

PERCEPTIONS OF UNIVERSITY STUDENTS TOWARDS ONLINE TEACHING-LEARNING PROCESS DURING COVID-19 PANDEMIC

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Abstract: The present research was intended to explore the perceptions of University students towards Online Teaching-Learning Process, Online Assessment its Effectiveness and problems during COVID-19 Pandemic. Quantitative research with a descriptive survey method was employed to meet the desired objectives of the study. The purposive sampling technique was used to select the 205 students studying at University level. A self-constructed questionnaire, in Google Form, to ascertain students' perception towards the online teaching-learning process during the COVID-19 pandemic was used for data collection. Frequencies, percentages, and Pearson's chi-square technique were used to analyze and interpret the data. The study revealed that 57.1% of the sample used the 'Google Meet' platform for Online Teaching-Learning Process and 92.7% of the sample used the 'Smart Phones' for it; 58.5% 'Agreed' that online lectures were able to understand effectively whereas 25.4% of them 'Disagree'; 25.9% of the sample pointed out the 'Network Issue' as a major problem during Online Teaching-Learning Process. A significant association was found between Gender and response towards Satisfaction with the Online Examinations. Similarly, significant association was found between Course Type and responses towards the Effectiveness of online classes, Doubt Clarification, and Satisfaction with Online Examinations. Whereas, no significant association was found between Family Income and responses towards Type of Device Used for Online Learning, Demand for online classes for the future, Problems in Online Learning, and Study Material Procurement. The findings of the study have a great implication for Students, Parents, Teacher Educators, Research Scholars, Educational Administrators, and Policymakers. The study implies that there is a vital need for improvement in the Online Teaching-Learning Process at the higher education level.

Keywords: Online Teaching-Learning Process, Online Assessment, Effectiveness, COVID-19 Pandemic.

I. INTRODUCTION

Education plays a very important role in the life of every individual. The success in life and the future of an individual depend on education. Education illuminates the mind and thought process and makes individual real human beings. It assures a good career, status in society, in profession and develops self-confidence among all educated persons. But, many hindrances come across during the acquisition of knowledge through formal settings. Some of them are limited to very short of span, easily controllable and affect limited geographical area as well as limited numbers of people i.e. may affect individually. But, in contrast to these features, some hindrances are of just opposite nature. One of them which mankind witnessed recently is COVID-19 Pandemic.

In the month of March, 2020 Corona epidemic emerged as pandemic and all the educational institutions were closed to safeguard the health of the public and to control spread in the community. According to UNESCO, by the end of April 2020, 186 countries have implemented nationwide closures, affecting about 73.8% of the total enrolled learners (UNESCO, 2020; Jelińska & Paradowski, 2021). Then governments suggested online learning as an alternate learning mode in schools and colleges and directed all the educational institutions from pre-primary to post-graduation level to switch over from the traditional mode of offline teaching-learning to online mode of admission, teaching-learning, examination, and assessment.

The corona virus (COVID-19) pandemic has pushed students toward alternative education, and online learning is the most important solution adapted to overcome academic loss during this pandemic (OECD, 2020; Motte-Signoret et al. 2021). With the ability to attend college from the living room, many students welcomed the gesture to study and learn online but its effectiveness has not been ascertained yet (Muthuprasad et al. 2021). Online learning is a technique to turn students into independent learners. It gives users greater control and flexibility. It uses minimal infrastructure so that students can personalize their learning. It allows students to take classes from a place of their choice. Students can log in to the online classes from any part of the world. This can be made possible only due to the connectivity of internet and wide availability of Wi-Fi network. It is more convenient to learn according to students' needs, characteristics, talents and pace as it allows them to log in to the online classes at their own will.

Though online learning is not a substitute for resources but an opportunity to provide education to those who unable to attend the classes in formal settings due to any reason. Types of Online platforms used, gadgets, devices and the media that complement them or not, place a greater emphasis on learning and practicing with the tools and resources that students can use. Online learning within a Community of Inquiry (CoI) Framework can increase student engagement in learning and improve learning performance and teamwork during the COVID-19 Pandemic (Tan et. al., 2020). Studies suggest that students want more interactivity in online teaching. To accomplish this, student response systems can integrate methods such as surveys, quizzes, and breakout rooms that have been shown to encourage students; inclusion of online Question-Answer sessions improved student engagement. Online

education enables schools to reach a comprehensive network of students without being constrained by geographical boundaries. Online learning indoors and at the desk can also benefit secondary school students by enabling them to learn during the pandemic (Van Haeften et al, 2020).

In view of stakeholders, online learning is a flexible and effective source of teaching and learning and most agree with the fact that online learning helps with distance learning, easy management, accessibility, and less use of resources and time. It is aptly mentioned by World Economic Forum (WEF, 2020) that students on average keep 25% to 60% more material after learning online, compared to 8% to 10% in the classroom. This is because students can learn faster: online learning requires 40%-60% less time to learn than a traditional classroom, with students learning, rereading and skipping at their own pace, and speeding up concepts at their own will. Since online courses can take place at home or a location of their choice, there is less chance for students to miss the classes. The online teaching and learning, in its basic sense, was initially evolved for choice based purposes but due to the advent of COVID-19 it is turned as obligatory (OECD, 2020).

In compliance to the advisory and guidelines issued by Government of India from time to time, all the educational institutions catering higher education switched to an online mode of teaching-learning during the COVID-19 Pandemic. This, besides posing some inbuilt challenges, provided opportunities for the students as well as teachers to acquire new skills and competencies required for carrying out new roles and responsibilities in online teaching learning. Students especially from professional courses, and belonging to extreme geographical and socio-economic conditions faced various problems and challenges; like lack of gadgets and sufficient data packs, internet connectivity, lack of concentration (OECD, 2020), lack of face to face and live interactions, lack of digital skills (OECD, 2020) to operate online meeting platforms, etc. (Mukhtar et al. 2020; Jelińska.& Paradowski ,2021; Muthuprasad et al. 2021). But still, they tried hard to attend the online classes as these were mandatory. Hence a need was felt to study their perceptions towards online teaching learning process.

