Mysore J. Agric. Sci., 59 (1) : 237-243 (2025)

Perception of Students towards Offline and Online Classes in Selected Agricultural Universities of Karnataka

PRAHLAD P. BHAT[1], M. T. LAKSHMINARAYAN[2], Y. N. SHIVALINGAIAH[3], S. GANESAMOORTHI[4] AND K. G. BANUPRAKASH[5]

[1,3&4]Department of Agricultural Extension, College of Agriculture, GKVK, Bengaluru - 560 065

[2]Department of Agricultural Extension, College of Agriculture, Mandya

[5]Farmers Training Institute, UAS, GKVK, Bengaluru - 560 065

e-Mail : prahladpbhat1997@gmail.com

AUTHORS CONTRIBUTION

PRAHLAD P. BHAT : Conceptualization, data collection, analysis and manuscript prepration

M. T. LAKSHMINARAYAN : Guidance, supervision and editing

Y. N. SHIVALINGAIAH ; S. GANESAMOORTHI & K. G. BANUPRAKASH : Conceptualization, guidance and interpretation

Corresponding Author :

PRAHLAD P. BHAT

Received : October 2024

Accepted : November 2024

ABSTRACT

The present study was conducted at University of Agricultural Sciences, Bangalore (UAS-B) and University of Agricultural Sciences, Dharwad (UAS-D) during 2024 to analyze the perception of students towards offline and online classes. The data were collected from 180 students in UAS-B (90 students) and UAS-D (90 students) using a pre-tested interview schedule. Two separate scales on perception of students towards online classes and perception of students towards offline classes were developed and standardized specifically for the study. The results in respect of offline classes revealed that a majority of the students of UAS-B (55.56%) and UAS-D students (53.33%) had better perception towards offline classes, while an equal percentage of students (26.67% each) of both universities had good perception towards offline classes. Further, it was also found that 17.78 and 20.00 per cent of the students of UAS-B and UAS-D had poor perception towards offline classes, respectively. With respect to the findings of online classes, the results revealed that as high as 42.22 and 40.00 per cent of the students of UAS-B and UAS-D, respectively had better perception, whereas 35.56 and 32.22 per cent of the students of UAS-B and UAS-D had good perception towards online classes, respectively. Less than one-fourth (22.22%) and 27.78 per cent of the students of UAS-B and UAS-D had poor perception towards online classes, respectively. The statistical analysis revealed that there was no significant difference in respect of the mean perception score of UAS-B and UAS-D students towards offline and online classes.

Keywords : Perception of students, Offline classes, Online classes

EDUCATION is a tool through which society pass on its accumulated knowledge and skills across generations. The modes of education are the means through which the transmission of the knowledge takes place. It can be broadly divided into online and offline modes of learning. Online learning is the education that takes place over the Internet and it is often referred to as 'e-learning or online classes'. However, online classes are just one type of 'distance learning' - the umbrella term for any learning that takes place across distance and not in a traditional classroom (offline classes). The emergence of Coronavirus (COVID-19) pandemic has affected almost all of the political, social, cultural and economic deeds, shaking the world to its roots. As a preventive measure, educational institutions in India were closed in the first (24th March to 14th April, 2020) and second (15th April to 3rd May, 2021) phases of national lock down. Academic institutions across the world have also been forced to momentarily suspend the face-to-face classes

(offline classes) as safety measures to stop the spread of virus and for well-being of the society. All types of academic institutions encompassing schools, colleges and Universities have been using one or the other online teaching tool (s) for reaching out to the students to ensure their continuous learning. Though, online teaching has been seen as the best replacement of face-to-face classes during emergent COVID-19 situation, it cannot completely replace the traditional classroom teaching (offline classes). In this backdrop, the present study is carried out with the following specific objectives:

1. To analyze the perception of students towards offline and online classes in selected agricultural universities
2. To find out the difference between the students of selected agricultural students in respect of the perception towards online and offline classes.

