COMPARISON OF PERCEPTION AMONG ONLINE AND OFFLINE LEARNERS

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Abstract

Distance education in traditional mode involves a lot of logistic requirements from both teacher and learner front as it involves exchange of hard copies of resource material, assignments, examinations and attending real time contact sessions. This study attempts at investigating whether an online mode of distance education can either replace or supplement the existing practice. Accordingly, the study involved offering a distance course to learners in offline mode and online mode. Various parameters on perception of learners, their performance and learning experiences were elicited through a structured instrument covering 40 respondents in offline mode and 18 respondents in online mode. The study revealed that the offline learning and online learning are at par with regard to learning and perception. In case of self-assessment the Knowledge acquired in the programme is very good in case of online learners (72.2%). In view of the logistic convenience in online learning and as there is no compromise in the quality of learning and learner performance, online learning can be a potential player in promoting distance education in future.

Key words: *Perception, Distance education, Online mode, offline mode*

Introduction

Education is an important process to transfer the wisdom to future generations. Shifting paradigm of teacher from 'knowledge provider' to 'knowledge facilitator' has changed the very outlook of teaching and learning. In India, due to ever-growing population, imparting high quality education in general and agricultural education in particular is a gigantic task. There is a need to expand the knowledge base of facilitator / faculty / teacher / instructor in agriculture higher education. There are several governmental initiatives to enhance the performance of faculty through training and distance mode of education. It is a foundation for teacher training programs in terms of the inclusion of technological resources for education. To this end it's convenient to put interest into those needs that teachers express regarding the adoption of the new educational paradigm: ICT training, curricular adaptations, infrastructure improvement, etc. Making educational programs for the incorporation of technological resources that attend to the specific needs of each region. For ensuring quality of education teachers are providing with training to develop their ability to keep pace with changes and develop their vocational and thinking abilities. Teaching techniques is introduced to help teachers to use new sources of knowledge (Miao et al, 2016). Distance education is becoming more prevalent and is increasingly becoming a dominant form of education for adult learners as it continues to transform due to improvement and advancement in telecommunication technologies (Chin, 2019). In recent past, it is observed that the learning process in higher education has undergone a transition towards open mode with e learning growing at 14 times the pace of conventional distance learning. The modern developments in Information and Communication Technology (ICT) like social media, open educational resources, knowledge access through internet video formats and open access to electronic learning-based courses in agriculture education have taken place during the last decade. This technological advancement in higher education indicate that ICT can be used as an effective mediator to facilitate teaching and learning process compare to conventional teaching and learning process. These developments made it mandatory to provide well-made and well-directed content towards enhancing teaching competency among faculty in adopting modern teaching methodologies. The National Academy of Agricultural Research Management (NAARM), an organization under Indian Council of Agricultural Research (ICAR) has developed methodologies to develop technology enabled digital content in agricultural education and implemented a distance mode of training through online and offline learners. Thus, a study was undertaken to compare the perception among online and offline learners with the objective to study the methodology of learning process adopted among online and offline learners.

Materials and Methods

To gain a deep insight into the topic a descriptive research design was adopted for the present investigation. The present study was conducted during 2016 among the faculty of selected Agricultural Universities who were preferred to join the course on Enhancement of Teaching Competency through online and offline mode, which was offered by NAARM. It is necessary to evaluate the effectiveness of Technology Enhanced Learning (TEL) as it can be replicated in entire NARES (National Agricultural Research Education System). The study involved an analysis of both online and offline learners through distance education. It was a one-month course organized for 58 nominated faculty of six agricultural universities. A disproportionate sample of 40 and 18 respondents were selected randomly from offline mode and online mode respectively. Thus, a total of 58 respondents were selected for the study. For the purpose of analysis of this case study, a well-structured questionnaire has been prepared with various parameters. It was one of the major factors that among offline and online learner's majority of them were male respondents and Assistant professors. The process involved in evaluation of learning process under both offline and online mode are shown in Fig. 1 and Fig. 2