The present study entitled “Perceptions of University Students towards Online Teaching-Learning Process during COVID-19 Pandemic” examines the perceptions of students related to online teaching, examinations and evaluation.

Objectives of the study: Present study was carried out with keeping the following objectives in mind:

1. To Find the Perceptions of University Students towards Online Learning.
2. To Find the Perceptions of University Students towards Online Assessment.
3. To Find the Problems of University Students in Online Teaching-Learning Process.
4. To Find the Perceptions of University Students towards Effectiveness of Online Teaching-Learning Process.
5. To Find the Association of students’ Perceptions towards Online Teaching-Learning Process with Gender, Course Type and Family Income.

Hypothesis of the study: The concerned Null Hypothesis (H₀) to fifth objective was: There will be no significant Association of students’ Perceptions towards Online Teaching-Learning Process with Gender, Course Type and Family Income. This H₀ further divided into three sub-null hypotheses to test the Association of students’ Perceptions towards Online Teaching-Learning Process separately with Gender, Course Type and Family Income. Therefore, the three subH₀ are:

- a) There will be no significant Association of students’ Perceptions towards Online Teaching-Learning Process with Gender.
- b) There will be no significant Association of students’ Perceptions towards Online Teaching-Learning Process with Course Type.
- c) There will be no significant Association of students’ Perceptions towards Online Teaching-Learning Process with Family Income.

Delimitations of the study: The study was confined to the following aspects:

1. Perceptions of only University students were taken into consideration.
2. Only MANUU was taken as University.
3. Students from Teacher Education Courses were taken as subjects.
4. Data was collected through self made questionnaire.

II. REVIEW OF RELATED RESEARCHES

Researches related to online teaching-learning at national and international level have been accelerated during and after the COVID-19 pandemic. There are considerably more numbers of researches carried out in foreign countries during this period. However, the researchers tried to collect the related materials through online resources.

Although online teaching is not a new phenomenon, the transition to online teaching as a result of COVID-19 brings about a number of challenges from both the teachers’ and the students’ perspective. These challenges were associated with the separation between teachers and their students as opposed to the conventional classroom teaching (Moore 2014) and/or lack of online teaching experience (Johnson et al. 2020). The separation leads to the difficulty for teachers in their ability to communicate effectively with students as well as restricting them from generalizing the teaching ability developed in the physical classroom into the online contexts (Putri et al. 2020) For instance, teachers can enhance the teacher-student connectedness using facial expressions and body languages, whose influences could be affected in an online context, which leads to greater reliance on voice communication (Bao 2020).

The question of the preparation, design, and effectiveness of e-learning is not well understood in developing countries such as India, (Muthuprasad et al. 2021) where technical constraints, device suitability, and bandwidth availability pose serious challenges. Distance learning involves specific problems that affect the quality and effectiveness of teaching and learning such as the lack of personal contact between students and teachers (Stodel et al., 2006; Arroyo et al., 2015; Barnard-Ashton et al., 2017; Janse and Van Rensburg, 2018), the lack of adequate technological means to implement programs and support participants in meeting their learning needs and insufficient skills of teachers and students to apply technological solutions (Garrison et al. 1999; Pawan et al: 2003; Livingston and Condie, 2006). These deficits lead to a more sense of insecurity, confusion, and threat among

students and feelings of doubt, fear, and failure among teachers (Arroyo, 2015.; Van Rensburg, 2018) that affects how teachers view their students and what consequences they teach them.

According to Haidar (2014) perceptions of faculty towards Online Learning at Higher Education level was negative and possesses lack of technology usage. Also, researcher opined that the understanding the pros and cons of online learning is important when considering instructional and learning decisions. Whereas, Motte-Signoret et al. (2021) found that online programs were perceived as appropriate ways of teaching during the COVID pandemic.

III. METHODOLOGY OF RESEARCH: The study was carried out by adopting the following methodology:

1. **Statement of the problem:** Perceptions of University Students towards Online Teaching-Learning Process during COVID-19 Pandemic.
2. **Type of research:** Quantitative research with descriptive survey method.
3. **Population:** It consists of students of Maulana Azad National Urdu University (MANUU).
4. **Sample:** Total Sample consists of 205 students studying in the courses DELED (103), BED (82) and MED (20) students from Department of education, Maulana Azad National Urdu University (MANUU), Hyderabad.
5. **Sampling technique:** Purposive sampling technique was used in this study.
6. **Tool:** The researcher prepared a questionnaire with 28 closed-ended questions to study the perceptions of the MANUU students towards online learning, online assessment, online teaching-learning process, effectiveness of online examinations.
7. **Data collection method:** The researcher has prepared a questionnaire in Google form and shared the link with different class students to collect the data.
8. **Statistical methods used:** Frequencies, percentages and Pearson's chi-square were used to analyze and interpret the data.

IV. ANALYSES AND DISCUSSION

Researchers used frequency, percentage, and Pearson's chi-square to analyze the data obtained from the self-constructed questionnaire and results have been presented in the concerned tables. Objective-wise analysis and discussion have been given below:

The first Objective of the study was: To Find the Perceptions of University Students towards Online Learning. For achieving this objective, items related to learning were analyzed with the help of frequencies and percentages. The relevant items and their analysis have been given below:

1. Which online plat form is appropriate for online learning?

In response to this item, 117 students out of 205 (i.e. 57.1% of total respondents) responded in favor of the GOOGLE MEET. It indicates that most of the students (inferred as teachers too prefer it- because the student opted and sometimes suggest the suitable platform for Online Classes with the consent of their teachers) prefer to use Google Meet for online classes. Rest of the 88 students gave ambiguous response to this item.

2. Which device do you use for online learning?

In reply to this item, 190 students out of 205 (i.e. 92.7% of total respondents) responded in favor of 'Smart-phones'; and only 1 out of 205 (0.5%) responded each to 'Laptops' and 'others'. It means almost all of the students use their smart-phones for online classes (Muthuprasad et al. 2021). Rest of the 13 students couldn't respond properly to this item. Similar results in the study of Abbasi et al. (2020) were reported that 76% of the college students use mobile device for their e-learning.