Methodology

The present study was conducted atthe University of Agricultural Sciences, Bangalore (UAS-B) and University of Agricultural Sciences, Dharwad (UAS-D) during 2024. One hundred and eighty under graduate and post graduate studentsb (who were exposed to both offline and online classes) from UAS-B (90 students) and UAS-D (90 students) were purposively selected for the study. Data was collected from five campuses of UAS-B and two campuses of UAS-D. The data was collected using a pre-tested structured schedule with suitable scales.

Perception of students towards offline and online classes in the present study is operationally defined '*as the extent of mental awareness of students about offline and online classes'*. Summated rating scale suggested by Likert (1932) and Edwards (1969) was followed to develop and standardize scales for analyzing the perception of students towards offline and online classes. The developed perception scale was found to be highly reliable (0.756 and 0.887) and valid (0.927 and 0.941) for both online and offline class, respectively. Each of the developed perception scales on offline and online classes had 15 statements. The perception scales consists of 15 statements each. The response was collected on a five-point continuum, namely, strongly agree, agree, undecided, disagree and strongly disagree with an assigned score of 5, 4, 3, 2 and 1 for positive statements and reverse scoring for negative statements, respectively. The perception score of the scale ranged from a minimum of 15 to a maximum of 75 score. Based on the means and half standard deviations, the respondents were categorized as poor, good and better perception (Table 1), Darshan (2019).

Higher score on the perception scale indicates that the students have better perception, while lower perception score indicates that the students have poor perception. The collected data was scored and analyzed using frequency, percentage, ranks, mean and standard deviation Jagadeesh (2023).

Table 1

Categorization of perception of students towards offline and online based on mean and standard deviation

Perception categories	Offline classes (Score)		Online classes (Score)	
	UAS-B	UAS-D	UAS-B	UAS-D
Poor (< $\bar{X}$ - ½ SD)	< 55.38	< 53.68	< 51.05	< 49.97
Good (< ± ½ SD)	55.38 to 65.06	53.68 to 62.68	51.05 to 59.31	49.97 to 57.95
Better (> + ½ SD)	> 65.06	> 62.68	> 59.31	> 57.95
Mean	60.22	58.18	55.18	53.96
Standard deviation	9.68	9.01	8.27	7.99

Results and Discussion

Statement-wise Perception of Students towards Offline and Online Classes

The results in Table 2 and 3 presents the research data on the statement-wise perception of students towards offline and online classes.

Statement-wise Perception of Students towards Offline Classes

It is observed from the Table 2 that among fifteen perception statements with respect to the offline classes, the statement: 'Students have easy access to physical resources like libraries and labs in offline classes' obtained mean perception score of 4.81 and was accorded as the first rank by the UAS-B students, while the statement 'Teachers can gauge students' emotions and well-being more effectively in offline classes' received a score of 4.79 and was ranked second. The statement 'Teachers does not have greater control over classroom management in offline classes' obtained a mean perception score of 4.71 and was ranked third. Further, the results revealed that the statements, namely, 'Students perceive offline classes as more flexible in terms of scheduling and location', 'Students find it easier to focus on their studies without the online distractions in offline classes' and 'Teachers does not struggle to keep up with advancements in technology and modern teaching methods when teaching offline' were ranked thirteen (3.89 score), fourteen (3.71 score) and fifteen (3.12 score) by the UAS-B students, respectively.

Table 2

Perception of students towards offline classes

Perception statements	UAS-B students (n_1=90)		UAS-D students (n_2=90)	
	Mean perception score	Rank	Mean perception score	Rank
Students have easy access to physical resources like libraries and labs in offline classes	4.81	I	4.79	I
Teachers can gauge students' emotions and well-being more effectively in offline classes	4.79	II	4.76	II
Teachers does not have greater control over classroom management in offline classes	4.71	III	4.68	III
Offline classes does not promote critical thinking and problem-solving through in-person discussions	4.65	IV	4.50	V
Students form stronger bonds with their teachers and seek mentorship in offline classes	4.59	V	4.60	IV
Teachers may find to arrange logistics for larger class sizes with limited resources	4.49	VI	4.40	VI
Offline classes does not foster teamwork, collaboration, and group projects	4.42	VII	4.35	VII
Teachers often encounter challenges in maintaining an effective learning environment in offline classes	4.39	VIII	4.15	IX
Teachers can adapt their teaching methods based on in-person feedback in offline classes	4.30	IX	4.30	VIII
Students does not feel a stronger sense of belonging to their educational institution in offline classes	4.10	X	4.01	X
Teachers can use visual cues and body language to enhance their teaching in offline classes	3.99	XI	3.92	XI
The physical classroom environment is often considered a central hub for multiple horizons learning	3.98	XII	3.89	XII
Students perceive offline classes as more flexible in terms of scheduling and location	3.89	XIII	3.72	XIII
Students find it easier to focus on their studies without the online distractions in offline classes	3.71	XIV	3.00	XV
Teachers does not struggle to keep up with advancements in technology and modern teaching methods when teaching offline	3.12	XV	3.25	XIV

