

ATTITUDE OF OPTOMETRY STUDENTS TOWARDS ONLINE CLASSES DURING LOCKDOWN DUE TO COVID-19

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ABSTRACT

PURPOSE: The aim of this study was to investigate the attitude of optometry students towards online classes during lockdown due to COVID-19 and understanding of problems faced during online classes.

METHODS: A comparative cross-sectional study was done on 100 optometry students with the help of non-probability purposive sampling method. They were asked to fill the questionnaire so that their responses towards online and face to face classes and the problems associated could be compared. This study included participants of both genders and students of any year of bachelor program of optometry. Qualitative data was analyzed through frequency and percentage.

RESULTS: Total 100 students from four years were included which consisted of 49 males and 51 females. Results affirmed that students showed interest in online classes and they showed positive response for the promotion of online classes in future. Majority of students were satisfied with teacher's interest in online classes, amount of learning in online classes and interaction between teachers and students and online assignments and assessments. 58% students had complaints of eye issues, 57% students had complaints of backaches and 64% students agreed that online classes had made them lethargic. The main problems recorded were high costs, weak signals and lack of clinical practice. 51% students agreed to promote online classes while 34% disagreed and 15% were not sure.

CONCLUSION: The students showed positive response for online classes regarding learning, teachers' interest and interaction with teachers but there were some barriers that hindered in making online classes more effective.

KEYWORDS: Learning, satisfaction, students, COVID-19 pandemic.

INTRODUCTION

The COVID-19 is a contagious infection that first appeared in Wuhan, China and quickly spread across the world so declared as pandemic by World Health Organization (WHO).¹ Its mode of transmission is inhalation, droplets scattered in environment by sneezing of sick people. Therefore, it infects mucous membrane of mouth, nose or eye. Its symptoms include cough, fever, and severe acute respiratory infection.^{1,2} It has fatal results and has threatened the whole world.³ The governments have had to take deep-seated actions such as social distancing, travel and education

restriction to control the spread of outbreak. It was asked to avoid crowds in order to slow the spread of pandemic.⁴ There was suspension of activities at educational institutions.⁵ This closure of schools, colleges and universities affected many students.⁶ Ultimately, it forced to switch to distance education by suspending face-to-face education to diminish the impact of this pandemic on education.^{7,8}

There occurred a break in students' learning, assessments and even closure of public assessments for qualifications. In many countries worldwide, due to COVID-19 lockdown,

educational institutions closed in March 2020. Consequently, the teachers and students faced many challenges because they had to adopt to online education to maintain communication with their students.⁹ Until March 2020, there was traditional teaching at institutions and students assembled in schools and colleges according to their schedules.¹⁰ The teachers were comfortable in their regular routines and proper teaching. The teachers, students and parents faced an entirely new condition due to lockdown of educational department. The teachers continued their work by alternative means. The only possible way to continue teaching and learning was online teaching.¹¹ Teaching and student assessments were shifted to online mode that resulted in a lot of problems. Initially many assessments were cancelled as the new situation confused everyone.

The COVID-19 pandemic may prove to be a constructive disruptor as there is a chance of future change of present conventional method of education. Every department of education quickly moved their teaching plan to online lectures. This rapid transition to online teaching also affected optometry education programs so that the current year of study could be completed effectively. Also, this variation on idea of learning at a distance is now emerging across higher education landscape.¹² There are many geographic, time and other constraints that make post-secondary education difficult. This corona pandemic has various positive and negative impacts. One of its positive impacts in education field is that a technology based learning medium can be developed.¹³ This has been a general assumption that learning takes place in direct location where teachers and students are physically in a classroom. But, all the students do not choose this traditional way so they do not consider it an ideal approach. The network technologies help the learners to get benefit at the place wherever they are located so, they have overpassed the idea of face-to-face classrooms.¹⁴

Online learning offers numerous advantages to the students. These include convenience, flexibility, and access to education.¹⁵ Students have busy lifestyles so they are looking for convenience.¹⁶

Some barriers make it difficult to effectively implement online classrooms such as difficulty in maintenance of discipline, high costs and lack of faculty acceptance. It is valuable to investigate student satisfaction on online classes because new technologies have changed the sources of interaction of students with teachers and classmates.¹⁷ There is a great influence of student-to-student interaction.¹⁵ The quality of interaction in online settings depends on the type of technology tools used during learning. There may be lack of confidence in using these technologies that ultimately decreases student's satisfaction and in turn lower performance.¹⁸ Students in an online environment may feel isolated, confused and frustrated and it may reduce student's interest in the subject.⁵ Online learning may be difficult as students require constant feedback and clarification on difficult concepts which can be very time consuming.¹⁹