3. Do you find online classes interesting?

In reply to this item, 78 students out of 205 (i.e. 38.0% of total respondents) responded 'Yes'; 44 out of 205 (21.5%) responded 'No' and 73 out of 205 (35.6%) responded 'Somewhat'. It implies that considerable numbers of the students perceived that online classes are interesting whereas, sizable numbers of the students considered online classes not interesting. Also, 35.6% of them thought the online classes somewhat interesting. Rest of the 10 students couldn't give proper response to this item.

4. Do you join the class in time?

In reply to this item, 173 students out of 205 (i.e. 84.4% of total respondents) responded 'Yes'; 8 out of 205 (3.9%) responded 'No' and 16 out of 205 (7.8%) responded 'Sometimes'. It implies majority of the students joined the online classes on time; some of them 7.8% were irregular in punctuality to join the classes on time; and whereas some of them 3.9% were often get late to join the classes. Rest of the 8 students gave ambiguous response to this item.

5. How long do you attend to online classes?

In reply to the above item, 25 students out of 205 (i.e. 12.2% of total respondents) attend the classes for 'Two Hours'; 40 of 205 (19.5%) spent 'Three Hours', 47 of 205 (22.9%) spent 'Four Hours'; and 80 of 205 (39.0%) spent 'Five Hours' daily. It shows most of the students (39.0%) spent maximum time i.e. Five Hours for online classes. Rest of the 13 students couldn't give proper response to this item.

6. Is the material provided by the teachers useful for you?

In reply to the above item, 140 students out of 205 (i.e. 68.3% of total respondents) responded 'Yes'; 7 out of 205 (3.4%) responded 'No' and 51 out of 205 (24.9%) responded 'Somewhat'. It implies most of the students perceived that the materials provided by the teachers are useful to them. While one fourth of the students considered the material not fully useful for them. Rest of the 7 students gave ambiguous response to this item.

7. How do you procure material for your study online?

In reply to this item, 162 students out of 205 (i.e. 79.0% of total respondents) responded 'Internet'; 18 out of 205 (8.8%) refer 'Books'; and 10 out of 205 (4.9%) procure the study material from their friends. It indicates majority of the students procure their

study materials from Internet. Only few of them 8.8% could hardly refer to the Books while very few of them 4.9% manage it from friends. Rest of the 15 students couldn't respond properly to this item.

8. Do you want only online classes in future?

In reply to the above item, 56 students out of 205 (i.e. 27.3% of total respondents) responded to 'Yes'; 136 out of 205 (66.3%) responded to 'No'. It means that almost one fourth of the students perceived that online classes should be continued in future whereas, majority of them 66.3% were not in favor of online classes to be continued in future. Rest of the 13 students couldn't be able to give proper response to this item. Similar results in the study of Abbasi et al. (2020) were reported that the college students did not prefer e-teaching over face-to-face teaching during the lock down situation. About one-third student thought that this online teaching should continue after the crisis ends. (Motte-Signoret et al. 2021)

The second Objective of the study was: To Find the Perceptions of University Students towards Online Assessment. For achieving this objective, items related to learning were analyzed with the help of frequencies and percentages. The relevant items and its analysis have been given below:

1. Do you visit rubrics?

In response to this item, 109 students out of 205 (i.e. 53.2% of total respondents) responded to 'Yes'; 67 out of 205 (32.7%) responded to 'No'. It implies that most of the students visited the Rubrics whereas, considerable numbers of them 32.7% were not visited the Rubrics at all. Rest of the 29 students couldn't be able to respond this item.

2. Did you score good marks in online examinations?

In response to this item, 131 students out of 205 (i.e. 63.9% of total respondents) responded to 'Yes'; 47 out of 205 (22.9%) responded to 'No'. It denotes that most of the students i.e. 63.9% satisfied with their marks obtained in Online Examinations whereas, sizable numbers of them 22.9% perceived that they weren't scored good marks in online examinations. Rest of the 27 students couldn't be able to respond this item properly.

3. Are you satisfied with your performance online?

In reply to this question, 111 students out of 205 (i.e. 54.1% of total respondents) responded to 'Yes'; and 79 out of 205 (38.5%) responded to 'No'. It refers that most of the students i.e. 54.1% satisfied with their performance in Online Examinations whereas, considerable numbers of them 38.5% weren't satisfied with their performance in online examinations. Rest of the 15 students couldn't be able to respond this item properly.

4. Is online assessment justifiable?

In response to the above item, 103 students out of 205 (i.e. 50.2% of total respondents) responded 'Yes'; 66 out of 205 (32.2%) responded 'No' and 31 out of 205 (15.1%) responded 'Somewhat'. It implies majority of the students perceived that online assessment is justifiable; but considerable numbers of them 32.2% felt it is not justifiable; whereas some of them 15.1% were thought it is somewhat justifiable. Rest of the 5 students gave ambiguous response to this item.

The third Objective of the study was: To Find out the Problems of University Students in Online Teaching Learning Process. For achieving this objective, items related to learning were analyzed with the help of frequencies and percentages. The relevant items and its analysis have been given below:

1. What type of problem do you face in online teaching?

In reply to the above question, 53 students out of 205 (i.e. 25.9% of total respondents) pointed towards 'Network Issue'; 4 out of 205 (2.0%) reported 'Voice Clarity Issue'; 3 out of 205 (1.5%) indicated 'Disturbance Issue'; 4 out of 205 (2.0%) mentioned 'Electricity Issue'; 3 out of 205 (1.5%) pointed 'Lack of Interest Issue'; 11 out of 205 (5.4%) indicated 'Lack of Interaction Issue'; and 6 out of 205 (2.9%) mentioned 'Motivation Issue'; whereas no one pointed out towards 'LACK OF GADGET/ DEVICE Issue' facing in online Teaching Learning Process. It reveals that major problem students faced during online teaching learning process is the 'Network Issue' followed by 'Lack of Interaction'. Rest of the 121 students gave multiple responses to this item. Dost, Hossain, Shehab, et al (2020) have also reported that 21.53% students reported poor internet connectivity in online teaching.