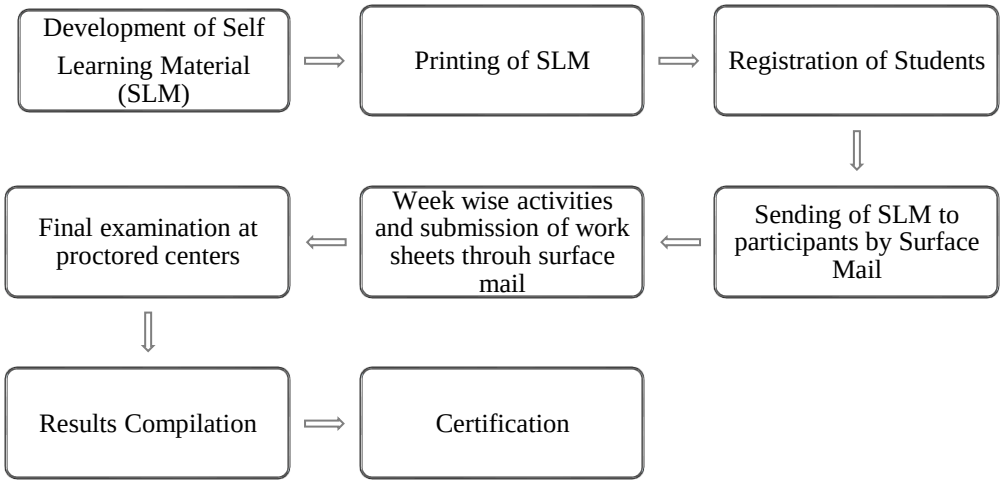

Fig. 1 Process flow in offline mode

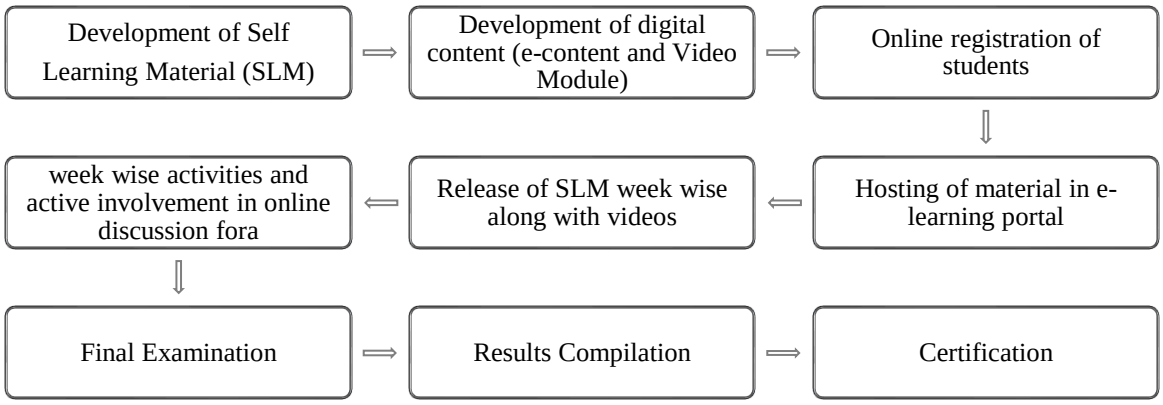

Fig. 2 Process in online mode

Results and Discussion

The studies involved comparative perception of online and offline methods, considering the factors of how the learners perceived their learning experiences and their performances through activities like assignments and quizzes. The detailed parameter wise analysis is given below.

3.1. Self-Assessment

Self-assessment is an introspective process, it is one of the aids in self-evaluation, along with self-verification and self-enhancement. An opinion-based evaluation revealed that majority of the respondents (57.5%) felt very good level of skill/knowledge at the end of programme compared to the level of skill/knowledge at the start of the programme (2.50%). Compared to offline learners, online learners put very good effort. Knowledge acquired in the programme is very good in case of online learners (72.2%). Concepts through this course has no clarity in fundamental principles in both the cases. An additional objective was to develop skills related to design of new educational practices, which include assessment for learning (Badia and Chumpitaz – Campus, 2018).