Using technology can be both rewarding and challenging.²⁰ Online classes limit some aspects of verbal communication and enduring teacher-student relationship in online classes may be challenging. Questions arise about learning effects, student satisfaction, organizational support, competing stages, faculty preparation, and proper training.²¹ There may be technology issues like unstable audio transmission or interruption in transmission.¹⁴ There may be some physical issues. Online study via social media causes a lot of eyestrain on students and they suffer other eye issues.²² As online courses are being adapted as a way to enhance access to students, the perceptions of students regarding online learning should be recorded. This study was done to estimate the student satisfaction during online classroom for an optometry student. This study investigates the students' preferences for different

modes of learning.

MATERIALS AND METHODS

Hundred students were investigated by asking questionnaire-based Proforma. They were asked if they had experienced online classes and was that was helpful enough. And they were helpful and interested in delivering lectures online. Either they faced any problems during online classes and either they had security issue while using video conferencing apps for online classes. They were asked to rate online assessments and assignment. In the end they were asked to rate online classes on a scale of 0-10.

RESULTS

Results showed that majority of students were satisfied with online learning and assessments. 73% students were satisfied with online assignments. 69% students agreed that teachers were helpful in explaining topics online. 66% students agreed that teachers were interested in delivering lectures online. 78% students agreed that online learning introduced new opportunities to interact meaningfully with the technology. 58% students agreed that interaction between teachers and students was easier in online classes. 65% students agreed that they were more nervous in traditional testing than in online assessments. 42% disagreed that cheating online classes was easy while 21% were unsure. (Table 1) Students faced some issues during online classes which included physical issues, high costs, security issues and internet signals issues. 69% students agreed that high cost was a big issue in online learning. 58% students had complaints of eye issues, 57% students had complaints of backaches and 64% students agreed that online classes had made them lethargic. 44% students agreed that there was lack of discipline in online classes. (Table 2) The chart shows that 75% students rated online classes for 5 and greater than 5 on a scale of 10. Maximum number of students rated online classes for 10. (Figure 1).

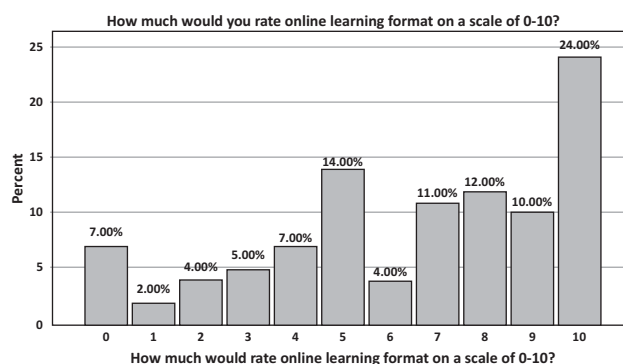
Table - 1: Majority of Students are Satisfied with Online Learning and Assessments

Questions	Strongly agree	Agree	May be	Disagree	Strongly disagree	Total
Online classes are helpful for learning	21 (21.0)	30 (30.0)	17 (17.0)	24 (24.0)	8 (8.0)	100
Teachers are helpful enough in explaining topics online	23 (23.0)	46 (46.0)	15 (15.0)	11 (11.0)	5 (5.0)	100
Teachers are interested in delivering lectures online	20 (20.0)	46 (46.0)	14 (14.0)	15 (15.0)	5 (5.0)	100
Interaction between teachers and students is easier during online lectures	16 (16.0)	42 (42.0)	9 (9.0)	28 (28.0)	5 (5.0)	100
Online assignments are good for students	19 (19.0)	54 (54.0)	10 (10.0)	14 (54.0)	3 (3.0)	100
There is less pressure on students in online classrooms	22 (22.0)	54 (54.0)	9 (9.0)	11 (11.0)	4 (4.0)	100
There is less chance of favoritism and partiality	10 (10.0)	49 (49.0)	26 (26.0)	10 (10.0)	5 (5.0)	100
Opportunity to interact meaning fully with the technology	20 (20.0)	58 (58.0)	11 (11.0)	9 (9.0)	2 (2.0)	100
It is easier to cheat in online assessment	14 (14.0)	23 (23.0)	21 (21.0)	30 (30.0)	12 (12.0)	100
Students are more nervous in traditional testing than in online testing	9 (9.0)	54 (54.0)	25 (25.0)	9 (9.0)	3 (3.0)	100
You can perform in opd after learning from online classes	10 (10.0)	34 (34.0)	16 (16.0)	21 (21.0)	19 (19.0)	100

