

A Study of Effect of Covid-19 on Students and Teachers with Special Reference to E-Learning (Online Learning)

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Research Article

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Abstract

Education is the backbone of any country and its development is based on the learning outcomes of the students. During the pandemic and post covid education sector is entirely transformed. This research paper is an attempt to analyse the impact of online learning and teaching on youth and educators. As youth has been considered future managers and nation builders. Novelty of this paper is that it's a comparative study to analyse the satisfaction level and challenges faced by both the groups (instructor and students) with special reference to higher education. Descriptive statistics and SPSS software has been used to analyse the data of 200 educators and students of Jaipur City. Implications of the study is to overcome the challenges faced by student's community and instructors. Also many academic institute and universities may formulate the strategies accordingly in this new post pandemic era to satisfy their employees and students too.

Introduction

On 24th March 2020, the Indian Government ordered a nationwide lockdown to reduce the impact of the COVID-19 pandemic. Following this many State governments ordered a suspension of all its educational institutions to ensure social distancing. To curb the spread of the Covid-19 coronavirus, the state governments across the country began shutting down schools and colleges temporarily. This is a pivotal time for the education sector because this is the period where all most all examinations are conducted. There is no immediate solution to stop the outburst of the pandemic, the educational institution's closure will not only have a short-term impact on the continuity of learning for more than 285 million young learners in India but also produce far-reaching economic and societal consequences. The structure of teaching and assessment methodologies was the first to get affected by the closure. Only a few universities and private colleges could adopt online teaching methods. Their low-income private and government colleges had no idea of how to get access to e-Learning solutions. The pandemic has significantly disturbed the higher education sector which is a critical determinant of a country's economic future. The pandemic has transformed the centuries-old, chalk and talk teaching methodology to digital teaching and learning. Multiple strategies are required to manage the crisis and build a strong Indian education system in the long term.

Pros of E-learning applications and its Connectivity

Online education depends on various factors and resilient connectivity is the ultimate one. Learning app firms could work together with technology providers and telecom service providers to develop tools that make learning truly enjoyable. They could also discover the providing students with real-time experience. All this is only possible with optimum utilization of network capacity. To ensure that learning never stops teachers are preparing chapters using application tools and taking classes using YouTube videos, zoom app, google meet app, etc., Entrepreneurs are also offering online learning apps like BYJU'S, Khan Academy, and various others providing aid at the time of lockdown. Post COVID-19, following the lockdown, there has been an increase in online education by colleges across the country. Online classes

via Google Meet, Zoom, YouTube, etc. are really helpful for everyone in the society especially students as they are benefitted from same purpose of learning that they were initially were before the lockdown started.

Review Of Literature

Amita (2020) revealed that the COVID 19 pandemic has brought various challenges for both centre as well as state government authorities to stop the outburst further its bad effects on several social and economic sectors.. To mitigate the loss of studies and avoid the increasing stress of students, Ministry of Human Resource Development and the regulators like NCERT, UGC, AICTE, Directorate of Higher Educations in states asked and prompt to educational institutions to shift to online modes of education. Pravat (2020) stated that this study has defined various impacts of Covid-19 on higher education in India. The recent outburst created an opportunity for change in pedagogical approaches and introduction of virtual education in all levels of education. The spread of pandemic Covid-19 has drastically disturbed every aspect of human life including education. It has created an unprecedented test on education. In many educational institutions around the world, campuses are closed and teaching-learning has moved online. Internationalization has slowed down considerably. Ramya and Akhila (2020) stated that around the world even the developed countries are stunned by this pandemic causing uncontrolled pain. India is no exception and Government has imposed a nation-wide lockdown to help contain the virus. This has disrupted the whole economy including the education sector. For a developing country like India where poor and marginalized outnumber the rest, this is a crisis situation. Suryawanshi and Venogopal (2020) stated that the study identified blended learning as an acceptable method of learning medical curriculum. Schedule flexibility, easy of understanding and absence of monotony of classroom teaching made e-learning more acceptable to the students. Lack of teacher student contact and absence of high-speed internet with hardware were perceived as barriers. Esteban and Jacob et al (2020) revealed that the disruptive effects of the COVID-19 outbreak have impacted almost all sectors of our society. Higher education is no exception. Anecdotal evidence paints a bleak picture for both students and universities. This paper provides the first systematic analysis of the effects of COVID-19 on higher education. To study these effects, we surveyed 1500 students at Arizona State University, and present quantitative evidence showing the adverse effects of the pandemic on students' outcomes and expectations. Kriswanda (2020) stated that this research is motivated by the need of exploring the students' perception of e-learning implementation of two English language subjects in the time of COVID-19 pandemic. The students' perceptions of e-learning are somewhat fruitful; further, it can promote flexibility, offer personalisation where learners can choose their learning path and pace. Shivangi (2020) revealed that the educational institutions (schools, colleges, and universities) in India are currently based only on traditional methods of learning, that is, they follow the traditional set up of face-to-face lectures in a classroom. Although many academic units have also started blended learning, still a lot of them are stuck with old procedures. The sudden outburst of a fatal disease called Covid-19 caused by a Coronavirus (SARS-CoV-2) shook the whole world. Najmul and Yukun (2020) stated that the Literature stated that the positive perception of e-Learning, this study examined and evaluated the impact of e-Learning crack-up perceptions on

psychological distress among college students during COVID-19 pandemic. This empirical study confirmed that college students are suffering from psychological distress due to ineffective e-Learning systems and fear of academic year loss. Payal (2020) stated that the COVID-19 crisis has pushed the global economy with a pervasive impact on almost all sectors. It has triggered the announcement of a lockdown by various nations in a try to arrest the transmission risk of the disease. According to a UNESCO report, the pandemic will adversely impact over 290 million students across 22 countries due to the closure of schools in the wake of the lockdown. Extended school closures will not only exhaust the fundamentals of students, but it will also lead to loss of human capital as well as economic opportunities in the long -run. T, Rubia, and Hincz, et al (2020) revealed that the coronavirus COVID-19 outbreak disrupted life around the globe in 2020. As in any other sector, the COVID-19 pandemic affected education in many ways. Government actions have followed a common goal of reducing the spread of coronavirus by introducing measures limiting social contact. Many countries suspended face-to-face teaching and exams as well as placing restrictions on immigration affecting the students. Aleksander and Damijana, et al (2020) revealed that in a period of just a few months, the COVID-19 pandemic, caused by the novel coronavirus, has completely transformed the lives of masses of people around the globe, including higher education students. We found that teaching staff and universities' public relations offered students the most important support at university during the pandemic.

Research Methodology

Research methodology is the path through which researchers need to conduct their research. It shows the path through which these researchers formulate their problem and objective and present their results from the data obtained during the study period. This research design and methodology chapter also show how the research outcome at the end will be obtained in line with meeting the objective of the study. This chapter hence discusses the research methods that were used during the research process. It includes the research methodology of the study from the research strategy to the result dissemination. The main focus of the chapter is to elaborate the research methodology followed by research design, sampling method, data collection tools and techniques, reliability analysis, validity analysis, and other tools used for data analysis. **Period: 7 July 2020 – 21 June 2021**

SAMPLING DESIGN It includes universe or target population, deciding sampling frame, location, selection technique, and sample size. The target population for this research study includes 30 students and 30 teachers from India. In this study for collecting primary data, structured questionnaires were framed. For collecting primary data researcher made a structured questionnaire and distributed the questionnaire to the students and teachers through Google forms. A detailed research analysis will be carried out thereafter. Researchers often use this psychometric scale to understand the views and perspectives towards a brand, product, or target market. statistical tools used for analyzing the data obtained for the present study are t-test and Annova analysis in SPSS software will be used for the data analysis.

Table 1.2 Likert Scale

Strongly Disagree	Agree	Neutral	Agree	Strongly Agree
1	2	3	4	5

HYPOTHESIS OF THE STUDY

Hypothesis for the Present Study

1. Challenges faced by the students and teachers towards E-Learning with respect to demographic variable.
H0: There is no significant difference in the challenges faced by the students and teachers towards E-Learning with respect to demographic variable.
H1: There is a significant difference in the challenges faced by the students and teachers towards E-Learning with respect to demographic variable.
2. Satisfaction level of the students and teachers towards E-Learning with respect to demographic variable.
H0: There is no significant difference in the satisfaction level of the students and teachers towards E-Learning with respect to demographic variables.
H1: There is a significant difference in the satisfaction level of the students and teachers towards E-Learning with respect to demographic variables.

DATA ANALYSIS AND INTERPRETATION

This chapter is divided into two parts Section I and Section II.

Section I is analysis related with the responses collected from the students under study. Section II consist of data analysis of teachers from whom data has been collected for the research.

DESCRIPTIVE ANALYSIS - STUDENTS:

Interpretation:

In the above table 1, It has been shown that out of total respondents (30), the Majority are Female (29) and only (01) respondent is male. Chart number 2 represents the age of the students. It can be seen from the above chart that the maximum number of respondents are from the age group of 20-30 (26) and only (04) are below 20. Chart no. 3 represents the learning category. It can be seen on the above chart that maximum respondents are from Post Graduate (22) and only (07) respondents are from Graduate and only (01) is from Under Graduate Category. Chart number 4 represents the Type of University. It can be seen from the above chart that the maximum respondents are from Government universities (19) and only (11) are from Private universities. Chart no. 5 represents the Educational Qualification of the students. It can be seen that the maximum respondents were from Post Graduate (19), (10) respondents

from Graduate, and Only (01) from Under Graduate. In the above chart no. 6, It has been shown that out of total respondents (30). The majority of respondents are Students (29), and Self Employed is only (01). Above Chart No.7 represents that the majority of respondents are familiar with the Google meet (19) and Zoom (9) and only (02) respondents are familiar with Microsoft teams.