2. Is the voice clear in online classes?

In response to the above problem, 81 students out of 205 (i.e. 39.5% of total respondents) opted 'Yes'; 24 out of 205 (11.7%) 'No' and 80 out of 205 (39.0%) to 'Somewhat'. It shows that considerable numbers of the students perceived that the voice was clear in online classes; but some of them 11.7% felt it is not clear; whereas sizable numbers of them 39.0% were thought it was somewhat clear. Rest of the 20 students gave ambiguous response to this item.

3. Can you upload assignments online?

In reply to this item, 191 students out of 205 (i.e. 93.2% of total respondents) responded 'Yes'; 2 out of 205 (1.0%) responded 'No' and 5 out of 205 (2.4%) responded 'Sometimes'. It indicates that a large majority of the students were able to upload their assignment online whereas, very few of them i.e. 1% not able to do so. And, 2.4% were able to upload sometimes. Rest of the 7 students couldn't give proper response to this item.

The fourth Objective of the study was: To Find the Perceptions of University Students towards Effectiveness of Online Learning Process. For achieving this objective, items related to learning were analyzed with the help of frequencies and percentages. The relevant items and its analysis have been given below:

1. Are you able to understand the online lectures effectively?

In reply to above question, 16 students out of 205 (i.e. 7.8% of total respondents) responded 'Strongly Agree'; 120 out of 205 (58.5%) responded 'Agree' and 52 out of 205 (25.4%) responded 'Disagree'. It reveals that around two third of the students (7.8+58.5=66.3%) were able to understand the online lectures effectively whereas, around one fourth of them i.e. 25.4% not able to understand the online lectures. Rest of the 17 students couldn't give proper response to this item.

2. Do you involve in discussion during online classes?

In response to this item, 110 students out of 205 (i.e. 53.7% of total respondents) responded 'Yes'; 17 out of 205 (8.3%) responded 'No' and 71 out of 205 (34.6%) responded 'Somewhat'. It means that majority of the students were involved in the discussion during online classes whereas, few of them i.e. 8.3% reported that they were not involved in the discussion during

online classes. And, considerable numbers 34.6% of the students perceived that they were involved in the discussion during online classes occasionally. Rest of the 7 students couldn't give proper response to this item.

3. Do you clarify your doubts in online classes?

In response to the question, 103 students out of 205 (i.e. 50.2% of total respondents) responded 'Yes'; 31 out of 205 (15.1%) responded 'No' and 65 out of 205 (31.7%) responded 'Somewhat'. It implies that about half of the students were able to clarify their doubts in online classes whereas, some of them i.e. 15.1% of the students were not able to clarify their doubts in online classes. And, about one third, 31.7% of the students had clarified their doubts in online classes occasionally. Rest of the 6 students gave multiple responses to this question.

4. Are you satisfied with online teaching mode?

In response to the above question, 91 students out of 205 (i.e. 44.4% of total respondents) replied 'Yes'; and 96 out of 205 (46.8%) replied 'No'. It shows that considerable numbers, i.e. 44.4% of the students were satisfied with online teaching mode whereas; almost equal of them i.e. 46.8% of the students were not satisfied with online teaching mode. Rest of the 18 students couldn't give proper response to this item.

5. Are you satisfied with your performance online?

In response to this item, 100 students out of 205 (i.e. 48.8% of total respondents) responded 'Yes'; and 93 out of 205 (45.4%) responded 'No'. It implies that almost half numbers of the students, i.e. 48.8% of them were satisfied with their own performance in online teaching learning process whereas; 45.4% of the students were not satisfied with their own performance in online teaching learning process. Rest of the 12 students couldn't give proper response to this item.

The fifth Objective of the study was: To Find the Association of students' Perceptions towards Online Teaching-Learning Process with Gender, Course Type and Family Income. The concerned Null Hypothesis (H₀) to this objective was: *There will be no significant Association of students' Perceptions towards Online Teaching-Learning Process with Gender, Course Type and Family Income.* This H₀ further divided into three H₀ to test the Association of students' Perceptions towards Online Teaching-Learning Process separately with Gender, Course Type and Family Income. Therefore, the three H₀ are:

- d) *There will be no significant Association of students' Perceptions towards Online Teaching-Learning Process with Gender.*
- e) *There will be no significant Association of students' Perceptions towards Online Teaching-Learning Process with Course Type.*
- f) *There will be no significant Association of students' Perceptions towards Online Teaching-Learning Process with Family Income.*

To test these Null Hypotheses, Pearson's Chi-square test was employed and the obtained outputs have been presented in the tables followed by their interpretation.

a) Association of students' Perceptions towards Online Teaching-Learning Process with Gender

The concerned H₀ was: *There will be no significant Association of students' Perceptions towards Online Teaching-Learning Process with Gender.* To test this H₀, responses on relevant items were analyzed with the help of Chi-square technique. The responses on Duration of attending the online classes, their involvement in discussion during online classes, clarifying their doubts in online classes, satisfaction with online examinations, satisfaction with their marks scored in online examinations and perception towards online assessment justifiability were considered as the components of online teaching for finding its association with Gender (i.e. Male and Female), if any. The item-wise, numbers of responses and output obtained have been presented and discussed below:

1. **How long do you attend to online classes?** Responses to this item has been presented in the table 1(a) followed by output of Chi-square analysis in table 1(b):

Table 1(a): Cross-tabulation (2X4 contingency table) of Gender X Duration of Attending Classes Online

		GENDER		Total
		Male	Female	
Duration of Attending Classes Online	2 Hours	15	10	25
	3 Hours	21	19	40
	4 Hours	25	22	47
	5 Hours	43	37	80
Total		104	88	192

Table 1(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.411 ^a	3	.938
N of Valid Cases	192		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.46.			

From the above table 1(b), the value of Pearson Chi-Square is $\chi^2(3) = 0.41$ and $p = .938$ which is not significant. Hence, the null Hypothesis (H₀) that "There will be no significant association between Gender and Duration of Attending classes Online" is

not rejected. It can be inferred that Gender and Duration of Attending classes Online are not associated to each other or both are independent to each other. Both types of Gender i.e. male and female attended the online classes for equal duration.