Table 1. Distribution of the respondents according to their self-assessment

Sl. No.	Statements	Offline (N=40)					Online (N=18)				
		Poor	Fair	Satis-factory	Very Good	Excellent	Poor	Fair	Satis-factory	Very Good	Excellent
1.	Your level of skill / knowledge at the start of course	3 (7.5)	17 (42.5)	18 (45.0)	1 (2.5)	1 (2.5)	1 (5.6)	1 (5.6)	12 (66.6)	3 (16.6)	1 (5.6)
2.	Your level of skill / knowledge at the end of course	0	2 (5.0)	7 (17.5)	23 (57.5)	8 (20.0)	0	0	1 (5.6)	13 (72.2)	4 (22.2)
3.	Level of effort you put into the course	0	5 (12.5)	13 (32.5)	19 (47.0)	3 (7.5)	0	0	4 (22.2)	13 (72.2)	1 (5.6)
4.	Job relevance of the information /knowledge acquired in the programme	0	2 (5.0)	6 (15.0)	20 (50.0)	12 (30.0)	0	0	2 (11.1)	7 (38.9)	9 (50.0)
5.	Clarity in fundamental principles and concepts through this course	0	0	14 (35.0)	16 (40.0)	10 (20.0)	0	0	4 (22.2)	7 (38.9)	7 (38.9)
6.	Usefulness of whatsapp group formed	1 (2.5)	0	3 (7.5)	16 (40.0)	17 (42.5)	0	0	2 (11.1)	9 (50.0)	7 (38.9)

(Values in parenthesis indicate percentage)

3.2. Media Usage Pattern

In e-learning the delivery hardware can range from desktop or laptop computers to tablets or smart phones, but the instructional goal is to support individual learning or organizational performance goals (Clark, & Mayer 2016). However, in the present study (Fig 3(a) and Fig 3(b)), majority of learners preferred desktop/laptops in both offline/online mode, compared to the use of smart phones/tablets. Since the mobile revolution is in boom, it is expected that these numbers go high in the future.

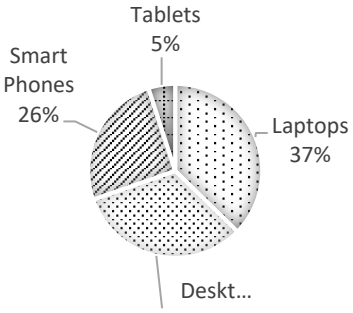

Fig 3(a).offline(n=40)

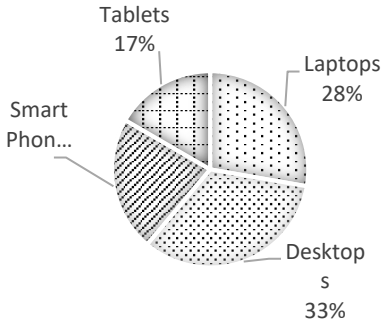

Fig 3(b).Online (N=18)

Fig 3. Distribution of the respondents according to their media usage pattern

3.3. Course Involvement Pattern

Various research studies revealed that Classroom teaching mode is limited by time and place. Usually, a class has 45 minutes. However, according to relevant research, it is shown that people's concentration time is only 12-15 minutes at most. Further the students face lack of timely interaction and information feedback between teachers and students (Li & Shen, 2019).Some studies suggest that there is a trend that learners who excelled in the course spent less time (West, Rosser, Monani & Gurak, 2006). Time spent on course is thus considered for the study to check if there is any variation in both offline and online learning. As seen in Fig 4, the pattern of time spent is same among both learners though more percentage of offline learners spent 6-8 hours/week whereas online learners spent 4-6 hours/week. In case of online, the time spent by the learners i.e., 2-4 hours/week and 6-8 hours/week were in equal proportion.

