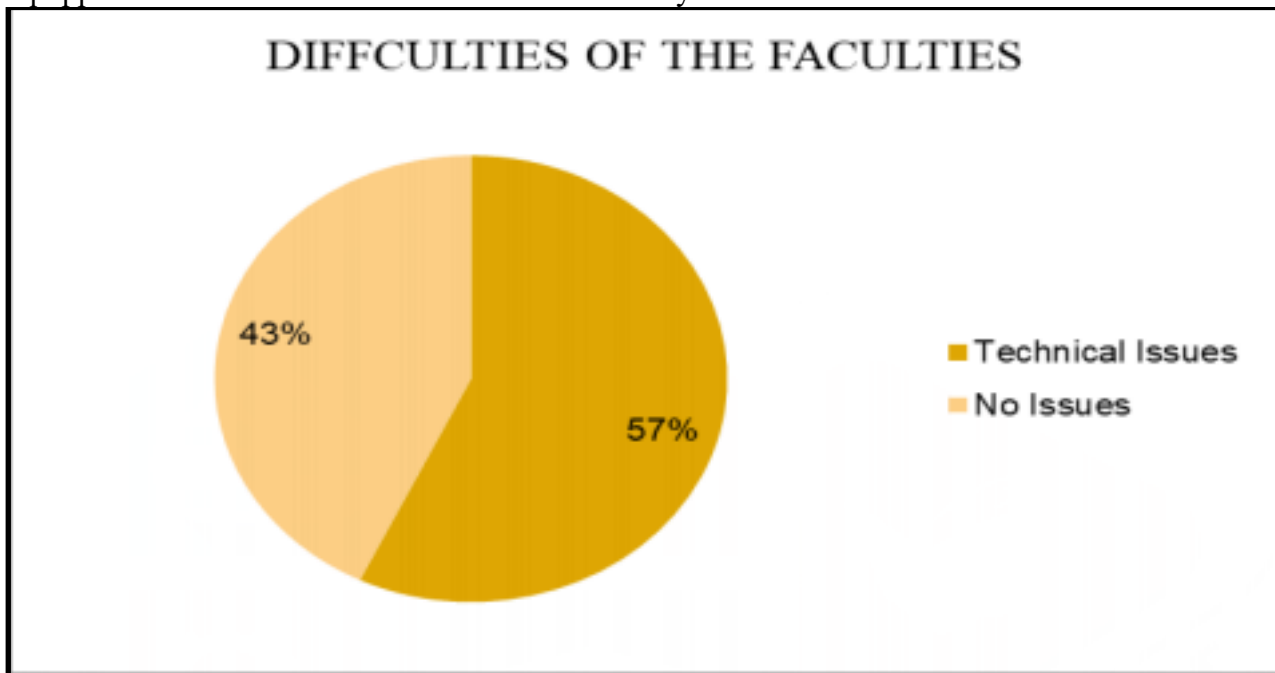
PRIVACY INVASION

With all the classes going online around the clock several students may not find it very comfortable to switch on their videos and most of us tend to put off our videos during class. Students at all times may not feel comfortable to put their videos down due their personal reasons and the environment at home. Students may feel as though they're privacy is being invaded when they are asked to put on their videos. Again, there were a small amount of the respondents (14%) who felt that putting on their videos for their online classes did not have anything to do with their privacy. A considerable amount of the respondents (29%) have stated that switching on their videos during class was an invasion of privacy. On the other hand more than half of the respondents (57%) are not essentially worried that usage of video in virtual classes are an invasion of their privacy but it would also depend on situations and circumstances at the moment.