2. **Do you involve in discussion during online classes?** Responses to this item has been presented in the table 2(a) followed by output of Chi-square analysis in table 2(b):

Table 2(a): Cross-tabulation (2X3 contingency table) of Gender X Involvement in Discussion

		GENDER		Total
		Male	Female	
Involvement in Discussion	Yes	68	42	110
	No	9	8	17
	Somewhat	32	39	71
Total		109	89	198

Table 2(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.924 ^a	2	.085
N of Valid Cases	198		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.64.			

From the above table 2(b), the value of Pearson Chi-Square is $\chi^2(2) = 4.92$ and $p = .085$ which is not significant. Hence, the null Hypothesis (H0) that “There will be no significant association between Gender and Involvement in Discussion during Online Classes” is not rejected. It can be inferred that Gender and Involvement in Discussion during Online Classes are not associated to each other or both are independent to each other. Both types of Gender are involved in discussion in similar way.

3. **Do you clarify your doubts in online classes?** Responses to this item has been presented in the table 3(a) followed by output of Chi-square analysis in table 3(b):

Table 3(a): Cross-tabulation (2X3 contingency table) of Gender X Doubt Clarification

		GENDER		Total
		Male	Female	
Doubt Clarification	Yes	62	41	103
	No	14	17	31
	Somewhat	33	32	65
Total		109	90	199

Table 3(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.799 ^a	2	.247
N of Valid Cases	199		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.02.			

From the above table 3(b), the value of Pearson Chi-Square is $\chi^2(2) = 2.78$ and $p = .247$ which is not significant. Hence, the null Hypothesis (H0) that “There will be no significant association between Gender and Doubt Clarification in Online Classes” is not rejected. It can be inferred that Gender and Doubt Clarification in Online Classes are not associated to each other or both are independent to each other. Both types of Gender have similar type of Doubt Clarification in Online Classes.

4. **Is online examination satisfactory?** Responses to this item has been presented in the table 4(a) followed by output of Chi-square analysis in table 4(b):

Table 4(a): Cross-tabulation (2X2 contingency table) of Gender X Satisfaction with Online Examination

		GENDER		Total
		Male	Female	
Satisfaction With Online Examination	Yes	72	39	111
	No	32	47	79
Total		104	86	190

Table 4(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.053 ^a	1	.001
Continuity Correction^b	10.092	1	.001
N of Valid Cases^b	190		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 35.76.			
b. Computed only for a 2x2 table			

From the above table 4(b), the value of Pearson Chi-Square is $\chi^2(1) = 11.05$ and $p = .001$ which is significant at .01 level. Hence, the null Hypothesis (H0) that “There will be no significant association between Gender and Satisfaction with Online Examinations” is rejected. It can be inferred that Gender and Satisfaction with Online Examinations are associated with each other or both are not independent to each other. Both types of Gender have different type of Satisfaction with Online Examinations. We can say that Satisfaction and Dissatisfaction with Online Examinations is related to specific gender and this can be further clarified from the Cross-tabulation Table 4(a) that majority of Males were Satisfied with Online Examinations whereas majority of Females were not Satisfied with the Online Examinations.

5. Did you score good marks in online examinations? Responses to this item has been presented in the table 5(a) followed by output of Chi-square analysis in table 5(b):

Table 5(a): Cross-tabulation (2X2 contingency table) of Gender X Scored Good Marks in Online Examination

		GENDER		Total
		Male	Female	
Scored Good Marks in Online Examination	Yes	73	58	131
	No	22	25	47
Total		95	83	178

Table 5(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.105 ^a	1	.293
Continuity Correction^b	.776	1	.378
N of Valid Cases^b	178		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 21.92.			
b. Computed only for a 2x2 table			

From the above table 5(b), the value of Pearson Chi-Square is $\chi^2(1) = 1.11$ and $p = .293$ which is not significant. Thus, the null Hypothesis (H0) that “There will be no significant association between Gender and Scored Good Marks in Online Examination” is not rejected. It can be inferred that Gender and Scored Good Marks in Online Examination are not associated with each other or both are independent to each other. Both types of Gender have obtained similar type of Marks in Online Examination.

6. Is online assessment justifiable? Responses to this item has been presented in the table 6(a) followed by output of Chi-square analysis in table 6(b):

Table 6(a): Cross-tabulation (2X3 contingency table) of Gender X Justifiability of Online Examination

		GENDER		Total
		Male	Female	
Justifiability of Online Examination	Yes	63	40	103
	No	33	33	66
	Somewhat	13	18	31
Total		109	91	200

Table 6(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.358 ^a	2	.113
N of Valid Cases	200		
a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 14.11.			

From the above table 6(b), the value of Pearson Chi-Square is $\chi^2(2) = 4.36$ and $p = .113$ which is not significant. Therefore, the null Hypothesis (H₀) that “There will be no significant association between Gender and Justifiability of Online Examination” is not rejected. It can be inferred that Gender and Justifiability of Online Examination are not mutually associated or both are independent to each other. Both types of Gender have similar perception towards Justifiability of Online Examination.

b) Association of students’ Perceptions towards Online Teaching-Learning Process with Course Type

The concerned H₀ was: *There will be no significant Association of students’ Perceptions towards Online Teaching-Learning Process with Course Type.* To test this H₀, responses on relevant items were analyzed with the help of Chi-square technique. The responses on Duration of attending the online classes, Understanding online lecture effectively, their involvement in discussion during online classes, clarifying their doubts in online classes, satisfaction with online examinations, satisfaction with their marks scored in online examinations and perception towards online assessment justifiability were considered as the components of online teaching for finding its association with Course Type (i.e. D.El.Ed., B.Ed., M.Ed. and Ph.D.), if any. The item-wise, numbers of responses and output obtained have been presented and discussed below:

1. How long do you attend to online classes? Responses to this item has been presented in the table 7(a) followed by output of Chi-square analysis in table 7(b):

Table 7(a): Cross-tabulation (4X4 contingency table) for Course Type X Duration of Attending Classes Online

		COURSE TYPE				Total
		D.El.Ed.	B.Ed.	M.Ed.	Ph.D.	
Duration of Attending Classes	2 Hours	9	9	7	0	25
	3 Hours	10	27	2	1	40
	4 Hours	26	13	7	1	47
	5 Hours	31	43	5	1	80
Total		76	92	21	3	192

Table 7(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.705 ^a	9	.003
N of Valid Cases	192		
a. 6 cells (37.5%) have expected count less than 5. The minimum expected count is .39.			