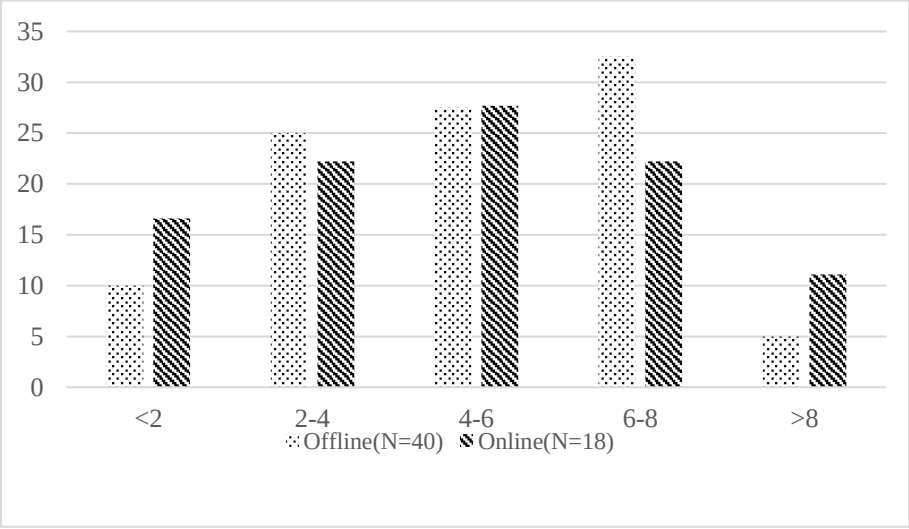

Fig 4. Distribution of the respondents according to their Course Involvement Pattern

3.4. Perception about Resource material

To enhance effective learning and teaching, development of quality teaching and assessment materials as well as designing learning activities are very essential Lo, Lin, Chan, Pui & Narain, 2016). Since there is no readily available material in hard copy format, online learners have the need to login to read and take part in activities like quizzes. Hence the material administered has to cater to the needs of learners in both the formats. The data in Fig 5 revealed that in both the cases clarity of the resource's material was very clear for majority of the respondents. Basically, compared with traditional courses, online courses are not easily affected by region, space and progress.

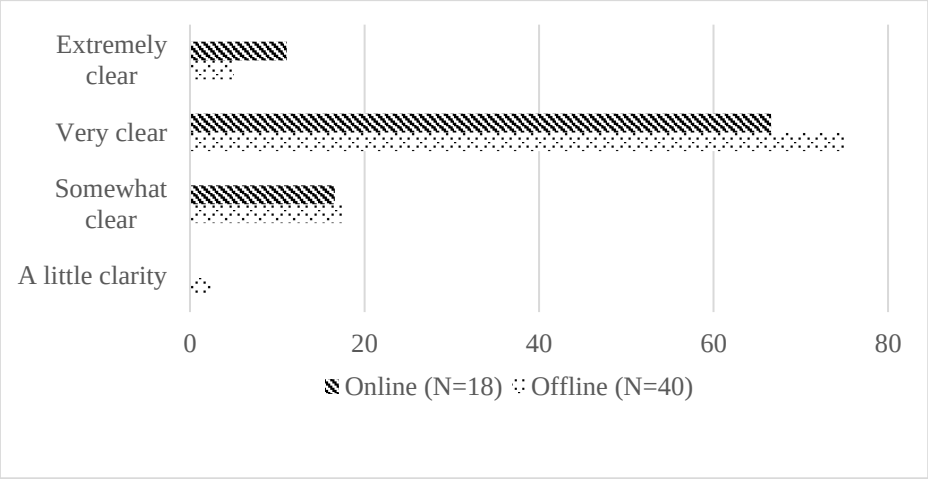

Fig 5. Distribution of the respondents according to their Perception about Resource material

3.5. Perception about Course Activities

With reference to the data in Table 2majority of the offline learners said that assignment topics given by the instructor was related to the course content but online learners highly preferred that contribution of assignments to my learning. None of the learners said that very low and low level of contribution of assignments to their learning and assignment topics were related to the course content. Preparing more team-based assignments and activities so learners can be more actively involved in class and team discussions (Qiu, 2019).

