PERCEPTION TOWARD E-LEARNING AMONG VETERINARY STUDENTS DURING COVID 19 PANDEMIC PERIOD

ALIMUDEEN, S.*, ARUL SABAREESWARAN, T.A., CHETHAN, G.N., INDUJA, T.R., SENTHIKUMAR, R.,
ANJALI K. BABU and BIMAL P. BASHIR
Department of Veterinary and Animal Husbandry Extension,
College of Veterinary and Animal Sciences, Pookode-673576, KVASU, Kerala

SUMMARY

An exploratory research design was adopted to study the veterinary students' perception about e-learning by purposive selection of 150 undergraduate and postgraduate students from the College of Veterinary and Animal Sciences, Pookode, KVASU as respondents. Data were collected through a semi-structured pre-tested questionnaire encompassing the statements rated by 3-point Likert scale (Madhumita and Mishra, 2007) and it was developed with minimum and maximum obtainable score (by individual) of 23 and 69, respectively. Questionnaire was mailed to individual respondent during 2021-2022 and their perception score was calculated by summing scores of each statements. Of the whole sample, cent per cent of them were using smart phones, of which two-thirds (62.00%) were using smart phones since more than four years. Nearly 90.00% use WhatsApp regularly followed by Facebook/Instagram (75.33%) and YouTube (72.67%). More than 5.00% of the respondents were aware about distance learning programmes and were interested to join as well. More than one half of the students (54.67%) were not able to mention at least one Massive Open Online Courses (MOOCs) provider in India. Only 5 students had enrolled in MOOC. One half of the respondents secured the total perception score between 45(Q1) and 55(Q3) with median of 50.5(Q2) which indicated a positive perception towards e-learning among veterinary graduates and post graduates.

The rapid introduction of technology greatly influenced the pedagogical approach of veterinary education. Lockdown in connection with Corona Virus Disease-19 (COVID-19) transformed the living style and the students all over the world were forced to stay out of classroom. In India, all the educational institutes were closed temporarily in the middle of March, 2020. Usage of digital platform for the academic purpose in the higher educational institutions were increased as a consequence of COVID-19 (Sobaih *et al.*, 2020). The ubiquitous nature of social media played a significant role in e-learning, along with providing the learning sources it also enables learners to retrieve the material sources, hence it's been proved to be the best alternative method of teaching during the pandemic period (Bashir *et al.*, 2022). With this background the present study was conceived with the objective to study the smart phone and internet usage pattern of veterinary university students in Kerala and assess their perception towards e learning.

This study was conducted in one of the colleges functioning under the Kerala Veterinary and Animal Sciences University, Kerala during 2020-2021 academic year. A purposive sampling method was employed here, sampling frame consists both undergraduate and post graduate students of College of Veterinary and Animal Sciences, Pookode, Wayanad. A total of 150 undergraduate and post graduate students from the college were

*Corresponding author: alimudeens@gmail.com

respondents for the current study. Students' perception about e-learning was ascertained through a semi-structured pre-tested questionnaire from the students. The scale developed by Madhumita and Mishra (2017) was adopted for the current study. Required data were collected through a mailed questionnaire. All the statements regarding students' perception about e-learning in the questionnaire were rated on a 3-point Likert scale (For positive statements scores were rated as, 1 = Disagree; 2 = Not decided and 3 = strongly agree and vice versa followed for the negative statements). Mean score for each positive statement was calculated using the following formula and accordingly for the negative statements.

$$\text{Mean} = \frac{\text{Agree} \times 3 + \text{Not decided} \times 2 + \text{Disagree} \times 1}{\text{Total number of respondents}}$$

The perception score of individual respondent was calculated by summing scores of each statements. The collected data were tabulated and descriptive statistical analysis was done. The box plot with jitters was created by using R and R Studio software and then the results discussed.

Of the whole sample, 63 (42.00%) respondents were male and remaining 58% were females. All were using smart phones and nearly two-third of the respondents (62.00%) using the smart phones since more than last four years. All the students were using their own internet package and they were using the internet daily. More than

Table 1. **Distribution of the respondents based on their dependence onto different study material**

(N=150)

Variable	Category	Frequency	Percentage
Sources which	Books	041	27.33 %
referred mostly	Lecture	094	62.67 %
for your academic	Printed Notes	108	72.00 %
purpose	e lecture	024	16.00 %

* Multiple responses not to total

one half of the students were satisfied with the internet network provided by the institution. Nearly 90% of the students using WhatsApp regularly followed by Facebook /Instagram (75.33%) and Youtube (72.67%), It was supported by the findings of Bashir *et al.* (2022), they reported that majority of veterinary students under the study had medium level of social media utilisation for the academic purpose. More than 95% of the respondents aware about distance learning programmes and around three-fourths of them were interested to join in distance learning programme. Only 16% of the students under study preferred e-lectures (Table 1). These findings are in contradictory with the findings of Kumar (2019). He reported that almost every respondent (99.00%) was interested in the online discussion forum.