From the above table 7(b), it is evident that the value of Pearson Chi-Square is $\chi^2(9) = 24.71$ and $p = .003$ which is significant at .01 level. Therefore, the null Hypothesis (H₀) that “There will be no significant association between Course Type and Duration of Attending Classes Online” is rejected. It can be inferred that Course Type and Duration of Attending Classes Online are mutually associated or both are not independent to each other. Students enrolled in various types of Courses attended the online classes differently. This can be further clarified from the Cross-tabulation Table 7(a) that among various courses most of the B.Ed. students devoted maximum time (5hours) in attending online classes; most of the students (26) of D.El.Ed. course engaged 4hours daily and highest numbers of B.Ed. students among different courses engaged 3hours in attending online classes.

2. Were you able to understand the online lectures effectively? Responses to this item has been presented in the table 8(a) followed by output of Chi-square analysis in table 8(b):

Table 8(a): Cross-tabulation (4X3 contingency table) for Course Type X Understanding Online Lecture Effectively

		COURSE TYPE				Total
		D.El.Ed.	B.Ed.	M.Ed.	Ph.D.	
Understanding Lecture Effectively	Strongly Agree	3	10	1	2	16
	Agree	53	59	7	1	120
	Disagree	19	23	10	0	52
Total		75	92	18	3	188

Table 8(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.519 ^a	6	.001
N of Valid Cases	188		
a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .26.			

From the above table 8(b), it is clear that the value of Pearson Chi-Square is $\chi^2(6) = 23.52$ and $p = .001$ which is significant at .01 level. Therefore, the null Hypothesis (H0) that "There will be no significant association between Course Type and Understanding Online Lecture Effectively" is rejected. It can be inferred that Course Type and Effectiveness of Online Lectures are associated to each other or both are not independent. Students enrolled in various types of Courses perceived the effectiveness of online classes differently. This can be further verified from the Cross-tabulation Table 8(a) that among D.El.Ed. and B.Ed. courses majority of the students *Agreed* with the effectiveness of online classes; and among all courses maximum students (10) of B.Ed. *Strongly Agreed* to this whereas among M.Ed. students maximum numbers (10) were *Disagreed* with the effectiveness of online classes.

3. Do you involve in discussion during online classes? Responses to this item has been presented in the table 9(a) followed by output of Chi-square analysis in table 9(b):

Table 9(a): Cross-tabulation (4X3 contingency table) for Course Type X Involvement in Discussion

		COURSE_TYPE				Total
		D.El.Ed.	B.Ed.	M.Ed.	Ph.D.	
Involvement in Discussion	Yes	44	54	9	3	110
	No	6	7	4	0	17
	Somewhat	28	35	8	0	71
Total		78	96	21	3	198

Table 9(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.004 ^a	6	.423
N of Valid Cases	198		
a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .26.			

From the above table 9(b), it is clear that the value of Pearson Chi-Square is $\chi^2(6) = 6.00$ and $p = .423$ which is not significant. Therefore, the null Hypothesis (H0) that "There will be no significant association between Course Type and Involvement in Discussion" is not rejected. It can be inferred that Course Type and Involvement in Discussion are not associated to each other or both are independent. Students enrolled in various types of Courses perceived the similar type of Involvement in Discussion during the online classes. This may be verified from the Cross-tabulation Table 9(a).

4. Do you clarify your doubts in online classes? Responses to this item has been presented in the table 10(a) followed by output of Chi-square analysis in table 10(b):

Table 10(a): Cross-tabulation (4X3 contingency table) for Course Type X Doubt Clarification

		COURSE_TYPE				Total
		D.El.Ed.	B.Ed.	M.Ed.	Ph.D.	
Doubt Clarification	Yes	40	57	3	3	103
	No	11	10	10	0	31
	Somewhat	29	28	8	0	65
Total		80	95	21	3	199

Table 10(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	26.156 ^a	6	.000
N of Valid Cases	199		
a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .47.			

From the above table 10(b), it is clear that the value of Pearson Chi-Square is $\chi^2(6) = 26.16$ and $p = .000$ which is significant at .01 level. Therefore, the null Hypothesis (H0) that "There will be no significant association between Course Type and Doubt Clarification in Online Classes" is rejected. It can be inferred that Course Type and Doubt Clarification are associated to each other or both are not independent. Students enrolled in various types of Courses perceived about the Doubt Clarification in online classes differently. This can be further verified from the Cross-tabulation Table 10(a) that among all courses maximum students of B.Ed. course (57) admit that their doubts clarified during the online classes; whereas least numbers of students from M.Ed. and Ph.D. Courses (3 each) accept the Doubt Clarification in online classes; and among all courses maximum numbers of students (29) of D.El.Ed. course had thought of somewhat doubt clarification in online classes.

5. Is online examination satisfactory? Responses to this item has been presented in the table 11(a) followed by output of Chi-square analysis in table 11(b):

Table 11(a): Cross-tabulation (4X2 contingency table) for Course Type X Satisfaction with Online Examination

		COURSE_TYPE				Total
		D.El.Ed.	B.Ed.	M.Ed.	Ph.D.	
Satisfaction With Online Examination	Yes	44	59	6	2	111
	No	34	31	13	1	79
Total		78	90	19	3	190

Table 11(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.835 ^a	3	.049
N of Valid Cases	190		
a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.25.			

From the above table 11(b), it is clear that the value of Pearson Chi-Square is $\chi^2(3) = 7.835$ and $p = .049$ which is significant at .01 level. Therefore, the null Hypothesis (H0) that "There will be no significant association between Course Type and Satisfaction with Online Examination" is rejected. It can be inferred that Course Type and Satisfaction with Online Examination are mutually associated or both are not independent. Students enrolled in various types of Courses perceived differently about the Satisfaction with Online Examination. This can be further verified from the Cross-tabulation Table 11(a) wherein among all courses maximum students of B.Ed. course (59) were found to be satisfied with online examination; whereas among all courses, maximum numbers of students (34) of D.El.Ed. course, were found to be not satisfied with online examination.

