

## ONLINE PEDAGOGICAL MANEUVER AND ITS' IMPACT ON LEARNING PATTERN OF VETERINARY STUDENTS

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### SUMMARY

The present study was conducted using a questionnaire for the students pursuing second professional of B.V.Sc. & A.H. programme at College of Veterinary Science, Rampura Phul. The results of the study found that students missed the physical environment of the college and in person interactions with teachers and classmates. Students faced problem related to understanding the topics which were taught online. One third of them developed the habit of getting up late in morning. Eye strain and headache were found to be the major ill impacts of virtual classes on students' health. Majority of the students preferred to have traditional face to face mode of education or blended learning model of education in future.

**Keywords:** COVID-19, Online Teaching, Veterinary Students, Virtual Learning

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The year 2020 witnessed a drastic change in human life. The lone living planet of the universe suffered from COVID-19, the biggest pandemic of our age. Everything was put on temporal halt and education sector is not an exception. Traditional classroom teaching was suspended globally and forced educators to shift to an online mode of teaching overnight. For India's vast higher education system, this transition from traditional face-to-face teaching-learning process to the online mode was not free from issues and challenges, requiring special attention towards certain aspects. Therefore, the present study was conducted to understand the current scenario of online learning in veterinary education with the objective to assess the impact of online classes on studies of veterinary students and to find the effect of online learning on daily routine and health of students.

For the present study, a survey of students pursuing B.V.Sc. & A.H. programme at College of Veterinary Science, Rampura Phul (a constituent college of Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana) was conducted. The college became functional from the academic session 2019-20 with the admission of first batch of undergraduate students, B.V.Sc. & A.H programme. Only second professional students were selected for the present study because they had undergone both the teaching-learning methods i.e. online as well as offline. The data collection tool (questionnaire) was personally distributed to all the 82 students visiting the College Library after the commencement of physical classes during January 21 to 25, 2021. Students were asked to return the same at the circulation counter of the library. In total, 77 students (comprising of 42 males and 35 females) responded to the survey. The data were analyzed using MS-excel and

statistical package for social sciences (SPSS 26.0).

**Pattern of attending online classes:** Mobile phones were found to be the most used gadget for attending online classes as 84.41 percent students made use of these handheld devices to continue learning (Table I). Study conducted by Kapasia *et al.* (2020) in West Bengal had similar findings. More than 4/5 of the students used mobile data to attend online classes and the remaining twenty percent used Wi-Fi. Google Meet was the most used application for e-learning. Half of the students attended three online classes per day and the remaining half attended four classes per day.

**Constraints faced while attending online classes:** Attending online classes was not free from constraints. Poor connectivity,

Table I

Pattern of attending online classes			
Gadget used for online classes			
Mobile	Laptop	Tablet	Desktop Computer
84.41%	14.29%	1.30%	0.00%
Subscription to internet plan			
Mobile data	Wi-Fi	Broadband	Any other
80.52%	19.48%	0.00%	0.00%
Application used to attend online classes			
Zoom	Meet	Team	Any other
37.66%	100.00%	37.66%	0.00%
Number of online classes attended daily			
One	Two	Three	Four
0.00%	0.00%	50.65%	49.35%
Time spent on online classes daily			
< 1 hour	1-2 hours	2-3 hours	3-4 hours
0.00%	0.00%	15.58%	84.42%

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problems related to voice being not audible/paused/clear were the major obstacles faced by the students while attending online classes (Table II). A few students located in rural areas always faced the problem of poor connectivity and studies of 36.36 percent students were often disrupted by poor internet connectivity. These results have been supported by the findings of Muthuprasad *et al.* (2021), which revealed lack of connectivity as the major hindrance in online learning faced by agriculture students.

**Need of physical environment and in person interaction:** About ninety five percent students missed the physical environment of the college like sitting in the classroom, studying in the library, enjoying campus life etc. during online classes. Findings of study conducted by Bhaduri and Bindu (2020) during lockdown in April and May, 2020, also advocates this.

All the students, but one missed the in-person interaction with classmates, colleagues and faculty parallel to the study of Edex Live (2020).

**Impact of online classes on studies:** More than three fourth of the students selected ‘strongly disagree’ or ‘disagree’ options for the statement ‘there was no problem in understanding the topics taught in online classes’ (Table III). About forty percent students either chose ‘agree’ or ‘strongly agree’ option for the statement ‘teachers were not able to pay proper attention to every student’. This shows that students could not get desired attention from teachers due to constraints of online learning environment. About thirty percent respondents admitted that notifications from other applications diverted their attention from classes. Understanding the topics and distraction due on mobile were also found as the major hurdles in online education by Karyala and Kamat (2020) also.

**Effect on daily routine and health:** Table IV shows that students started getting up late. In total, about one third students developed the habit of getting up late sometimes to always. Similarly, every third student adopted the habit of not getting ready before classes ranging from sometimes to always. About twelve percent students always missed their breakfast to attend online classes.

Focussing on screen and sitting for longer times badly affected the health of students. More than half of the respondents ‘often’ suffered from eye strain. Majority of students suffered from headache while attending online classes. In a similar study, conducted by Pittman *et al.* (2021), stress and anxiety were found to be increased with online teaching amongst students. The eyesight problems and frequent headaches are attributed to prolonged screen time (Narayana Health, 2020).