It is important to note that only 43.33% of the respondents had prior idea about MOOC (Massive Open Online Courses) and nearly two-thirds of them were came to know about this MOOCs from the teachers. Surprisingly more than one half of the number (54.67%) of the respondents couldn't able to mention at least one MOOCs provider in India. Only 5 students had enrolled MOOC. Among them two students each enrolled in MOOC related to food technology and wildlife conservation and one student in MOOC related to social sciences.

Table 2 reveals that students think e-learning rapidly delivers information to the learners (Mean = 2.52; SD = 0.702) and it boost's learner's learning interests (Mean = 2.47; SD = 0.739). They admit that e-learning is a flexible mode of learning as it can be accessed anywhere and anytime (Mean = 2.37; SD = 0.789) at the same time they acknowledge that e-learning is inconvenient as it is assessable virtually (Mean = 2.06; SD = 0.829). They believe that e-learning has the potential to improve/ increase the quality of education (Mean = 2.45; SD = 0.738) and it produces better learning results than traditional teaching (Mean = 2.13; SD = 0.780), in contrary to this Kumar *et al.* (2022) reported that majority of respondents (Veterinary under graduate students) opined they found problem in understanding the topics which taught in online classes. Further the results clearly depict that the students reported e-learning limits access to educational resources
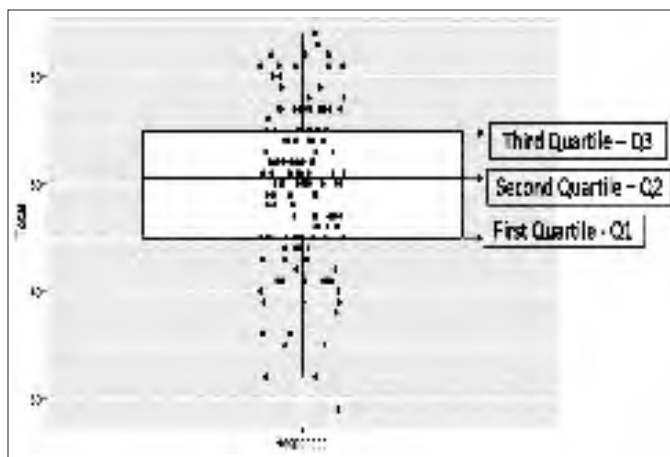

Fig. 1. Students' perception score about e-learning (N=150)

(Mean = 1.93; SD = 0.825); it helps in improve upon the performance of learners (Mean = 2.36; SD = 0.762) and promotes creativity (Mean = 2.03; SD = 0.819). They also felt that social networking sites have the potential to provide effective collaborative learning (Mean = 2.38; SD = 0.757) and e-learning help up remain update in our subject/field/area (Mean = 2.32; SD = 0.797). Nearly one-half of the respondents accept the fact that to use websites it is not mandate to be highly qualified. The results in accordance with the findings of Khan *et al.* (2021). Response wise distributions of students for other statements were given in Table 2.

The interview schedule was developed with the minimum and maximum obtainable score of 23 and 69, respectively. Fig. 1 clearly depicts that 50% of the respondents secured the total perception score between 45 (First Quartile - Q1) and 55 (Third Quartile - Q3) with median of 50.5 (Second First Quartile-Q2). From these above findings, it is quite obvious that veterinary students of Kerala have got positive perception towards e-learning. It is supported by the findings of Madhumita and Mishra (2017). A similar finding was reported by Elnoor *et al.* (2017) and reported that majority of respondents i.e. UG and PG veterinary students (89.17%) had favourable attitude towards use of e-learning tools. In the current study, the daily use of mobile phone coupled with internet by the students influenced them to perceive that e-learning is flexible mode of learning since the technology driven modifications in teaching can create an ease in learning methodology of students and thus accelerates their performance.

REFERENCES

Bashir, B.P., Alimudeen, S., Sabareeswaran A.T.A. and Induja, T.R. (2022). Utilization pattern of social media for education among veterinary science post-graduate students. *J. Krishi Vigyan.* **11(1)**: 373-380. DOI:10.5959/2349-4433.2022.00163.5.