TABLE 3

Perception of students towards online classes

Perception statements	UAS-B students (n_1=90)		UAS-D students (n_2=90)	
	Mean perception score	Rank	Mean perception score	Rank
Students have easy access to physical resources like libraries and labs in offline classes	4.81	I	4.79	I
Teachers and students welcome the opportunity to conduct/attend classes from the comfort of their homes	4.69	I	4.52	II
Students often struggle with staying motivated in online classes	4.67	II	4.60	I
Students anywhere in the world have access to educational resources created and shared by the teachers	4.60	III	4.51	III
Teachers and students struggle with finding a quiet and ergonomically suitable space for conducting/attending online classes	4.44	IV	4.19	V
Students and teachers often struggle with technical issues like internet connectivity and device compatibility in online classes	4.21	V	4.40	IV
Teachers and students do not have concerns about the security and privacy of online class sessions	4.20	VI	4.15	VI
Teachers do find easy ways to incorporate guest speakers and experts in virtual lectures	4.18	VII	4.10	VII
Students struggle with information overload in online courses	4.15	VIII	4.04	IX
Teachers and students feel online classes have more excitement and energy	4.09	IX	4.09	VIII
Students and teachers prefer online classes during pandemic and emergency situations only	4.04	1X	4.01	X
Students feel isolated in online classes, leading to a sense of disconnection when compared to offline classes	3.98	XI	3.99	XI
Students may feel lack of screen time during online classes	3.90	XII	3.89	XII
It's easy for the teachers to use a variety of multimedia tools in online classes	3.88	XIII	3.72	XIV
Online class provides flexibility of scheduling classes, pacing of course syllabus and personal commitments.	3.79	XIV	3.80	XIII
Use of online quizzes and polls enables teachers to easily assess student understanding during lectures	3.70	XV	3.60	XV

The findings in respect of UAS-D students revealed that the statement: 'Students have easy access to physical resources like libraries and labs in offline classes' obtained mean perception score of 4.79 and was accorded the first rank, whereas the statement 'Teachers can gauge students' emotions and well-being more effectively in offline classes' received a score of 4.76 and was ranked second. The statement 'Teachers does not have greater control over classroom management in offline classes' obtained a mean perception score of 4.68 and was ranked third. Further, the statements, namely, 'Students perceive offline classes as more flexible in terms of scheduling and location', 'Teachers does not struggle to keep up with advancements in technology and modern teaching methods when teaching offline' and 'Students find it easier to focus on their studies without the online distractions in offline classes' were ranked thirteen (3.72 score), fourteen (3.25 score) and fifteen (3.00 score), respectively by the UAS-D students. It could be concluded from the findings that both UAS-B and UAS-D students have good perception towards offline classes.

Statement Wise Perception of Students towards Online Classes

It is observed from the Table 3, that among the fifteen perception statements with respect to the online

classes by the UAS-B students, the statement 'Teachers and students welcome the opportunity to conduct/attend classes from the comfort of their homes', obtained the mean perception score of 4.69 and was accorded the first rank, while the statements 'Students often struggle with staying motivated in online classes' (4.67 score) and 'Students anywhere in the world have access to educational resources created and shared by the teachers' (4.60 score) were ranked second and third rank, respectively. The statements'It's easy for the teachers to use a variety of multimedia tools in online classes', 'Online class provides flexibility of scheduling classes, pacing of course syllabus and personal commitments' and 'Use of online quizzes and polls enables teachers to easily assess student understanding during lectures' were ranked thirteen (3.88 score), fourteen (3.79 score) and fifteen (3.70 score), respectively by the UAS-B students.