6. Did you score good marks in online examinations? Responses to this item has been presented in the table 12(a) followed by output of Chi-square analysis in table 12(b):

Table 12(a): Cross-tabulation (4X2 contingency table) for Course Type X Good Marks in Online Examination

		COURSE_TYPE				Total
		D.El.Ed.	B.Ed.	M.Ed.	Ph.D.	
Good Marks in Online Examination	Yes	58	58	12	3	131
	No	19	22	6	0	47
Total		77	80	18	3	178

Table 12(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.689 ^a	3	.639
N of Valid Cases	178		
a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is .79.			

From the above table 12(b), it is clear that the value of Pearson Chi-Square is $\chi^2(3) = 1.69$ and $p = .639$ which is not significant. Hence, the null Hypothesis (H0) that "There will be no significant association between Course Type and Good Marks in Online Examination" is not rejected. It can be inferred that Course Type and Good Marks in Online Examination are not associated to each other or both are independent. Students enrolled in various types of Courses perceived the similar type of perception regarding marks scored in Online Examination. This may be verified from the Cross-tabulation Table 12(a) also.

7. Is assessment online justifiable? Responses to this item has been presented in the table 13(a) followed by output of Chi-square analysis in table 13(b):

Table 13(a): Cross-tabulation (4X3 contingency table) for Course Type X Justifiability of Online Assessment

		COURSE_TYPE				Total
		D.El.Ed.	B.Ed.	M.Ed.	Ph.D.	
Justifiability of Online Assessment	Yes	44	53	4	2	103
	No	23	30	12	1	66
	Somewhat	15	12	4	0	31
Total		82	95	20	3	200

Table 13(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.130 ^a	6	.084
N of Valid Cases	200		
a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is .47.			

From the above table 13(b), it is clear that the value of Pearson Chi-Square is $\chi^2(6) = 11.13$ and $p = .084$ which is not significant. Hence, the null Hypothesis (H0) that "There will be no significant association between Course Type and Justifiability of Online Assessment" is not rejected. It can be inferred that Course Type and Justifiability of Online Assessment are not associated to each other or both are independent. Students enrolled in various types of Courses perceived the similar type of perception regarding Justifiability of Online Assessment. This may be verified from the Cross-tabulation Table 13(a) also.

c) Association of students' Perceptions towards Online Teaching-Learning Process with Family Income

The concerned H0 was: *There will be no significant Association of students' Perceptions towards Online Teaching-Learning Process with Family Income.* To test this H0, responses on relevant items were analyzed with the help of Chi-square technique. The responses on Type of Device/ Gadget used for online classes, Demand of only online classes for future, Problems faced by students in online teaching and Study material procurement were considered as the components of online teaching for finding its association with Family Income (i.e. five different levels of Family Income), if any. The item-wise, numbers of responses and output obtained have been presented and discussed below:

1. Which device do you use for online learning? Responses to this item has been presented in the table 14(a) followed by output of Chi-square analysis in table 14(b):

Table 14(a): Cross-tabulation (5X3 contingency table) for Family Income X Device Used

		FAMILY_INCOME					Total
		5000-10000	11000-20000	21000-30000	31000 and Above	Others	
Device Used	Laptop	0	0	0	1	0	1
	Smartphone	89	39	20	39	3	190
	Others	1	0	0	0	0	1
Total		90	39	20	40	3	192

Table 14(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.949 ^a	8	.763
N of Valid Cases	192		
a. 11 cells (73.3%) have expected count less than 5. The minimum expected count is .02.			

From the above table 14(b), it is clear that the value of Pearson Chi-Square is $\chi^2(8) = 4.95$ and $p = .763$ which is not significant. Hence, the null Hypothesis (H0) that “There will be no significant association between Family Income and Device Used for Online Learning” is not rejected. It can be inferred that Family Income and Justifiability of Online Assessment are not associated to each other or they are independent to each other. Students belonging to various levels of Family Income used the similar type of device for online learning. This may be verified from the Cross-tabulation Table 14(a) that Smartphone was used for online learning across all the levels of family income.

2. **Do you want only online classes in future?** Responses to this item has been presented in the table 15(a) followed by output of Chi-square analysis in table 15(b):

Table 15(a): Cross-tabulation (5X2 contingency table) for Family Income X Demand of online classes for future

		FAMILY_INCOME					Total
		5000-10000	11000-20000	21000-30000	31000 and Above	Others	
Demand of online classes for future	Yes	30	12	2	12	0	56
	No	61	29	16	29	1	136
Total		91	41	18	41	1	192

Table 15(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.889 ^a	4	.421
N of Valid Cases	192		
a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is .29.			

From the above table 15(b), it is evident that the value of Pearson Chi-Square is $\chi^2(4) = 3.89$ and $p = .421$ which is not significant. Therefore, the null Hypothesis (H0) that “There will be no significant association between Family Income and Demand of online classes for future” is not rejected. It can be inferred that Family Income and Demand of online classes for future are not associated mutually or they are independent to each other. Students belonging to various levels of Family Income had similar type of Demand of online classes for future. This may be verified from the Cross-tabulation Table 15(a) that majority of them deny the need of online classes for future.

3. **What type of problem do you face in online learning?** Responses to this item has been presented in the table 16(a) followed by output of Chi-square analysis in table 16(b):

Table 16(a): Cross-tabulation (5X7 contingency table) for Family Income X Problems in Online Learning

		FAMILY_INCOME					Total
		5000-10000	11000-20000	5000-10000	11000-20000	5000-10000	
Problems in Online Learning	Network Issue	31	7	4	9	2	53
	Voice Clarity	2	0	1	1	0	4
	Disturbance	0	2	0	1	0	3
	Electricity	1	0	2	1	0	4
	Lack of Interest	1	1	0	1	0	3
	Lack of Face to Face Interaction	10	0	0	1	0	11
	Motivation	1	0	2	3	0	6
Total		46	10	9	17	2	84

Table 16(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	35.727 ^a	24	.058
N of Valid Cases	84		
a. 30 cells (85.7%) have expected count less than 5. The minimum expected count is .07.			