T TEST OF STUDENTS

Table No. 9

GENDER AND STATEMENTS (FACTORS)

CHALLENGES STATEMENTS (FACTORS)	T	Df	Sig. (2-tailed)
You have sufficient computer knowledge and IT skills to conduct your online lectures. (F1)	.939	28	.356
There is no Difficulties of teaching some subjects (Ex. Mathematics/Accounts). (F2)	-.744	28	.463
You have availability of high-speed internet at home. (F3)	-.919	28	.366
Students are motivated during online lectures. (F4)	-.878	28	.388
Home environment is suitable for conducting online lectures. (F5)	-1.498	28	.145

Table showing factors statement between gender and challenges of student's factors.

Sources: Compiled by the researcher, based on the data collected.

Interpretation: In the above table, the statements show the P-value greater than Alpha value 0.05, the 2 tailed significance value of factors such as F1 (0.356), F2 (0.463), F3 (0.366), F4 (0.388), and F5 (0.145), Hence the Null Hypothesis is accepted. There is no significant difference in the challenges faced by the students towards E-Learning concerning demographic variables.

Table No. 10

GENDER AND STATEMENTS (FACTORS)

SATISFACTION STATEMENTS (FACTORS)	T	Df	Sig. (2-tailed)
You would like to take the E-Teaching Learning in Future as well. (F6)	1.147	28	.261
You would like to recommend your friends, relatives, etc. for using E-Teaching Learning. (F7)	.586	28	.562
Online lectures are effective than traditional/physical classroom lectures. (F8)	-.233	28	.818
It may be difficult to get an immediate feedback on what was being taught. (F9)	2.001	28	.055
Flexible hours of conducting online lectures. (F10)	1.394	28	.174

Table showing factors statement between gender and challenges of student's factors.

Sources: Compiled by the researcher, based on the data collected.

Interpretation: In the above table, the statements show the P-value greater than Alpha value 0.05, the 2 tailed significance value of factors such as F6 (0.261), F7 (0.562), F8 (0.818), F9 (0.055), and F10 (0.174), Hence the Null Hypothesis is accepted. There is no significant difference in the satisfaction level of students towards E-Learning concerning demographic variables.

ANNOVA ANALYSIS OF STUDENTS

Table No. 11

AGE AND STATEMENTS FACTORS

CHALLENGES STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You have sufficient computer knowledge and IT skills to conduct your online lectures. (F1)	Between Groups	.328	1	.328	.091	.766
	Within Groups	101.538	28	3.626		
	Total	101.867	29			
There is no Difficulties of teaching some subjects (Ex. Mathematics/Accounts). (F2)	Between Groups	.328	1	.328	.296	.591
	Within Groups	31.038	28	1.109		
	Total	31.367	29			
You have availability of high-speed internet at home. (F3)	Between Groups	4.615	1	4.615	1.726	.200
	Within Groups	74.885	28	2.674		
	Total	79.500	29			
Students are motivated during online lectures. (F4)	Between Groups	.021	1	.021	.007	.933
	Within Groups	79.346	28	2.834		
	Total	79.367	29			
Home environment is suitable for conducting online lectures. (F5)	Between Groups	1.078	1	1.078	.740	.397
	Within Groups	40.788	28	1.457		
	Total	41.867	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between age and challenges of student's factors.

Interpretation:

In the above Table, since the calculated P-value is greater than 0.05, in case of analysis between age and challenges factors of students such as F1 (0.766), F2 (0.591), F3 (0.200), F4 (0.933), F5 (0.397) the null hypothesis is accepted at 5% level about factors (F1), (F2), (F3), (F4), (F5) which shows that there are no significant differences in the challenges of students towards E-learning with demographic factors. Students are comfortable with E-learning and they have not faced any challenges as well

Table No.12

AGE AND STATEMENTS FACTORS

		Sum of Squares	Df	Mean Square	F	Sig.
You would like to take the E-Teaching Learning in Future as well. (F6)	Between Groups	1.950	1	1.950	1.262	.271
	Within Groups	43.250	28	1.545		
	Total	45.200	29			
You would like to recommend your friends, relatives, etc. for using E- Teaching Learning. (F7)	Between Groups	.328	1	.328	.202	.657
	Within Groups	45.538	28	1.626		
	Total	45.867	29			
Online lectures are effective than traditional/physical classroom lectures. (F8)	Between Groups	.415	1	.415	.243	.626
	Within Groups	47.885	28	1.710		
	Total	48.300	29			
It may be difficult to get an immediate feedback on what was being taught. (F9)	Between Groups	.415	1	.415	.181	.674
	Within Groups	64.385	28	2.299		
	Total	64.800	29			
Flexible hours of conducting online lectures. (F10)	Between Groups	4.928	1	4.928	4.241	.049
	Within Groups	32.538	28	1.162		
	Total	37.467	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between age and satisfaction level of student's factors.

Interpretation: In the above Table, since calculated P value is greater than 0.05, in case of analysis between age and satisfaction level factors of students such as F6 (0.271), F7 (0.657), F8 (0.626), F9 (0.674), F10 (0.049) the null hypothesis is accepted at 5% level with regard to factors (F6), (F7), (F8), (F9), (F10) which shows that shows that there are no significant differences in the satisfaction level of

students towards E-learning with demographic factors. It shows that students are satisfied with E-learning.

Table No.13

PROFESSION AND STATEMENTS FACTORS

CHALLENGES STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You have sufficient computer knowledge and IT skills to conduct your online lectures. (F1)	Between Groups	5.315	1	5.315	1.541	.225
	Within Groups	96.552	28	3.448		
	Total	101.867	29			
There is no Difficulties of teaching some subjects (Ex. Mathematics/Accounts). (F2)	Between Groups	1.574	1	1.574	1.479	.234
	Within Groups	29.793	28	1.064		
	Total	31.367	29			
You have availability of high-speed internet at home. (F3)	Between Groups	.259	1	.259	.091	.765
	Within Groups	79.241	28	2.830		
	Total	79.500	29			
Students are motivated during online lectures. (F4)	Between Groups	.332	1	.332	.118	.734
	Within Groups	79.034	28	2.823		
	Total	79.367	29			
Home environment is suitable for conducting online lectures. (F5)	Between Groups	.074	1	.074	.049	.826
	Within Groups	41.793	28	1.493		
	Total	41.867	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between profession and challenges of student's factors.

Interpretation: In the above Table, since calculated P value is greater than 0.05, in case of analysis between profession and challenges factors of students such as F1 (0.225), F2 (0.234), F3 (0.765), F4 (0.734), F5 (0.826) the null hypothesis is accepted at 5% level with regard to factors (F1), (F2), (F3), (F4), (F5) which shows that there are no significant differences in the challenges of students towards E-learning with profession.

Table No.14

PROFESSION AND STATEMENTS FACTORS

		Sum of Squares	Df	Mean Square	F	Sig.
You would like to take the E-Teaching Learning in Future as well. (F6)	Between Groups	.372	1	.372	.233	.633
	Within Groups	44.828	28	1.601		
	Total	45.200	29			
You would like to recommend your friends, relatives, etc. for using E- Teaching Learning. (F7)	Between Groups	.074	1	.074	.045	.834
	Within Groups	45.793	28	1.635		
	Total	45.867	29			
Online lectures are effective than traditional/physical classroom lectures. (F8)	Between Groups	.507	1	.507	.297	.590
	Within Groups	47.793	28	1.707		
	Total	48.300	29			
It may be difficult to get an immediate feedback on what was being taught. (F9)	Between Groups	.662	1	.662	.289	.595
	Within Groups	64.138	28	2.291		
	Total	64.800	29			
Flexible hours of conducting online lectures. (F10)	Between Groups	.225	1	.225	.169	.684
	Within Groups	37.241	28	1.330		
	Total	37.467	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between profession and satisfaction level of student's factors.

Interpretation: In the above Table, since calculated P value is greater than 0.05, in case of analysis between age and satisfaction level factors of students such as F6 (0.633), F7 (0.834), F8 (0.590), F9 (0.595), F10 (0.684) the null hypothesis is accepted at 5% level with regard to factors (F6), (F7), (F8), (F9), (F10) which shows that there are no significant differences in the satisfaction level of students towards E-learning with profession.

Table No.15

EDUCATIONAL QUALIFICATION AND STATEMENTS FACTORS

CHALLENGES STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You have sufficient computer knowledge and IT skills to conduct your online lectures. (F1)	Between Groups	3.109	2	1.554	.425	.658
	Within Groups	98.758	27	3.658		
	Total	101.867	29			
There is no Difficulties of teaching some subjects (Ex. Mathematics/Accounts). (F2)	Between Groups	.609	2	.304	.267	.768
	Within Groups	30.758	27	1.139		
	Total	31.367	29			
You have availability of high-speed internet at home. (F3)	Between Groups	2.679	2	1.339	.471	.630
	Within Groups	76.821	27	2.845		
	Total	79.500	29			
Students are motivated during online lectures. (F4)	Between Groups	2.335	2	1.168	.409	.668
	Within Groups	77.032	27	2.853		
	Total	79.367	29			
Home environment is suitable for conducting online lectures. (F5)	Between Groups	5.635	2	2.818	2.100	.142
	Within Groups	36.232	27	1.342		
	Total	41.867	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between educational qualification and challenges of student's factors.