**Preferred mode of education in future:** Veterinary science being professional programme requires physical presence of students in laboratories for practicals. When asked about their preferences for future mode of education, about

**Table II**

**Constraints faced while attending online classes**

Sr. Statement No.	Always	Often	Some-times	Rarely	Never
1 There was poor connectivity	7.79%	36.36%	45.45%	7.79%	0.26%
2 Voice was not audible	1.30%	32.47%	50.65%	11.69%	3.90%
4 Malfunctioning of IT gadgets	0.26%	29.87%	28.57%	28.57%	10.39%
5 Electricity problem to charge gadgets	5.19%	16.88%	29.87%	18.18%	29.87%
6 Costly internet plans	11.69%	23.38%	20.78%	9.09%	35.06%

**Table III**

**Impact of online classes on studies**

Sr. Statement No.	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1 There was no problem in understanding the topics taught in online classes	15.58%	62.34%	15.58%	5.19%	1.30%
2 Teachers were not able to pay proper attention to every student	10.39%	28.57%	12.99%	44.16%	3.90%
3 Notifications from other apps diverted attention from class	6.49%	23.38%	19.48%	37.66%	12.99%

**Table IV**

**Effect on daily routine and health**

Sr. Statement No.	Always	Often	Some-times	Rarely	Never
<b>Effect on daily routine</b>					
1 Getting up late	3.90%	15.58%	11.69%	38.96%	29.87%
2 Not getting ready before classes	5.19%	10.39%	16.88%	25.97%	41.56%
3 Missing breakfast to attend classes	11.69%	20.78%	24.68%	9.09%	33.77%
<b>Effect on health</b>					
1 Eye strain	12.99%	51.95%	12.99%	18.18%	3.90%
2 Headache	11.69%	33.77%	36.36%	9.09%	9.09%
3 Backache	7.79%	29.87%	18.18%	23.38%	20.78%
4 Mental stress	6.49%	27.27%	25.97%	23.38%	16.88%
5 Sleep disorders	6.49%	23.38%	15.58%	18.18%	36.36%

57 percent students opted for traditional face-to-face mode to have better comprehension of the subject matter (Fig. 1). Around 42 percent students would like the blend of both traditional face-to-face learning as-well-as online learning modes. Study by Chakraborty *et al.* (2021) also advocates this finding, as sixty six percent students in that study felt that they learn better in physical classrooms than through online education. Mahdy (2020) in a study of veterinary medical students of 92 countries, also found that it was difficult to fulfill the veterinary competencies only with online education system, as being a professional course

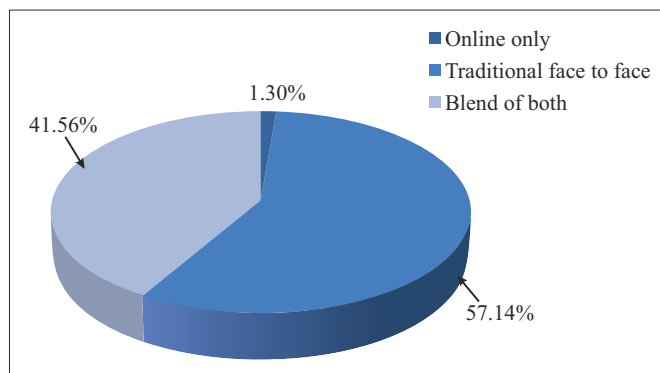


Fig. 1. Preferred mode of education in future

involving practical involvement of students was not easy to learn in virtual mode. Thus, offline education cannot be ignored in future and the convergence of offline education with online education, termed as blended learning, will be the future mode of education (Jindal and Chahal, 2018).

**Statistical examination of variables:** The impact assessment part of questionnaire consisted of four categories of questions pertaining to online learning environment, constraints faced, effect on daily routine and health issues faced, having 3, 6, 3 and 5 questions, respectively. To examine the correlation between aforementioned categories of variables, pearson correlation was applied (Table V).

A significant, positive correlation was observed between constraints faced by students and effect on their daily routine ( $r = 0.324$ ). Similarly, there existed a strong, positive correlation between effect of online classes on the daily routine of students and the health issues faced by them ( $r = 0.452$ ). While a negative correlation was found between constraints faced and online learning environment ( $-0.063$ ). Further negative correlation was found between effect on daily routine and online learning environment  $-0.104$ . Similarly, there existed a negligible correlation between health issues faced and online learning environment ( $.048$ ).

### CONCLUSION

The results of the study led to the conclusions that continuing education only in online mode in future will hamper the veterinary education to a great extent disturbing the appropriate understanding of the topics and reduced attention towards studies. By observing the effect of online classes on daily routine and the health of students, it can implicitly be stated that online mode of education is not praise worthy for the overall personality of the learners. Thus, agra dual restoration of traditional face-to-face learning is essential, albeit we should not slip into our old ‘teacher-driven’ ways and remember to apply the learnings of this phase to enrich our regular classes with online teaching.

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Table V

### Correlation between online learning environment, constraints faced, effect on daily routine and health issues

	Descriptive Statistics		
	Mean	Std. Deviation	N
Online learning environment	10.22	1.924	77
Constraints faced	17.90	4.179	77
Effect on daily routine	7.04	3.131	77
Health issues faced	14.87	4.629	77

	Correlations			
	Online learning environment	Constraints faced	Effect on daily routine	Health issues faced
Online learning environment	1	-.063	-.104	.048
Constraints faced	-.063	1	.324**	.205
Effect on daily routine	-.104	.324**	1	.452**
Health issues faced	.048	.205	.452**	1

\*\* . Correlation is significant at the 0.01 level

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