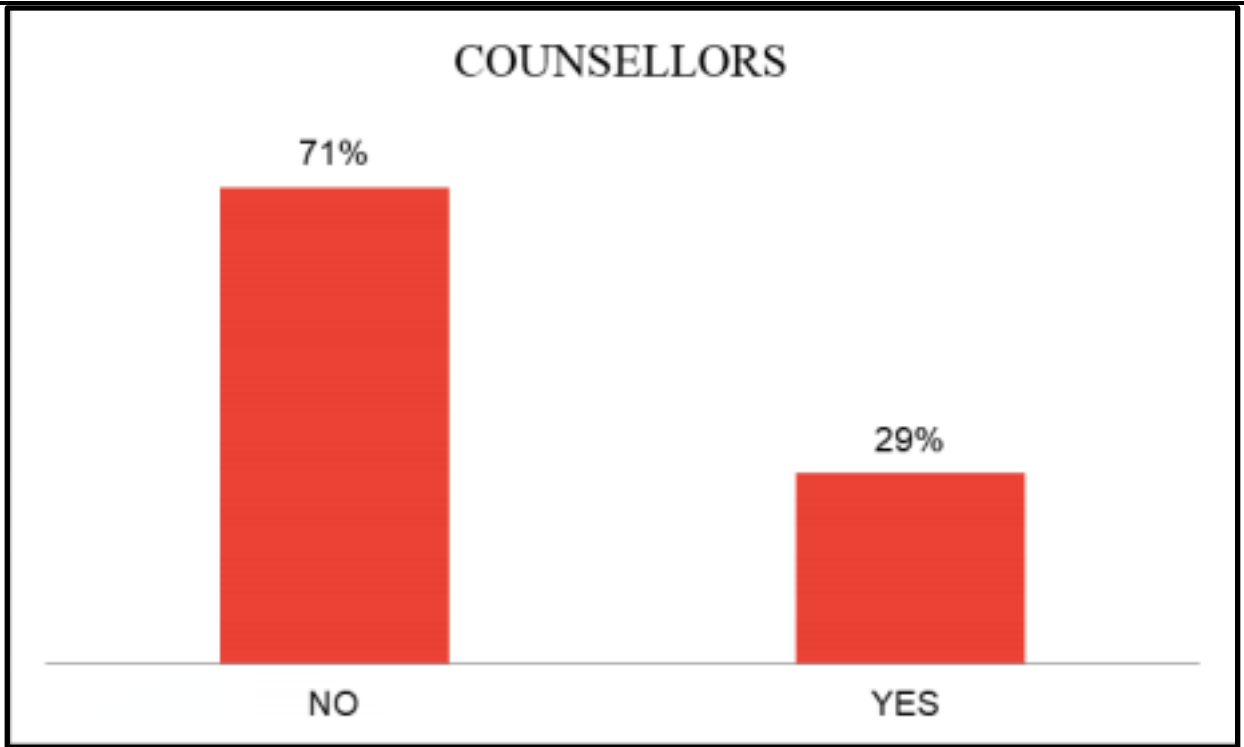
DIFFICULTIES FACED BY THE FACULTIES

Not only students tend to face difficulties but even the teachers have faced equal difficulties to adapt into the online mode of teaching and learning. A little more than half of the respondents (57%) have stated that their teachers have faced technical and connectivity issues due to the online mode of teaching. On the other hand a little more than two-fifth of the respondents (43%) have stated that their teachers faced no issues during their online session and that they are well equipped and trained towards the virtual education system.



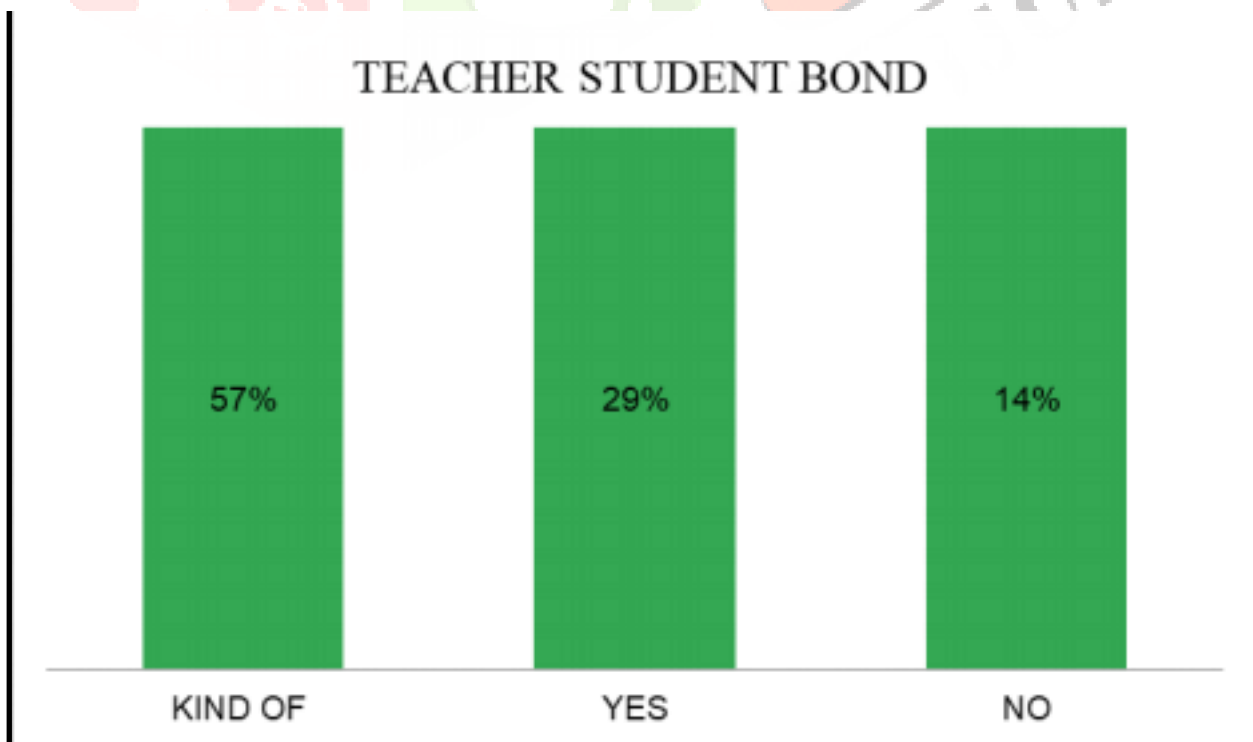
AVAILABILITY OF MENTAL AND PHYSICAL HEALTH COUNSELLORS

With rising cases of depression and anxiety most of the students feel pressured and left out due to the sudden shift of their learning into distance and online mode. The students are often facing a lot of mental and physical pressure and are wavering between the thought of pursuing their higher education and their current education being at stake because of the pandemic. The respondents were asked if they had counsellors in their institution to reach out if students had mental and physical issues during this period of lockdown and online learning. A considerable amount of respondents (29%) stated they have certain organizations and forums through which students can vent out their mental and physical health problems. But a majority of the respondents (71%) responded that they do not have any counsellors to aid and assist them with their mental health issues.