Interpretation: In the above Table, since calculated P value is greater than 0.05, in case of analysis between profession and challenges factors of students such as F1 (0.658), F2 (0.768), F3 (0.630), F4 (0.668), F5 (0.142) the null hypothesis is accepted at 5% level with regard to factors (F1), (F2), (F3), (F4), (F5) which shows that there are no significant differences in the challenges of students towards E-learning with educational qualification.

Table No.16

EDUCATIONAL QUALIFICATION AND STATEMENTS FACTORS

		Sum of Squares	Df	Mean Square	F	Sig.
You would like to take the E-Teaching Learning in Future as well. (F6)	Between Groups	3.879	2	1.939	1.267	.298
	Within Groups	41.321	27	1.530		
	Total	45.200	29			
You would like to recommend your friends, relatives, etc. for using E- Teaching Learning. (F7)	Between Groups	2.335	2	1.168	.724	.494
	Within Groups	43.532	27	1.612		
	Total	45.867	29			
Online lectures are effective than traditional/physical classroom lectures. (F8)	Between Groups	.216	2	.108	.061	.941
	Within Groups	48.084	27	1.781		
	Total	48.300	29			
It may be difficult to get an immediate feedback on what was being taught. (F9)	Between Groups	8.700	2	4.350	2.094	.143
	Within Groups	56.100	27	2.078		
	Total	64.800	29			
Flexible hours of conducting online lectures. (F10)	Between Groups	3.935	2	1.968	1.584	.224
	Within Groups	33.532	27	1.242		
	Total	37.467	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between educational qualification and satisfaction level of student's factors.

Interpretation: In the above Table, since calculated P value is greater than 0.05, in case of analysis between age and satisfaction level factors of students such as F6 (0.298), F7 (0.494), F8 (0.941), F9 (0.143), F10 (0.224) the null hypothesis is accepted at 5% level with regard to factors (F6), (F7), (F8), (F9), (F10) which shows that there are no significant differences in the satisfaction level of students towards E-learning with

Section II

DEMOGRAPHIC ANALYSIS - TEACHERS:

Interpretation:

In the above chart no. 1, It has been shown that out of the total respondents 30, the Majority are Female 24 and only 06 respondents were male. Chart number 2 represents the age of the teachers. It can be seen from the above chart that maximum respondents are from the age group of 20-30 (08), 30-40 (08), and 40-50 (08), and only (06) are above 50. Chart no. 3 represents the teaching category. It can be seen on the above chart that maximum respondents are from Under Graduate (12) and only (09) respondents are from Post Graduate and Graduate Category. Chart no. 4 represents the qualification of the teachers. It can be seen that maximum respondents were from Post Graduate (17), (6) respondents from Under Graduate, (4) respondents were from Graduate and Only (3) were from Above P.G. In the above chart no. 5, It has been shown that out of total respondents (30). The majority of respondents are a private employee (23), (06) are teachers, and government employee is only (01). The above Chart represents that the majority of respondents are familiar with the Google meet (14) and Zoom (12) and only (04) respondents are familiar with Microsoft teams.

T TEST ON TEACHERS

Table No. 8

GENDER AND STATEMENTS (FACTORS)

CHALLENGES STATEMENTS (FACTORS)	T	Df	Sig. (2-tailed)
You have sufficient computer knowledge and IT skills to conduct your online lectures. (F1)	2.563	13.275	.023
There is no Difficulties of teaching some subjects (Ex. Mathematics/Accounts). (F2)	.189	6.616	.855
You have availability of high-speed internet at home. (F3)	-1.225	13.762	.241
Students are motivated during online lectures. (F4)	-1.244	9.059	.245
Home environment is suitable for conducting online lectures. (F5)	1.487	7.678	.177

Table showing factors statement between gender and challenges of teacher's factors.

Sources: Compiled by the researcher, based on the data collected.

Interpretation: In the above table, the statements show the P value greater than Alpha value 0.05, the 2 tailed significance value of factors such as F1 (0.023), F2 (0.855), F3 (0.241), F4 (0.245) and F5 (0.177),

Hence the Null Hypothesis is accepted. There is no significant difference in the challenges faced by the teachers towards E-Learning with respect to demographic variable.

Table No. 9

GENDER AND STATEMENTS (FACTORS)

SATISFACTION STATEMENTS (FACTORS)	T	Df	Sig. (2-tailed)
You would like to take the E-Teaching Learning in Future as well. (F6)	.635	6.275	.548
You would like to recommend your friends, relatives, etc. for using E-Teaching Learning. (F7)	1.345	6.762	.222
Online lectures are effective than traditional/physical classroom lectures. (F8)	2.955	7.623	.019
It may be difficult to get an immediate feedback on what was being taught. (F9)	-.117	6.537	.911
Flexible hours of conducting online lectures. (F10)	.433	6.754	.679

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between gender and satisfaction level of teacher’s factors.

Interpretation: In the above table, the statements show the P value greater than Alpha value 0.05, the 2 tailed significance value of factors such as F6 (0.548), F7 (0.222), F8 (0.019), F9 (0.911) and F10 (0.679), Hence the Null Hypothesis is accepted. There is no significant difference in the satisfaction level of the teachers towards E-Learning with respect to demographic variables.

ANNOVA ANALYSIS OF TEACHERS

TABLE NO.10

AGE AND STATEMENTS FACTORS

CHALLENGES STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You have sufficient computer knowledge and IT skills to conduct your online lectures. (F1)	Between Groups	14.633	3	4.878	1.790	.174
	Within Groups	70.833	26	2.724		
	Total	85.467	29			
There is no Difficulties of teaching some subjects (Ex. Mathematics/Accounts). (F2)	Between Groups	5.033	3	1.678	1.138	.352
	Within Groups	38.333	26	1.474		
	Total	43.367	29			
You have availability of high-speed internet at home. (F3)	Between Groups	.992	3	.331	.171	.915
	Within Groups	50.375	26	1.938		
	Total	51.367	29			
Students are motivated during online lectures. (F4)	Between Groups	7.008	3	2.336	1.901	.154
	Within Groups	31.958	26	1.229		
	Total	38.967	29			
Home environment is suitable for conducting online lectures. (F5)	Between Groups	3.008	3	1.003	1.004	.407
	Within Groups	25.958	26	.998		
	Total	28.967	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between age and challenges of teacher's factors.

Interpretation: In the above Table, since calculated P-value is greater than 0.05, in case of analysis between age and challenges factors of teachers such as F1 (0.174), F2 (0.352), F3 (0.915), F4 (0.154), F5 (0.407) the null hypothesis is accepted at 5% level concerning factors (F1), (F2), (F3), (F4), (F5) which shows that there are no significant differences in the challenges of teachers towards E-

learning with demographic factors. Teachers are comfortable with E-learning and they have not faced any challenges as well.

TABLE NO.11

AGE AND STATEMENTS FACTORS

SATISFACTION STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You would like to take the E-Teaching Learning in Future as well. (F6)	Between Groups	3.167	3	1.056	.784	.514
	Within Groups	35.000	26	1.346		
	Total	38.167	29			
You would like to recommend your friends, relatives, etc. for using E- Teaching Learning. (F7)	Between Groups	4.992	3	1.664	1.432	.256
	Within Groups	30.208	26	1.162		
	Total	35.200	29			
Online lectures are effective than traditional/physical classroom lectures. (F8)	Between Groups	5.617	3	1.872	2.486	.083
	Within Groups	19.583	26	.753		
	Total	25.200	29			
It may be difficult to get an immediate feedback on what was being taught. (F9)	Between Groups	10.867	3	3.622	2.457	.085
	Within Groups	38.333	26	1.474		
	Total	49.200	29			
Flexible hours of conducting online lectures. (F10)	Between Groups	11.258	3	3.753	1.441	.254
	Within Groups	67.708	26	2.604		
	Total	78.967	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between age and satisfaction level of teacher's factors.

Interpretation: In the above Table, since calculated P-value is greater than 0.05, in case of analysis between age and satisfaction level factors of teachers such as F6 (514), F7 (0.256), F8 (0.083), F9 (0.085), F10 (0.254) the null hypothesis is accepted at 5% level with regard to factors (F6), (F7), (F8), (F9), (F10) which shows that there are no significant differences in the satisfaction level of teachers towards E-learning with demographic factors. It shows that teachers are satisfied with E-learning

TABLE NO.12

PROFESSION AND STATEMENTS FACTORS

CHALLENGES STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You have sufficient computer knowledge and IT skills to conduct your online lectures. (F1)	Between Groups	2.481	2	1.241	.404	.672
	Within Groups	82.986	27	3.074		
	Total	85.467	29			
There is no Difficulties of teaching some subjects (Ex. Mathematics/Accounts). (F2)	Between Groups	2.497	2	1.249	.825	.449
	Within Groups	40.870	27	1.514		
	Total	43.367	29			
You have availability of high-speed internet at home. (F3)	Between Groups	3.055	2	1.528	.854	.437
	Within Groups	48.312	27	1.789		
	Total	51.367	29			
Students are motivated during online lectures. (F4)	Between Groups	1.699	2	.849	.615	.548
	Within Groups	37.268	27	1.380		
	Total	38.967	29			
Home environment is suitable for conducting online lectures. (F5)	Between Groups	6.358	2	3.179	3.796	.035
	Within Groups	22.609	27	.837		
	Total	28.967	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between profession and challenges of teacher's factors.