Elnoor, O.S., Hundal, J.S., Kashyap, N., Singh, N. and Chahal, U.S. (2017). Information literacy competencies of veterinary students and their attitude towards e-learning. *Haryana Vet.*

Table 2. Students' Perception about e-learning (N=150)

Statement		Disagree	Not Decided	Agree	Mean	SD
1. E-learning boost's learner's learning interests	f	22	35	93	2.47	0.739
	%	14.67	23.33	62.00		
2. E-learning rapidly delivers information to the learners	f	18	36	96	2.52	0.702
	%	12.00	24.00	64.00		
3. E-learning produces better learning results than traditional teaching	f	37	57	56	2.13	0.780
	%	24.67	38.00	37.33		
4. E-learning is inconvenient as it is assessable virtually*	f	56	47	47	2.06	0.829
	%	37.33	31.33	31.33		
5. E-learning is a flexible mode of learning as it can be assessed anywhere and anytime	f	29	37	84	2.37	0.789
	%	19.33	24.67	56.00		
6. E-learning has the potential to improve/increase the quality of education	f	22	38	90	2.45	0.738
	%	14.67	25.33	60.00		
7. E-learning is unimportant for better academic achievements*	f	66	34	50	2.11	0.876
	%	44.00	22.67	33.33		
8. learning from website is difficult*	f	66	42	42	2.16	0.836
	%	44.00	28.00	28.00		
9. E-learning is a waste of time*	f	88	33	29	2.39	0.793
	%	58.67	22.00	19.33		
10. E-learning deteriorates the competitive capacity of the learner*	f	61	47	42	2.13	0.831
	%	40.67	31.33	28.00		
11. The web based activity irritates me*	f	79	31	40	2.26	0.855
	%	52.67	20.67	26.67		
12. To use websites one has to be highly qualified*	f	69	47	34	2.23	0.798
	%	46.00	31.33	22.67		
13. E-learning is more important that traditional mode of learning for academic achievement	f	57	57	36	1.86	0.777
	%	38.00	38.00	24.00		
14. E-learning limits access to educational resources*	f	46	48	56	1.93	0.825
	%	30.67	32.00	37.33		
15. E-learning is an active and interactive mode of learning	f	58	53	39	1.87	0.797
	%	38.67	35.33	26.00		
16. E-learning improves teacher learner interactions	f	61	52	37	1.84	0.795
	%	40.67	34.67	24.67		
17. E-learning help improve upon the performance of learners	f	26	44	80	2.36	0.762
	%	17.33	29.33	53.33		
18. E-learning promotes creativity	f	48	50	52	2.03	0.819
	%	32.00	33.33	34.67		
19. E-learning doesn't facilitate class room based learning*	f	34	63	53	1.87	0.753
	%	22.67	42.00	35.33		
20. E-learning doesn't help develop critical thinking*	f	57	55	38	2.13	0.788
	%	38.00	36.67	25.33		
21. E-learning help up remain update in our subject / field / area	f	31	40	79	2.32	0.797
	%	20.67	26.67	52.67		
22. Social networking sites have the potential to provide effective collaborative learning	f	25	43	82	2.38	0.757
	%	16.67	28.67	54.67		
23. E-learning doesn't help improve quality of communication*	f	73	37	40	2.22	0.842
	%	48.67	24.67	26.67		

* Negative Statements; f - Frequency; Per cent rounded to two decimals not to 100

56(1): 41-46.

Khan, M.A., Vivek, Nabi, M.K., Khojah, M. and Tahir, M. (2021). Students' perception towards e-learning during COVID-19 pandemic in India: An empirical study. *Sustainability.* **13(1)**: 57(1-14). DOI: 10.3390/su13010057.

Kumar, D., Singh, N. and Chandwani, S. (2022). Online pedagogical maneuver and its impact on learning pattern of veterinary students. *Haryana Vet.* **61(1)**: 154-156.

Kumar, K. (2019). A study of veterinary scholars' perception of MOOCs. *Inf. Learn. Sci.* **120(11/12)**: 743-757. DOI: 10.1108/ILS-04-2019-0031.

Madhumita and Mishra, O.P. (2017). Perception of E-learning by post postgraduate students of Banaras Hindu University. *Interaction.* **35(1)**: 21-26.

Sobaih, A.E.E., Hasanein, A.M. and Elnasr, A.A.E. (2020). Responses to COVID-19 in higher education: Social media usage for sustaining formal academic communication in developing countries. *Sustainability.* **12(16)**: 6520(1-18). DOI: 10.3390/su12166520.