ESTABLISHING TEACHER STUDENT BOND

Even during physical classrooms most of the students found it difficult to establish a bond with their teachers. With this new shift into the technological model of education students have a mixed feeling of settling into class and the feeling of being left out. A little more than half of the respondents (57%) had stated that they were having a moderate relationship with their teachers. A considerable amount of the respondents (29%) stated that they were able to establish a strong bond with their teachers and a very small number of respondents (14%) stated that they were not able to establish a bond with their teachers.



REGRETS RELATED TO PURSUING THE COURSE

During times of emergencies just like the COVID-19 pandemic students are largely regretful of their decisions to pursue their current course. A considerable amount of the respondents (29%) have stated that they regret their decision of opting for higher education in this academic year. A little more than two-fifth of the respondents (43%) have stated that they do not regret their decision and the pandemic is to be blamed. The rest of the (29%) of the respondents have stated that they perhaps do not regret their decision but desperate times call for desperate measures.

CHAPTER 5

DISCUSSION AND INTERPRETATION

THEME 1 - DEMOGRAPHIC PROFILE

The demographic profile of the respondents included;

- **Age of the Respondents** – All the respondents of this survey fall into the age group of 20- 30 years and most of them belonging to the age of 22.
- **Gender of the Respondents** – There were 43% of females and 57% of males who undertook this survey.
- **Prior Experience** – All the respondents had prior online learning experience and they were not new to this method of learning
- **Courses/ Subjects learnt through Online Mode** – Most of respondents belonged to Commerce stream and they studied subjects like marketing, managerial economics and a few were even studying MBA and B.com. The other respondents belonged to Science stream and were studying behavioural science and cyber security. One respondent belonged to the Humanities stream pursuing the subject called education through the online mode.
- **Employment** - Most of the students were working professionals and they had their institutions and workplaces in the same location. The other halves of the respondents were not employed and they were only students.

THEME 2 – CHALLENGES AND TRENDS OF VIRTUAL EDUCATION IN LIGHT OF COVID-19

With the onset of the pandemic the education sector has moved into the hybrid model of teaching and learning. Under this theme we will analyse the various trends, challenges and difficulties faced by the staff as well as the students during this period of pandemic.

- **Higher Education** – Several respondents had stated that they opted for higher education in order to increase their skills and knowledge in the particular field. But the majority of the respondents stated that they choose to study for the sole purpose of increase in ranking, better position and higher wages.
- **Work-Study Balance** – The majority of the respondents of the survey were working professionals and on being asked how they maintain a balance between working and studying they stated that they are allocating time between their online classes and household chores. Most of them stated that they found it very difficult and pressuring since all the work had been mounted on them and they are forced to maintain a balance between the two.
- **Institutional Support** – Almost all of the respondents stated that their institution did not give any kind of training and support for online education. A majority of the respondents had also invested into purchase of gadgets for online teaching and they have not been reimbursed by their institutions.
- **Concerns with regard to online learning** – The respondents faced a lot of technical and connectivity issues during their online classes, while a few of them being well-equipped and trained did not face any issues. On the other hand almost all of the respondents spend an average amount of at least 30 minutes to prepare for their next class. They also miss the physical presence of being in a classroom and being able to socialize with their peers. This has led them to worrying about loss of jobs and incomes due to the outbreak of the pandemic.
- **Revision of the Fee Structure** – Almost all of the respondents have stated that their institutions have not reduced a single penny though there is online education and most of the facilities of the colleges remain unused. Several students have now started to litigate against their respective colleges in demand for refund of half tuition fees and residential fees.

THEME 3 – EDUCATION POST PANDEMIC

The respondents of the survey have stated that there must be a better curriculum taking into account both online and offline teaching. There must be a clear cut distinction between what subjects could be taught through video and multimedia presentations and what subjects require the presence of a facilitator. The respondents have also stated that online classes must become a regular part of the curriculum. There must be more space for enhancement of skills and knowledge rather than cramming theories and getting marks. But a few of the respondents have stated that we must switch back the chalk and board method of teaching as our education system is completely based on physical interaction of staff and students.

In conclusion, the sudden shift into the hybrid model of education cannot be determined successful at the inception level itself. It now becomes the duty and responsibility of the schools, colleges, universities, education experts and sector leaders to watch closely at the trends in online education and formulate a new path to the field of education by reimagining virtual learning and teaching. They must ensure that quality learning continues in the newly adapted forms during and after the crisis.

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