Interpretation: In the above Table, since calculated P-value is greater than 0.05, in case of analysis between age and challenges factors of teachers such as F1 (0.672), F2 (0.449), F3 (0.437), F4 (0.548), F5 (0.035) the null hypothesis is accepted at 5% level with regard to factors (F1), (F2), (F3), (F4), (F5) which shows that there are no significant differences in the challenges of teachers towards E-learning with profession. Teachers are comfortable with E-learning and they have not faced any challenges as well.

TABLE NO.13

PROFESSION AND STATEMENTS FACTORS

SATISFACTION STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You would like to take the E-Teaching Learning in Future as well. (F6)	Between Groups	.225	2	.112	.080	.923
	Within Groups	37.942	27	1.405		
	Total	38.167	29			
You would like to recommend your friends, relatives, etc. for using E- Teaching Learning. (F7)	Between Groups	1.497	2	.749	.600	.556
	Within Groups	33.703	27	1.248		
	Total	35.200	29			
Online lectures are effective than traditional/physical classroom lectures. (F8)	Between Groups	1.461	2	.730	.831	.447
	Within Groups	23.739	27	.879		
	Total	25.200	29			
It may be difficult to get an immediate feedback on what was being taught. (F9)	Between Groups	.997	2	.499	.279	.759
	Within Groups	48.203	27	1.785		
	Total	49.200	29			
Flexible hours of conducting online lectures. (F10)	Between Groups	3.228	2	1.614	.575	.569
	Within Groups	75.739	27	2.805		
	Total	78.967	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between profession and satisfaction level of teacher's factors.

Interpretation: In the above Table, since calculated P-value is greater than 0.05, in case of analysis between age and satisfaction level factors of teachers such as F6 (0.923), F7 (0.556), F8 (0.447), F9 (0.759), F10 (0.569) the null hypothesis is accepted at 5% level with regard to factors (F6), (F7), (F8), (F9), (F10) which shows that there are no significant differences in the satisfaction level of teachers towards E-learning with demographic factors. It shows that teachers are satisfied with E-learning.

Table No.14

EDUCATIONAL QUALIFICATION AND STATEMENTS FACTORS

CHALLENGES STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You have sufficient computer knowledge and IT skills to conduct your online lectures. (F1)	Between Groups	15.133	3	5.044	1.865	.160
	Within Groups	70.333	26	2.705		
	Total	85.467	29			
There is no Difficulties of teaching some subjects (Ex. Mathematics/Accounts). (F2)	Between Groups	.332	3	.111	.067	.977
	Within Groups	43.034	26	1.655		
	Total	43.367	29			
You have availability of high-speed internet at home. (F3)	Between Groups	2.484	3	.828	.440	.726
	Within Groups	48.882	26	1.880		
	Total	51.367	29			
Students are motivated during online lectures. (F4)	Between Groups	2.648	3	.883	.632	.601
	Within Groups	36.319	26	1.397		
	Total	38.967	29			
Home environment is suitable for conducting online lectures. (F5)	Between Groups	5.202	3	1.734	1.897	.155
	Within Groups	23.765	26	.914		
	Total	28.967	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between educational qualification and challenges of teacher's factors.

Interpretation: In the above Table, since calculated P-value is greater than 0.05, in case of analysis between age and challenges factors of teachers such as F1 (0.160), F2 (0.977), F3 (0.726), F4 (0.601), F5 (0.155) the null hypothesis is accepted at 5% level with regard to factors (F1), (F2), (F3), (F4), (F5) which

shows that shows that there are no significant differences in the challenges of teachers towards E-learning with profession. Teachers are comfortable with E-learning and they have not faced any challenges as well.

TABLE NO.15

EDUCATIONAL QUALIFICATION AND STATEMENTS FACTORS

SATISFACTION STATEMENTS (FACTORS)		Sum of Squares	Df	Mean Square	F	Sig.
You would like to take the E-Teaching Learning in Future as well. (F6)	Between Groups	4.034	3	1.345	1.024	.398
	Within Groups	34.132	26	1.313		
	Total	38.167	29			
You would like to recommend your friends, relatives, etc. for using E- Teaching Learning. (F7)	Between Groups	6.416	3	2.139	1.932	.149
	Within Groups	28.784	26	1.107		
	Total	35.200	29			
Online lectures are effective than traditional/physical classroom lectures. (F8)	Between Groups	1.298	3	.433	.471	.705
	Within Groups	23.902	26	.919		
	Total	25.200	29			
It may be difficult to get an immediate feedback on what was being taught. (F9)	Between Groups	10.259	3	3.420	2.283	.103
	Within Groups	38.941	26	1.498		
	Total	49.200	29			
Flexible hours of conducting online lectures. (F10)	Between Groups	9.496	3	3.165	1.185	.335
	Within Groups	69.471	26	2.672		
	Total	78.967	29			

Sources: Compiled by the researcher, based on the data collected.

Table showing factors statement between qualification and satisfaction level of teacher's factors.

Interpretation: In the above Table, since calculated P-value is greater than 0.05, in case of analysis between age and satisfaction level factors of teachers such as F6 (0.398), F7 (0.149), F8 (0.705), F9 (0.103), F10 (0.335) the null hypothesis is accepted at 5% level with regard to factors (F6), (F7), (F8), (F9), (F10) which shows that there are no significant differences in the satisfaction level of teachers towards E-learning with demographic factors. It shows that teachers are satisfied with E-learning.

Findings

The T-test between gender and factor influencing challenges and satisfaction level of the teachers and students towards the Online learning concerning demographic factors. T-test has been done on gender on 5 factors influencing challenges of the teachers towards the E-Learning concerning demographic factors. Some factors show that there is no significant difference between respondents in value these factors influence challenges of the teachers towards E-Learning concerning demographic factors based on gender. The T-test between Gender and 5-factor influencing satisfaction level of the teachers towards the E-Learning concerning demographic factors. Some factors show that there is no significant difference between respondents in value these factors influence the satisfaction level of the teachers towards E-Learning concerning demographic factors based on gender.

Anova between Age and 5 factors influencing challenges of the teachers towards E-Learning concerning demographic factors based on Age. There are no significant differences in the challenges of teachers towards E-learning with demographic factors. Anova has been done on Age on 5 factors influencing satisfaction level of the teachers towards the E-Learning concerning demographic factors. 5 factors show that there is no significant difference between respondents in value these factors influence the satisfaction level of the teachers towards the E-Learning concerning demographic factors. Anova between Profession and 5 factors influencing challenges of the teachers towards E-Learning concerning demographic factors. There are no significant differences in the challenges of teachers towards E-learning with demographic factors.

Conclusion

In conclusion, the COVID-19 pandemic has made online learning a new normal in most, if not all, educational contexts across the globe.

It is no longer an unfamiliar phenomenon in many developing countries where online education was not well-established before the pandemic. In a sense, COVID-19 is a silver lining in the crisis. It provides a strong impetus for the digital transformation of education across different levels. In developing countries like India, COVID-19 provides concerned education stakeholders with the opportunity to explore the pros and cons of online learning, it can be concluded that all the objectives were achieved concerning age, gender, education qualification, profession. It can be seen that E-learning is accepted by the majority of age category from 20 – 30, 30-40, 40- 50 age group. The result of the study will provide a better understanding of various challenges faced by the students and teachers towards E-learn during Covid 19.

The present study design is descriptive and also the study belongs to Judgmental. The target population for this research study includes students and teachers find 60 respondents will be considered for the survey from Bandra to Jogeshwari from Mumbai. In this study, the researcher has used a non-probability sampling technique to collect the data. In this research, both primary and secondary source of data has been used to collect the information required to study the stated problem under study. In this study for Collecting primary data structured questionnaires were farmed. For collecting primary data researcher has used Google form and also distributed questionnaire forms to the students and teachers who are residents of Mumbai. In this study, the researcher reviewed various articles, a research paper published in journals, books, and official websites. The questionnaire was divided into two sections. Section A consists of demographic information and section B contains statements related to the topic under study. Section A consists of eight statements to know the demographic of customers such as Name, Gender, Age, Educational Qualifications, profession, Teaching category/learning category, familiarity with apps. All the questions related to demographic variables were asked on a nominal scale. Section B contains questions related to the topic. In this t-test and ANOVA has been used with the help of SPSS Software. The Researcher has used SPSS Software to analyze the data collected through Google form questionnaire.

Financial or other competing interests: None

Declarations

Consent: Structured questionnaire was circulated to the participants as a Google Form, and by submitting answers to those questions, participants consent was acquired.