The findings in respect of UAS-D students, the statement 'Students often struggle with staying motivated in online classes' obtained mean perception score of 4.60 and was accorded as the first rank, while the statement 'Students have easy access to physical resources like libraries and labs in offline classes' received a score of 4.52 and was ranked second. The statement 'Teachers does not have greater control over classroom management in offline classes' obtained a mean perception score of 4.51 and was ranked third. Further, the statements, namely, 'Online class provides flexibility of scheduling classes, pacing of course syllabus and personal commitments', 'It's easy for the teachers to use a variety of multimedia tools in online classes' and 'Use of online quizzes and polls enables teachers to easily assess student understanding during lectures' were ranked thirteen (3.80 score), fourteen (3.72 score) and fifteen (3.60 score), respectively by the UAS-D students. It could be concluded that the students of both UAS-B and UAS-D had good perception towards offline classes. Similar findings were observed by Mahajan and Kalpana (2018) and Adnan and Anwar (2020).

Overall Perception of Students towards Offline and Online Classes

The data in Table 4 and 5 presents the findings on the overall perception of students towards offline and online classes.

TABLE 4

Overall perception of students towards offline classes

Perception category	Students			
	UAS-B (n_1 = 90)		UAS-D (n_2 = 90)	
	No.	%	No.	%
Poor	16	17.78	18	20.00
Good	24	26.67	24	26.67
Better	50	55.56	48	53.33
Total	90	10]0.00	90	100.00
Mean	60.22		58.18	
Standard deviation	9.68		9.01	

TABLE 5

Overall perception of students towards online classes

Perception category	Students			
	UAS-B (n_1 = 90)		UAS-D (n_2 = 90)	
	No.	%	No.	%
Poor	20	22.22	25	27.78
Good	32	35.56	29	32.22
Better	38	42.22	36	40.00
Total	90	100.00	90	100.00
Mean	55.18		53.96	
Standard deviation	8.27		7.99	

Overall Perception towards Offline Classes

The results in Table 4 reveals that majority of the UAS-B students had better perception (55.56%) towards offline classes, while 26.67 and 17.78 per cent of the UAS-B students had good and poor perception towards offline classes, respectively. In the case of

UAS-D students, majority of the students had better perception (53.33%) towards offline classes, while 26.67 and 20.00 per cent of the students had good and poor perception towards offline classes, respectively. The above research findings were in line with the findings of Muthuprasad *et. al.* (2021) and Wahyundi *et. al.* (2022).

Offline classes provide: (a) easy access to students to physical resources (libraries, labs etc.), (b) students form stronger bonds with teachers and seek mentorship, (c) physical classroom environment is often considered a central hub for multiple horizons learning by students (d) students perceive offline classes as more flexible and (e) students find offline easier to focus more on their studies. Because of the above reasons, a vast majority of UAS-B and UAS-D students had good to better perception towards offline classes.

Overall Perception towards Online Classes

A perusal of Table 5 reveals that, as high as 42.22 per cent of the UAS-B students had better perception towards online classes, while 35.56 and 22.22 per cent of the UAS-B students had good and poor perception towards online classes, respectively. In case of UAS-D students, 40.00 per cent of the students had better perception towards online classes, whereas 32.22 and 27.78 per cent of the students had good and poor perception towards online classes, respectively. The above research findings were in line with the findings of Kulal & Nayak (2020) and Riaz *et. al.* (2023).

It could be inferred from the students that more than three-fourth of UAS-B and UAS-D students had better to good perception towards online classes because online classes provides: (a) opportunity to students to attend classes from the comfort of their homes, (b) students can access to educational resources created and shared by the teachers, (c) students feel online classes have more excitement and energy, (d) online classes provides flexibility of scheduling classes, pacing of course syllabus and personal commitment etc.