Table - 2: Students Faced some Issues during Online Classes which included Physical Issues, High Costs, Security Issues and Internet Signals Issues

Questions	Strongly agree	Agree	May be	Disagree	Strongly disagree	Total
Eye issues	22(22.0)	36(36.0)	19(19.0)	18(18.0)	5(5.0)	100
Backaches	12(12.0)	45(45.0)	29(29.0)	11(11.0)	3(3.0)	100
Lethargy	20(20.0)	44(44.0)	19(19.0)	14(14.0)	3(3.0)	100
High costs	19(19.0)	50(50.0)	11(11.0)	13(13.0)	7(7.0)	100
Security issues	10(10.0)	44(44.0)	26(26.0)	16(16.0)	4(4.0)	100
Internet connectivity issues	45(45.0)	32(32.0)	9(9.0)	9(9.0)	5(5.0)	100
Lack of discipline	13(13.0)	41(41.0)	22(22.0)	18(18.0)	6(6.0)	100

Figure -1: 75% Students rated Online Classes for 5 and Greater than 5 on a Scale of 10.



DISCUSSION

The methods of education change from time to time according to the demands of times and patterns of human life. Online classes have never been a part of regular habit in Pakistan. But, due to COVID-19 every educational institute is offering online classes. The knowledge in public administration education about effectiveness of online learning is very limited. This study was done to find out the critical issues of students related to online learning. This survey gave us a idea that most of the students have experienced online mode of education. It also guided us by means of online questionnaire that students are more available on technology based survey. It was necessary to undergo a survey like this so that we can assess the main areas needing reforms in different modes of education and also to assess the preferences of optometry students regarding learning styles. This study was done to find out the response of students regarding online education at undergraduate level in order to highlight the areas with deficiencies to improve the learning outcomes. There was almost equal number of male and female participants. It showed that online study was equally populated among male and female Respondents. A question was asked from all the 100 students that have they any experience of online classes before. We concluded that majority of them (90%) had experience of online classes and very few of them (10%) had never experienced online class. It means that majority of them were aware of benefits and issues of online learning. Results showed that almost half of the respondents had positive attitude towards online learning as they agreed that online classrooms and online assignments were useful. All the results depict that majority of students had experienced online classes. Attitude of students regarding online classes was assessed and they showed positive Response. The questionnaire was based on both positive and negative aspects of online classrooms.

Results show that more than 50% students are satisfied with online classes as they gave a positive feedback about online teaching and online assignments. Also, majority of the students think that online classes reduce the chance of favoritism and Partiality. Interaction between teachers and students is very important in effective learning. In this research a question was asked about teacher-student interaction and 58% students agreed that the interaction between teachers and students is not affected by online mode of Learning. Students have been facing many challenges during this lockdown period. Some questions were made to study the specific challenges associated with online learning. These include weak internet signals, high costs, eye issues and backache issues. Security issues were also discussed and results given show that more than 50% of students agreed that these issues were associated with online learning.

There has been an increase in use of information and communication technologies during this period. The study findings show that online classes cannot be promoted further as the students are unable to access the internet due to technical issues. 69% respondents agree that costs are associated with online classrooms and majority of respondents (77%) agree that internet connectivity is a major issue. Some of the respondents agreed that they felt lack of confidence while using technology but also 35% students disagreed this aspect. Also, positive points were recorded and majority of students agreed that there was less pressure in online classes and technology helps them to interact meaningfully with technology some of the respondents agreed that they felt lack of confidence while using technology. Learning outcomes were also discussed in the questionnaire. 58% respondents agreed that they could not get good marks due to online classes and some of the respondents disagreed that. Also, a question was asked about cheating in online exams and almost equal response was obtained. Some of

the students agreed that they were more nervous in traditional exams than online assessment and could have performed better in online assessment.

Students rated for physical issues arising due to continuous routine of online classes. These included eye issues, backaches and students also complained of lethargy. A question was asked about further continuation of online classes and 51% respondents agreed for the promotion of online classes while 34% disagreed and 15% were unsure. There is still a room of betterment to develop and improve online classes. A scale was made to rate online classes and very few respondents rated for less than 5 and majority of students rated online classes greater than 5.

CONCLUSION

I concluded in the light of above results and discussion that students feel that online system conducted during lockdown was effective as well as inefficient. It was effective because of the conditions that required online study while it was considered inefficient because of the costs and network problems. Online classes can be made more effective by clearing these problems.

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