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Figures

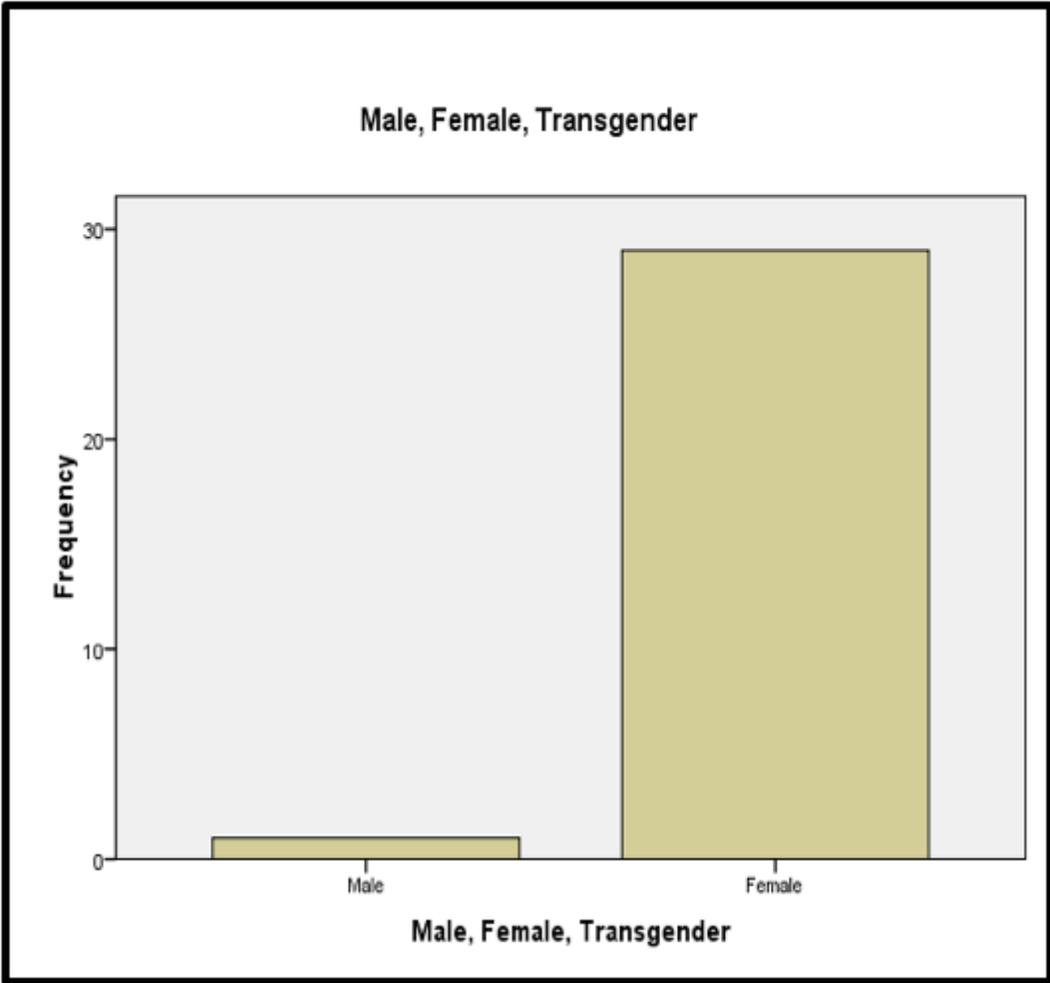


Figure 1

Chart 1 Gender

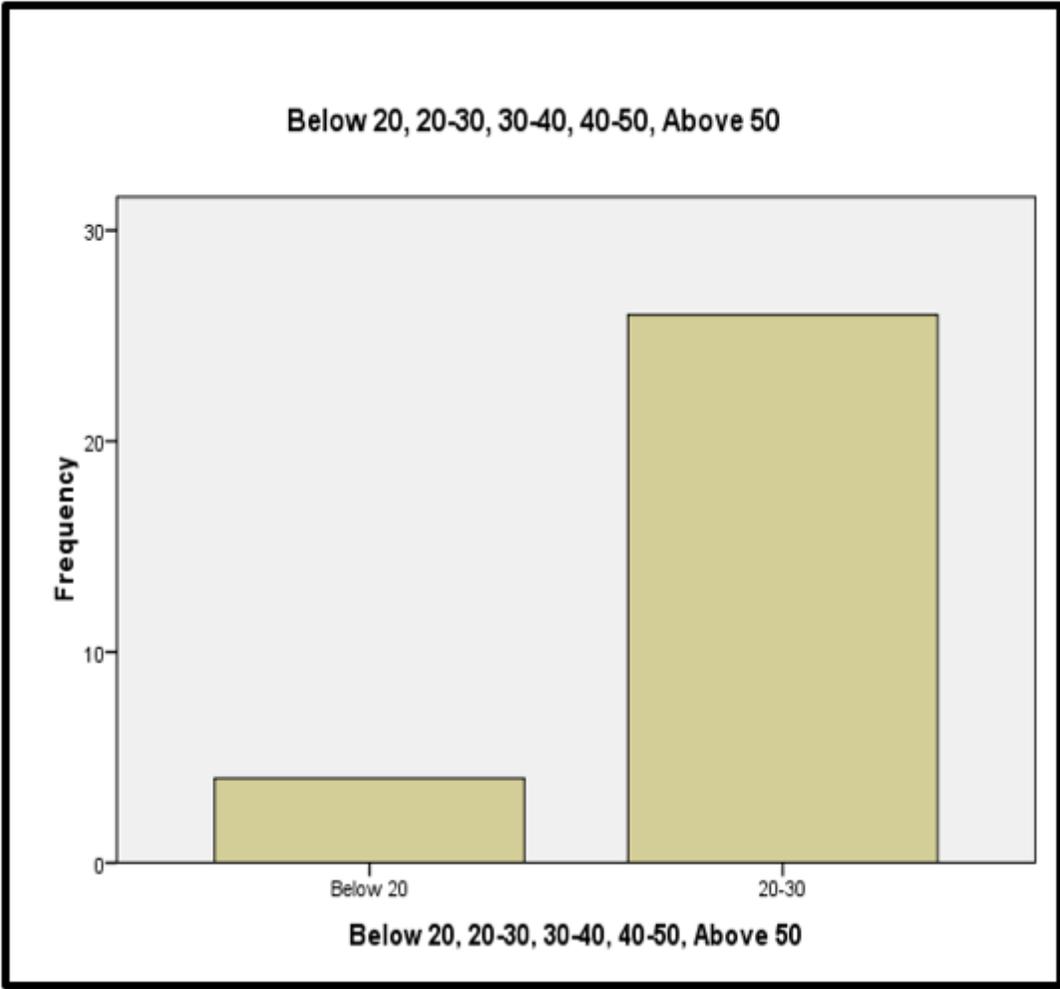


Figure 2

Chart 2, Age

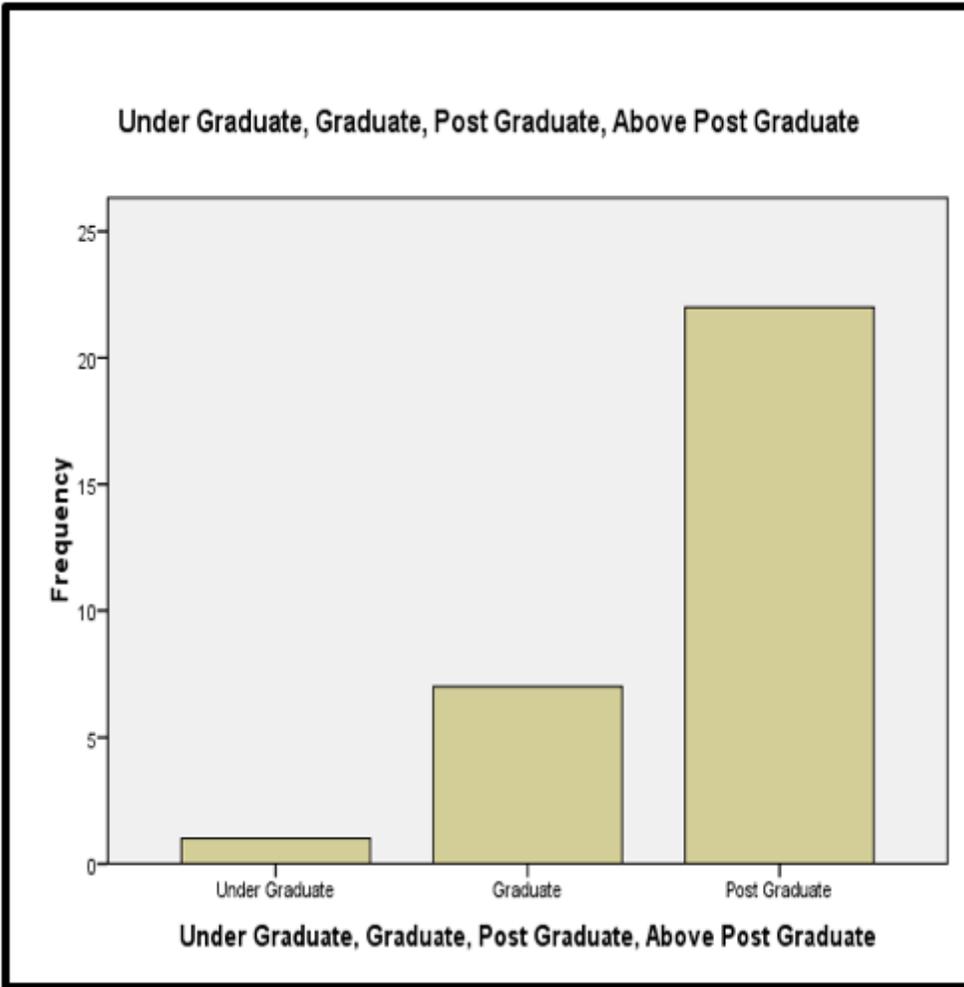