Test of Significance in Respect of Perception of Students towards Offline and Online Classes

In respect of offline classes (Table 6), it is observed that the mean perception score of UAS-B students (60.22) was slightly more than the mean perception score of UAS-D students (58.18). The statistical analysis revealed that there is no significant difference between UAS-B and UAS-D students in respect of mean perception score. Similarly, in respect of the findings of online classes the results revealed that the mean perception score of UAS-B students (55.18) was more compared to the mean perception score of UAS-D students (53.96). The 't' value revealed that there is no significant difference in respect of mean perception score between UAS-B and UAS-D students. The above research findings were in line with the findings of Smart and Cappal (2006).

Table 6

Test of significance in respect of perception of students towards offline and online classes

(n=180)

Students	Mean perception score	t value
I. Offline classes		
UAS-B (n_1 = 90)	60.22	0.277^{NS}
UAS-D (n_2 = 90)	58.18	
II. Online classes		
UAS-B (n_1 = 90)	55.18	0.102^{NS}
UAS-D (n_2 = 90)	53.96	

NS : Non-Significant

It could be concluded from the results of the research study that a majority of the students of both UAS-B and UAS-D students had good to better perception towards both offline and online classes. The offline and online classes has its own merits and demerits. Offline classes (a) helps the students to get immediate feedback and answers to their questions, (b) allows for lively discussions, which can make learning more engaging and enjoyable and builds a personal connection with teachers and peers can create a

supportive and motivating learning environment. Where in online classes the students can attend classes and complete assignments at their own pace and on their own schedule. This flexibility is especially helpful for those who have other commitments, such as jobs or family responsibilities. Online classes also allows them to balance their studies with their personal and professional lives more easily.

References

ADNAN, M. AND ANWAR, K., 2020, Online learning amid the COVID-19 pandemic: Students' perspectives. *Online Submission*, **2** (1) : 45 - 51.

DARSHAN, M. E., LAKSHMINARAYAN, M. T., SHIVAMURTHY, M., PATIL, S. S. AND BANUPRAKASH, K. G., 2019, Perception of farmers about the functioning of Raitha Samparka Kendras. *The Mysore J. Agri. Sci.,* **53** (2) : 73 - 81.

EDWARDS A. L., 1969, Techniques of attitude scale construction. VIkils, Feger and Dimons Pvt. Ltd., 9, Sport Road, Ballard Estate, Bombay, pp. : 34 - 37.

JAGADEESH, V., LAKSHMINARAYAN, M. T., KRISHNAMURTHY, B. AND SHIVARAMU, K., 2023, Perception of beekeepers towards bee keeping in coastal zone of Karnataka state, *The Mysore J. Agric. Sci.,* **57** (1) : 102 - 108.

KULAL, A. AND NAYAK, A., 2020, A study on perception of teachers and students toward online classes in Dakshina Kannada and Udupi District. *Asian Association of Open Universities Journal*, **15** (3) : 285 - 296.

LIKERT, R. A.,1932, A technique for assessing attitudes. Archives of Psychology, New York, pp. : 140.

MAHAJAN, M. V. AND KALPANA, R., 2018, A study of students' perception about e-learning. *Indian Journal of Clinical Anatomy and Physiology*, **5** (4) : 501 - 507.

MUTHUPRASAD, T., AISWARYA, S., ADITYA, K. S. AND JHA, G. K., 2021, Students' perception and preference for online education in India during COVID-19 pandemic. *Soc. Sci. Humanit. Open.*, **3** (1) : 100 - 101.

RIAZ, F., MAHMOOD, S. E., BEGUM, T., AHMAD, M. T., AL-SHAIKH, A. A., AHMAD, A., SHATI, A. A. AND KHAN, M. S., 2023, Students' preferences and perceptions regarding online versus offline teaching and learning post-COVID-19 lockdown. *J. Environ. Sustain.*, **15** (3) : 23 - 62.

SMART, K. L. AND CAPPEL, J. J., 2006, Students' perceptions of online learning: A comparative study. *J. Inf. Technol. Educ. Res..* , **5** (1) : 201 - 219.

WAHYUNI, D., ARIFUDDIN, A. AND PUTERA, L. J., 2022, Students' perception of learning english through hybrid learning (online and offline). *AS-SABIQUN*, **4** (5) : 1178 - 1195.