Table 2. Distribution of the respondents according to their Perception about Course Activities

Sl. No.	Statements	Offline (N=40)					Online (N=18)				
		Very low	Low	Medium	High	Very High	Very low	Low	Medium	High	Very High
1.	Contribution of assignments to my learning	0	0	16 (40.0)	22 (55.0)	2 (5.0)	0	0	3 (16.6)	12 (66.6)	3 (16.6)
2.	Time allotted for assignment submission	0	2 (5.0)	23 (57.5)	13 (32.5)	2 (5.0)	0	2 (11.1)	4 (22.2)	9 (50.0)	3 (16.6)
3.	Relevance of the assignment topics to the course content	0	0	9 (22.5)	25 (62.5)	6 (15.0)	0	0	2 (11.1)	11 (61.1)	5 (27.7)
4.	Ease in submission of Assignments	0	2 (5.0)	11 (27.5)	21 (52.5)	6 (15.0)	0	0	3 (16.6)	10 (55.5)	5 (27.7)

(Values in parenthesis indicate percentage)

3.6. Perception about Course Learning Experience

The experiences of learners are evaluated over a scale of 1-5 for both the methods of instruction. Factors like level of difficulty, usefulness, improvement in communication skills, quality and networking were compared, as shown in Table 3. In general, there is a very positive feedback on all these parameters. However, Online learners have given more positive feedback which may be due to more ease and convenience of learning. The structure of the course and attitudes it promoted toward online learning, computer-based instruction, and self-regulated learning traits and the Web-based course management system (Jaggars & Bailey, 2010).

Table 3. Distribution of the respondents according to their Perception about Course Learning Experience

Sl.no	Statements	Offline (N=40)					Online (N=18)				
		Very Low	Low	Medium	High	Very high	Very Low	Low	Medium	High	Very high
1	Level of difficulty of course	1 (2.5)	2 (5.0)	24 (60.0)	10 (25.0)	3 (7.5)	0	0	10 (50.0)	7 (38.8)	1 (5.5)
2	Course structure arrangement	0	0	12 (30.0)	21 (52.5)	7 (17.5)	0	0	1 (5.5)	14 (77.7)	3 (15.0)
3	Usefulness in applying the acquired knowledge, concepts, principles and theories from the course	0	0	7 (17.5)	26 (65.0)	7 (17.5)	0	0	3 (16.6)	8 (44.4)	7 (38.8)
4	Improvement in my communication due to this course	0	0	10 (25.0)	27 (67.0)	3 (7.5)	0	0	1 (5.5)	11 (61.1)	6 (33.3)

5	Enhanced networking among all participants	0	2 (5.0)	15 (37.5)	17 (42.5)	6 (15.0)	0	2 (11.1)	4 (22.2)	7 (38.8)	5 (25.0)
6	Overall quality of the course content	0	5 (12.5)	3 (7.5)	23 (57.5)	9 (22.5)	0	0	1 (5.5)	12 (66.6)	5 (27.7)
7	Overall course content is above my current skills	0	1 (2.5)	13 (32.5)	21 (52.5)	5 (12.5)	0	0	3 (16.6)	11 (55.0)	4 (22.2)

(Values in parenthesis indicate percentage)

3.7. Perception about Course Facilitator / Teacher / Instructor

Success of any distance or online course depends on the extent of student engagement and the ease of learning with interaction. The counselling, guidance and addressing of doubts or clarifications form important component in the success of any such course. In the present study students were provided access to teacher through alternate modes like social media, web and phone. These efforts have resulted in clear positive outlook about the teacher support as shown in Table 4 where majority of learners were positive about the effectiveness and access to the course facilitators, whenever needed.