Figure 3

Chart 3 the Learning Category

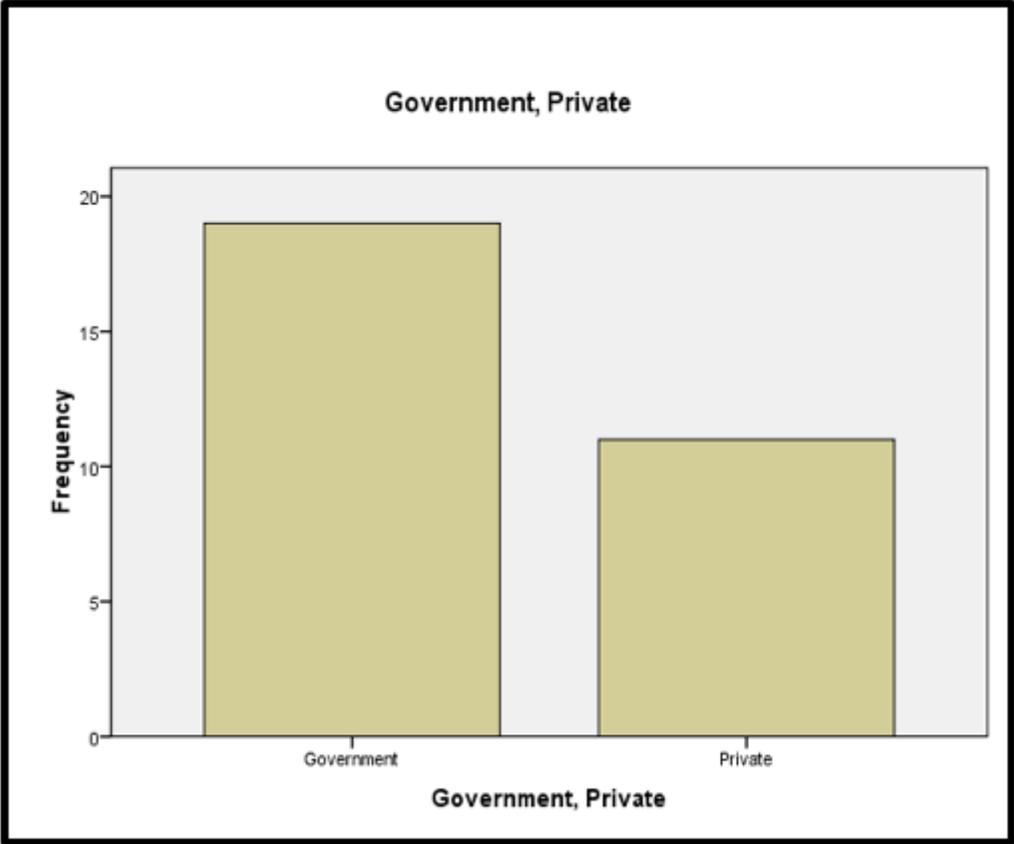


Figure 4

Chart 4 Types of Institute.

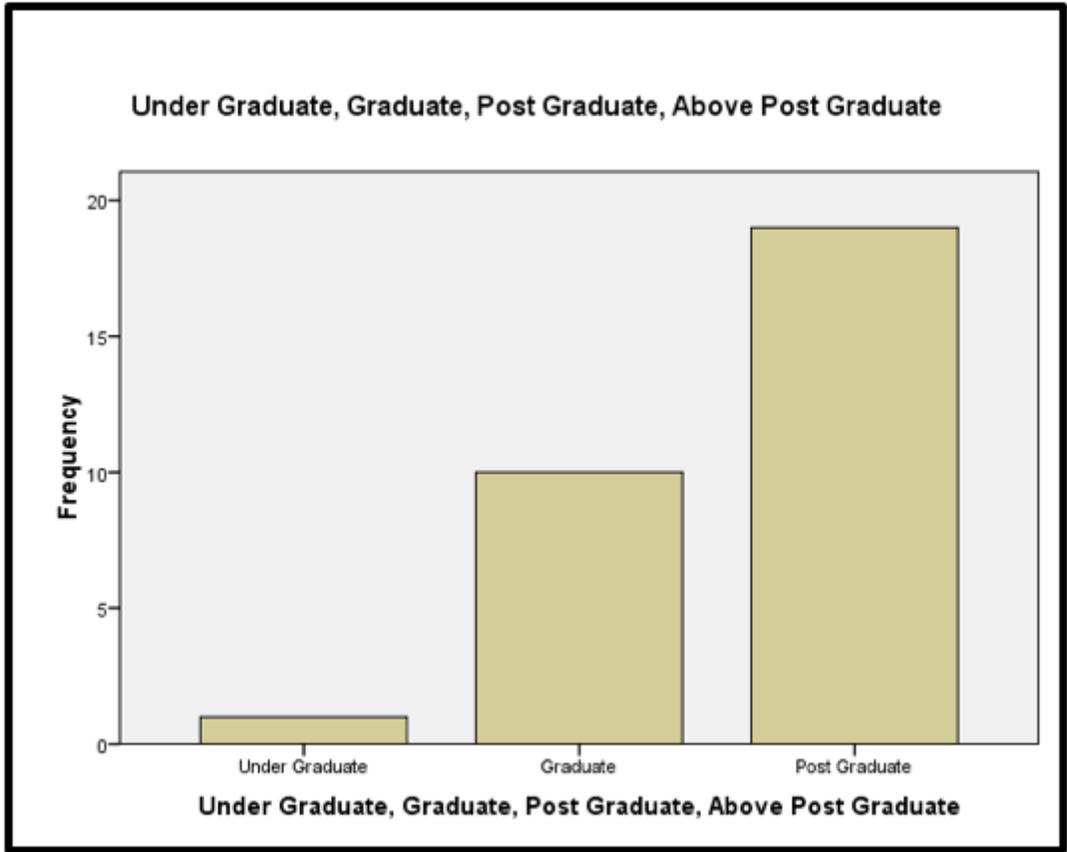


Figure 5

Chart 5 Educational Qualifications.