From the above table 16(b), it is clear that the value of Pearson Chi-Square is $\chi^2 (24) = 35.73$ and $p = .058$ which is not significant. Thus, the null Hypothesis (H0) that “There will be no significant association between Family Income and Problems in Online Learning” is not rejected. It can be inferred that Family Income and Problems in Online Learning are not associated with each other or both are independent to each other. Students belonging to various levels of Family Income had almost similar type of Problems in Online Learning. Though the association between two is not significant, but It is worthy to mention here that not a single student mentioned the problem of lack of device/ gadget whereas majority of them have network issue as majority of them are using their smart-phones for online classes (as discussed earlier) and some of them felt that lack of face to face interaction was also a problem. All these may be verified from the Cross-tabulation Table 16(a) given above.

4. How do you procure material for your study online? Responses to this item has been presented in the table 17(a) followed by output of Chi-square analysis in table 17(b):

Table 17(a): Cross-tabulation (5X3 contingency table) for Family Income X Study Material Procurement

		FAMILY_INCOME					Total
		5000-10000	11000-20000	5000-10000	11000-20000	5000-10000	
Study Material Procurement	Internet	70	35	17	37	3	162
	Books	10	5	1	2	0	18
	Friends	5	2	1	2	0	10
Total		85	42	19	41	3	190

Table 17(b): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.876 ^a	8	.942
N of Valid Cases	190		
a. 10 cells (66.7%) have expected count less than 5. The minimum expected count is .16.			

From the above table 17(b), it is evident that the value of Pearson Chi-Square is $\chi^2 (8) = 2.88$ and $p = .942$ which is not significant. Hence, the null Hypothesis (H0) that “There will be no significant association between Family Income and Study Material Procurement” is not rejected. It can be inferred that Family Income and Study Material Procurement are not associated with each other or they are independent to each other. Students belonging to various levels of Family Income had similar pattern

of Study Material Procurement. This may be verified from the Cross-tabulation Table 17(a). Though the association between two is not significant, but it is aptly to point out that majority of students depended on Internet for procuring their study material during this COVID-19 Pandemic.

V. FINDINGS OF THE STUDY

The study revealed that 57.1% of the sample used the 'Google Meet' platform for Online Teaching-Learning Process and 92.7% of the sample used the 'Smart Phones' for it; 58.5% 'Agreed' that online lectures were able to understand effectively whereas 25.4% of them 'Disagree'; 53.7% of them were able to get involved in discussion whereas 8.3% of them unable; 50.2% of them able to clarify their doubts whereas 15.1% of them unable; 44.4% of them satisfied with online teaching whereas 46.8% were not satisfied; 48.8% of them satisfied with their performance whereas 45.4% of them were not satisfied with their own performances in online classes.

54.1% of sample satisfied with online Examinations and 38.5% were not satisfied with online Examinations whereas 50.2% of sample replied that online assessment was justified and 32.2% found it not justified. Among various issues mentioned in the questionnaire, a large number of the students i.e. 25.9% of sample pointed out the 'Network Issue' as major problem whereas none of them pointed out towards 'LACK OF GADGET/ DEVICE Issue' during Online Teaching-Learning Process and Online Examinations. Also, 38.0% of sample found that online classes were interesting whereas 21.5% responded online classes as not interesting, 27.3% of sample wanted to continue the online teaching-learning process in future whereas 66.3% of them responded against this.

Significant Association was not found between Gender and students' Perceptions towards Online Teaching-Learning Process (Duration of attending the online classes, their involvement in discussion during online classes, clarifying their doubts in online classes, satisfaction with their marks scored in online examinations and perception towards online assessment justifiability) except response towards Satisfaction with the Online Examinations. Majority of Male students were Satisfied with Online Examinations whereas majority of Females students were not Satisfied with the Online Examinations.

Significant Association was found between Course Type and students' Perceptions towards Online Teaching-Learning Process (Effectiveness of online classes, Doubt Clarification and Satisfaction with Online Examinations). Significant association was found between Course Type and Understanding Online Lecture Effectively. Most of the Students of D.El.Ed. and B.Ed. courses *Agreed* with the effectiveness of online classes; whereas students of M.Ed. course were *Disagreed* with this. Similarly, significant association was found between Course Type and Doubt Clarification in Online Classes. Students of B.Ed. course acknowledged that their doubts were clarified during the online classes. Significant association was also found between Course Type and Satisfaction with Online Examinations. Students of B.Ed. course were found to be satisfied with online examination whereas students of D.El.Ed. course were found to be not satisfied with online examination.

No significant Association was found between Family Income and students' Perceptions towards Online Teaching-Learning Process (Type of Device Used for Online Learning, Demand of online classes for future, Problems in Online Learning and Study Material Procurement). No significant association was found between Family Income and Type of Device Used for Online Learning. Only 'Smartphone' was used for online learning across all the levels of family income. Similarly, no significant association was found between Family Income and Demand of online classes for future. Almost all of them deny the need of online classes for future. Also, no significant association was found between Family Income and Problems in Online Learning. Almost all of them have network issue as majority of them are using their smart-phones for online classes. Similarly, no significant association was found between Family Income and Study Material Procurement. Almost all of the students depended on Internet for procuring their study material during this COVID-19 Pandemic.

VI. IMPLICATIONS OF THE STUDY

The findings of the study have a great implication for Students, Parents, Teacher Educators, Research Scholars, Educational Administrators and Policy makers. The study implies that there is a vital need of improvement in Online Teaching-Learning Process in higher education level. Administration and faculty members should take necessary measures for improving e-teaching for better learning during lock down (Abbasi et al. 2020). Students' perceptions and attitudes, up to a great extent, are influenced by the support and favor they receive from families, teachers and by the role models they are exposed to. Since parents and teachers play a fundamental role in supporting students to develop these crucial attitudes and perception, particularly in the current situation, targeted policy interventions should be designed with the aim of reducing the burden on parents and help teachers and schools make the most of digital learning (OECD, 2020).

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