Table 4. Distribution of the respondents according to their Perception about Facilitator / Instructor / Teacher

Sl. No.	STATEMENTS	Offline (N=40)			Online (18)		
		Yes	No	Can't say	Yes	No	Can't say
1.	Facilitator communicated effectively	38 (95.0)	0	2 (5.0)	16 (88.8)	0	2 (11.1)
2.	Facilitator followed the course outline	39 (97.5)	0	1 (2.5)	17 (94.4)	0	1 (5.5)
3.	Facilitator stimulated my interest in the subject matter	33 (82.5)	0	5 (12.5)	14 (77.7)	0	4 (22.2)
4.	Facilitators were available for consultation (Online, WhatsApp, face to face or telephone)	36 (90.0)	2 (5.0)	4 (10.0)	15 (83.3)	0	3 (16.6)
5.	Feedback received from facilitator was very helpful.	35 (87.5)	0	5 (12.5)	14 (77.7)	0	4 (22.2)

(Values in parenthesis indicate percentage)

3.8. Perception about Evaluation Pattern

Online educators (i.e., instructors, instructional designers, administrators) in particular have had a specific interest in evaluation because critics have questioned the merit or worth of online education from its inception (Allen & Seaman, 2017; Jaschik& Lederman, 2014).

As the method of distance and online courses are offered simultaneously for the first time in agricultural education, learners' opinion about the evaluation procedure was elicited. More than 90 per cent of the learners concurred with the evaluation pattern adopted for the course in both the modes (Fig 6). As per the data given below in the Fig 6 most of the offline and online learners are agreed with the evaluation procedure. It is worthy to note that none of the learners strongly disagreed with the evaluation procedure.

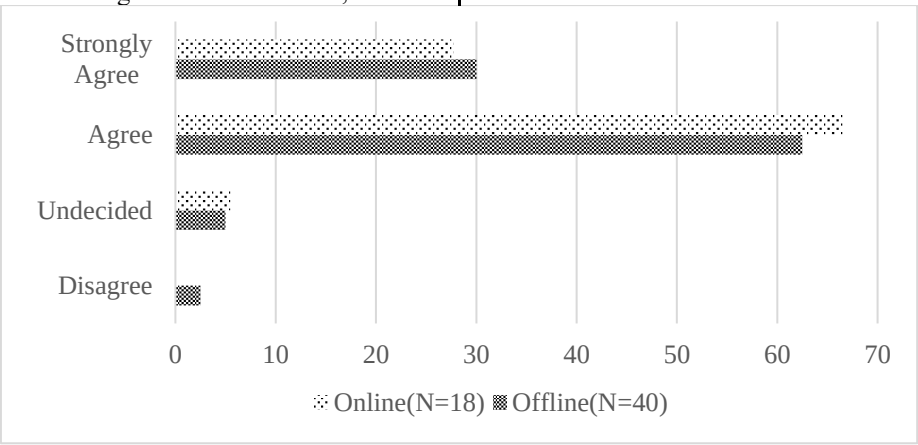

Fig 6. Distribution of the respondents according to their Perception about Evaluation Pattern

Conclusion

Compared to offline learners, online learners put very good effort in case of self-assessment. However, in the present study majority of learners preferred desktop/laptops in both offline/online mode, compared to the use of smart phones/tablets. The main motive for participation in distance/online courses is cited to be acquiring skills. None of the learners said that very low and low level of contribution of assignments to their learning and assignment topics were related to the course content. However online learners have given more positive feedback which may be due to more ease and convenience of learning. The study concluded that involving both online and offline modes for offering a similar course conclusively proved that online learning can replace traditional mode of distance educational practices for higher reach of learners and effective usage of resources.

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