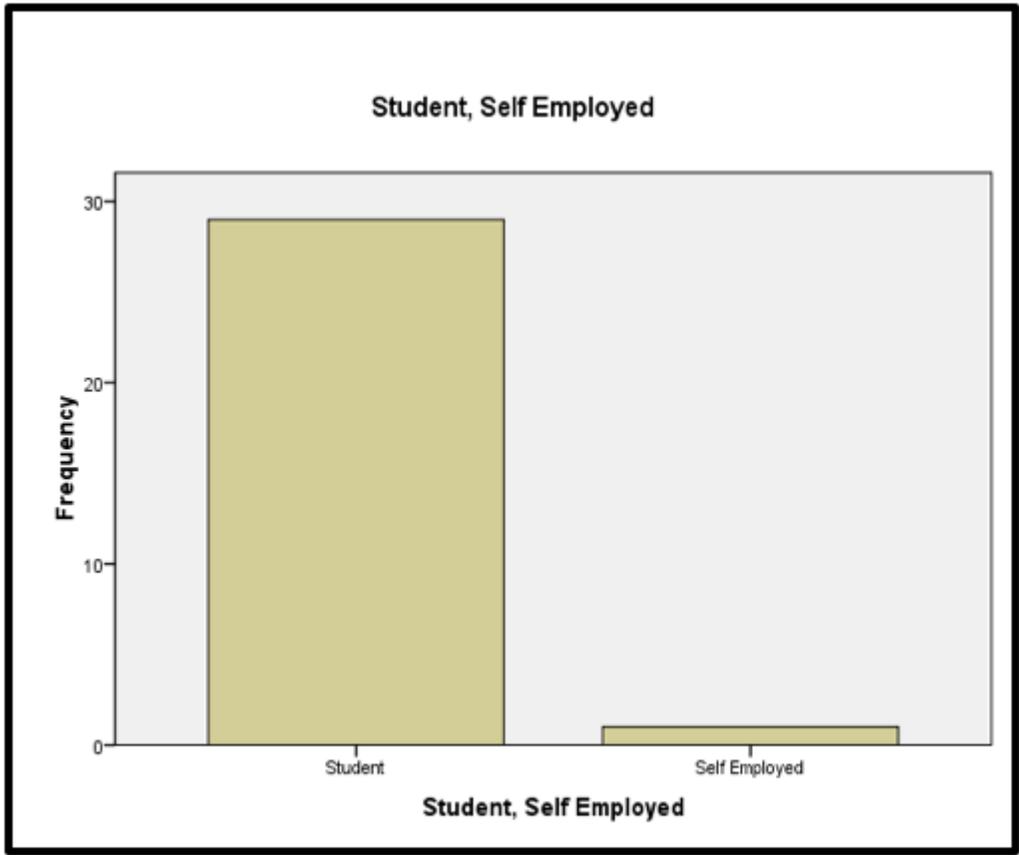


Figure 6

Chart 6 Profession

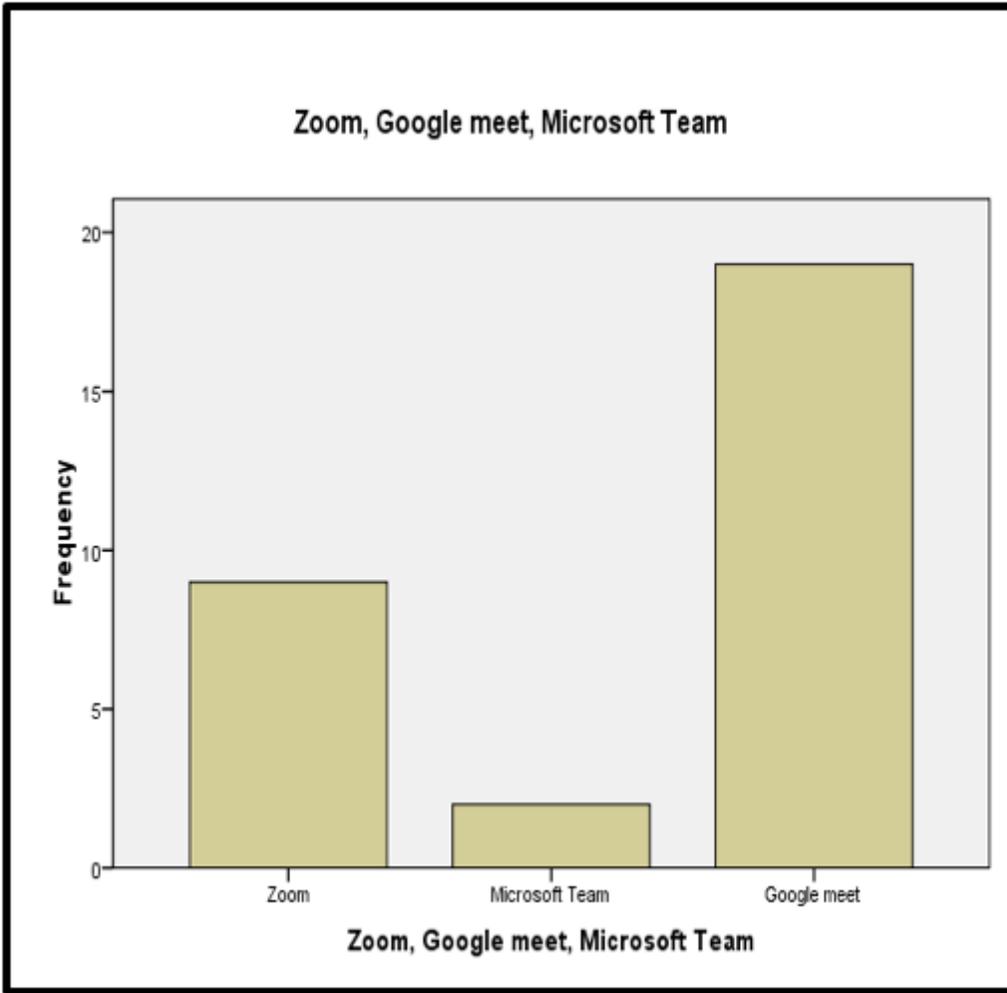


Figure 7

Chart 7

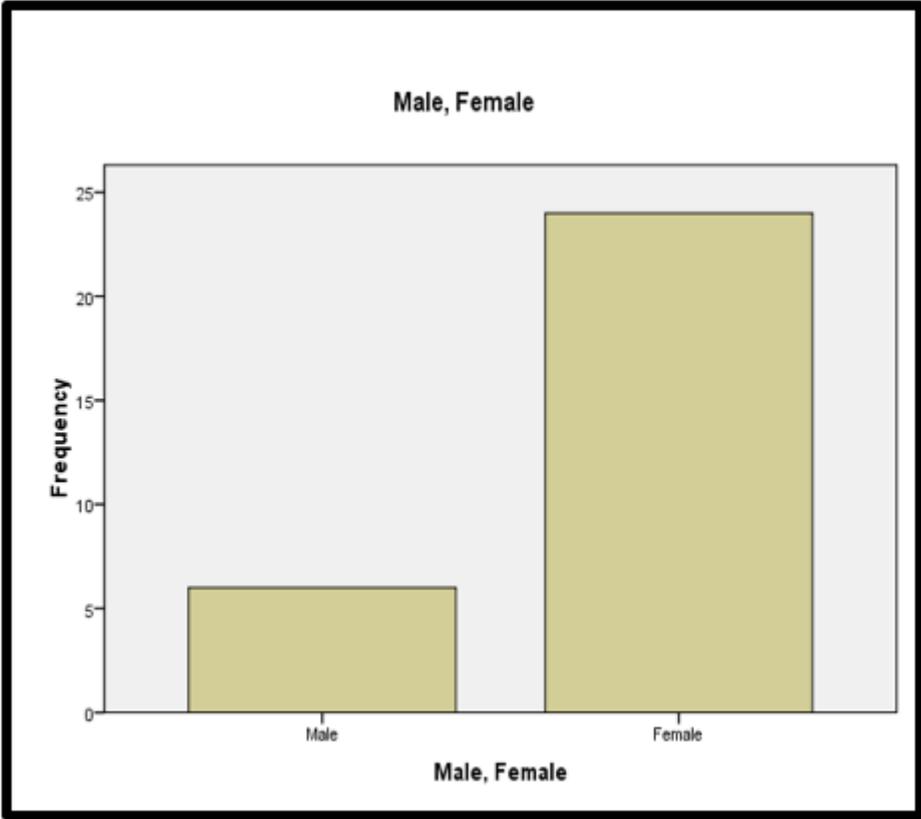


Figure 8

Section II Chart No. 1, Gender

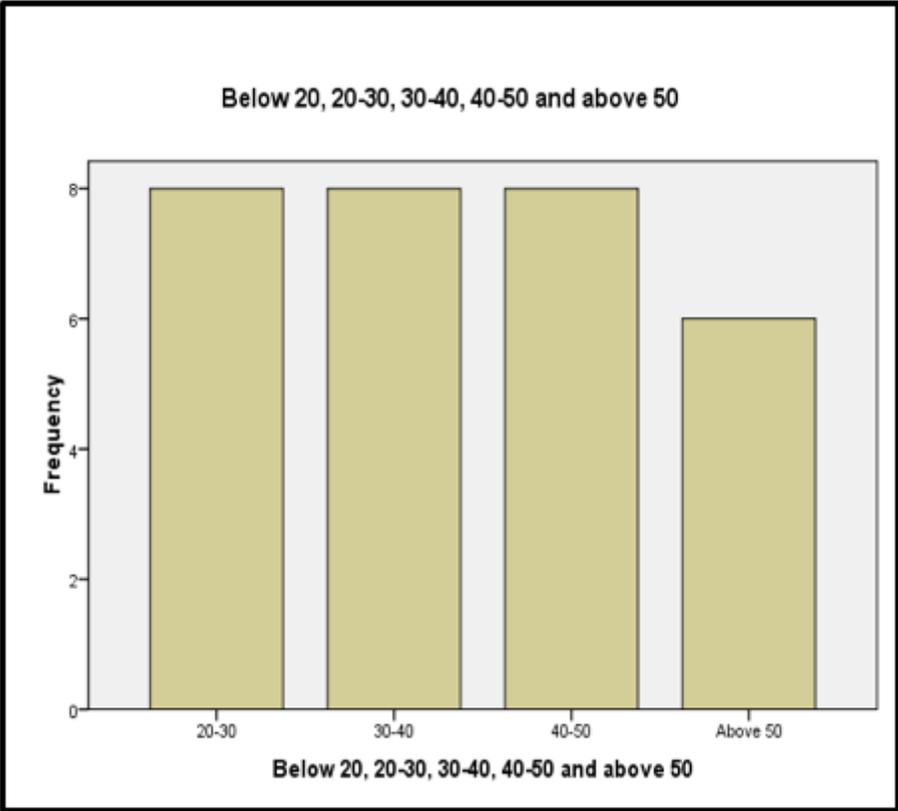


Figure 9

Section II Chart No. 2, Age

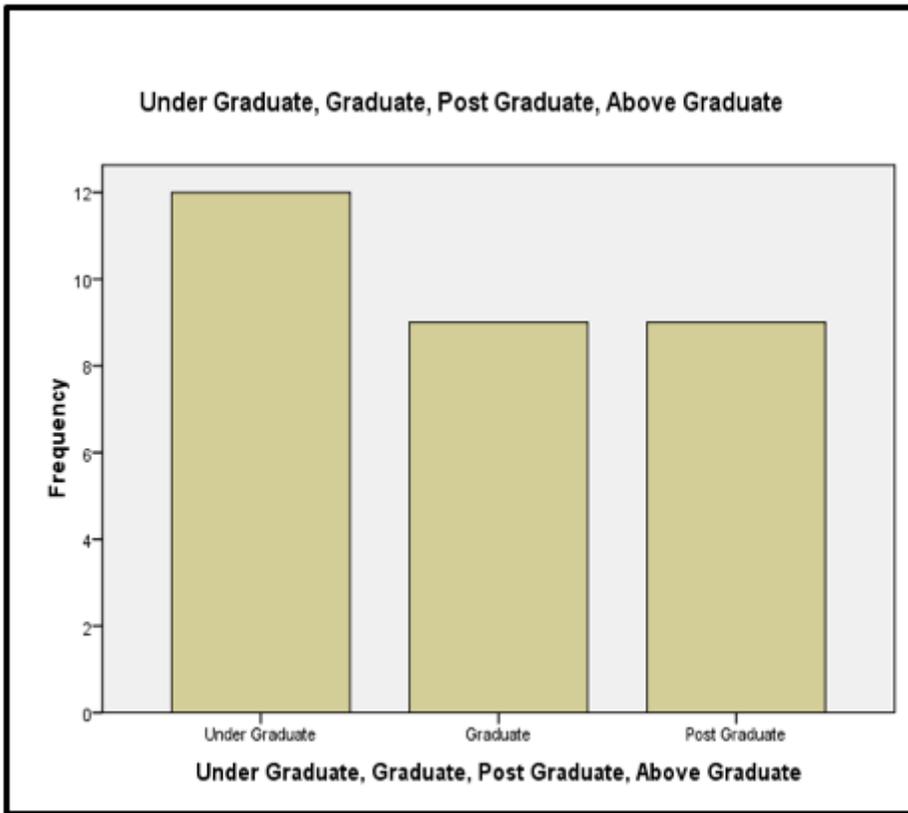


Figure 10

Section II Chart No 3 Teaching Category.

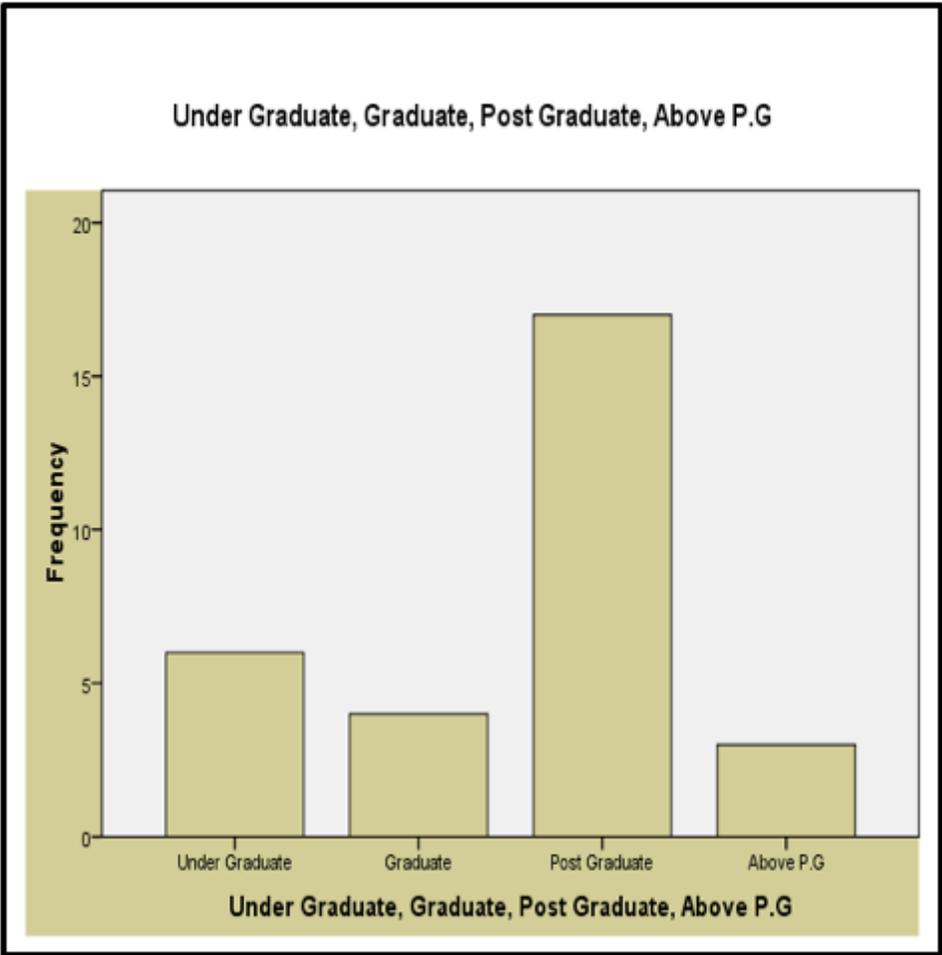


Figure 11

Section II Chart no. 4 Qualification

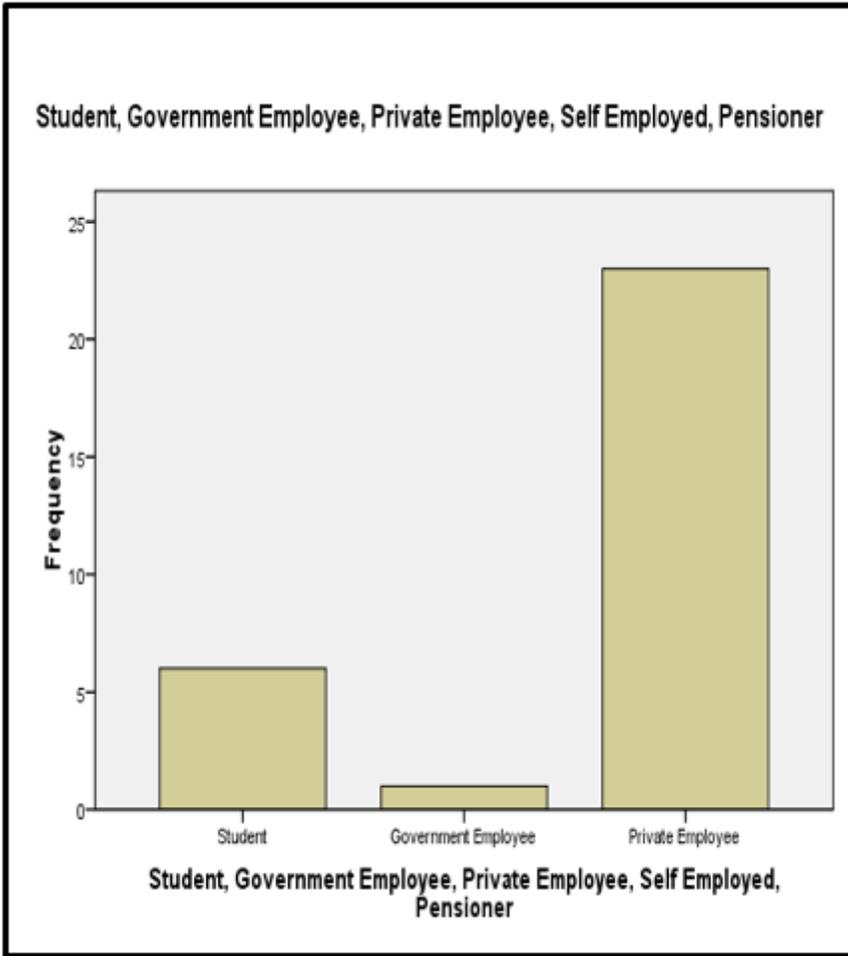


Figure 12

Section II Chart No. 5 Profession

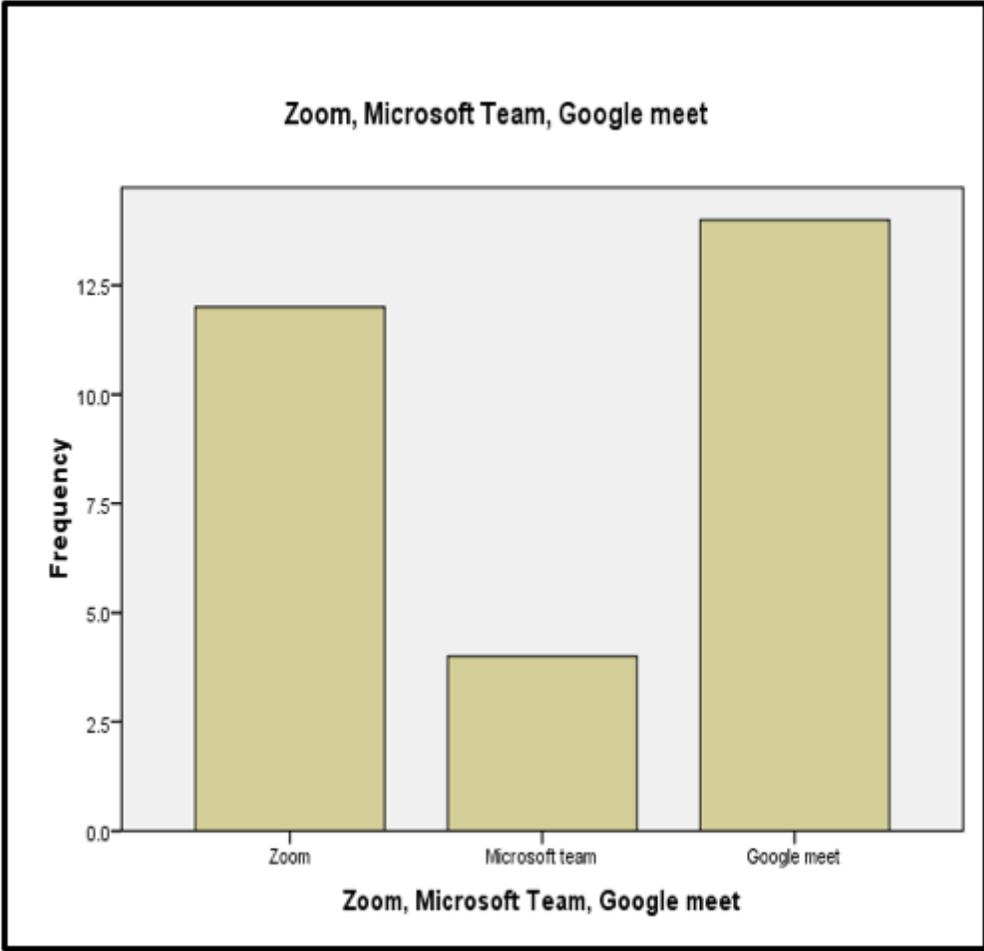


Figure 13

Section II Chart No. 6 tools