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21. Effectiveness of Seminar and Webinar in Learning Experience: An Empirical Analysis

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Abstract

The purpose of this study is to analyse the effectiveness of online mode of instruction (webinar) vis-à-vis offline mode of instruction (seminar) and the possible policy implications therein. This Study has been conducted by using the primary data collected from 253 scholars ranging from students to professors through questionnaire. Various factors were taken into consideration for investigation based on review of literature. The results throw light on why scholars favour one mode of learning over the other. This study has repercussions on policy implications concerning effectiveness of distance education involving intergenerational age differences on learning outcome and experience.

Keywords: Online and Offline mode of learning, Seminar, Webinar, Intergenerational age differences, learning outcome

Introduction:

In the backdrop of Information Communication Technology (ICT) revolution the entire world is witnessing a shift in the learning mechanism (Buchanan, (1999), Peters, O. (2000)) Traditional methods are being supplemented with ICT platforms to increase the efficiency of learning outcomes (Internet Society, 2016, Kumar, B. A., Goundar, M. S., & Chand, S. S. 2020). There are studies (Wan Faezah, A., & Nor Aini, A. R., 2012) which support combining traditional methods with ICT platforms results in better learning outcomes. To be more specific active supplementation of traditional methods with ICT is found to enhance critical thinking skills (Wang, Q., Güzer & Caner, 2014) as well as play a role in enhancing communication skills. However, given the increasing trend of exposure to online learning, there is indeed a requirement to develop new techniques to make the same efficient (Bott & Edwards, 2014). In this context, this paper tries to analyse the effectiveness of Online learning (webinar) vis a vis offline learning (seminar) Comparative analysis of these two modes of learning does have practical relevance in the backdrop of many Indian Universities offering Bachelor and Master Programmes in online mode. The study also gives an opportunity to evaluate if differences in age do affect learning outcomes of individuals who undertake these online courses

Literature Review:

Education India Journal: A Quarterly Refereed Journal of Dialogues on Education, A UGC-CARE List Journal, ISSN 2278-2435, Vol. 10, Issue-2 May-2021. Page 247

There are several studies which have concluded that use of technology in class does ensure more efficient learning outcomes (Gomleksiz,2004). The use of technology also gives ample scope for having reflection about the content among the scholars (Susman,1998). Marcinkiewicz (1994) has identified the prominent factors which determine the use of Computers by teachers in their class room. However, learning is a two way process, it not only depends upon the familiarity of teachers in use of technology, but it also depends upon the ease with which the students are able to access and utilise the same to enhance their learning experience (ACSD, 1999). According to some studies, it was found that, current generation learners (Harris & Rea, 2019) were in more ease with regards to using technology than teaching facilitators (Bousbahi & Alrazgan, 2015). Since even in India, as online courses are gathering more leverage, it becomes pertinent to analyse as to whether the results of the above study holds true in context of Indian learners and to analyse whether it is conducive in the backdrop of Indian Policy framework. Moreover, in a multilingual country like India, it would be interesting to analyse what would be chosen as lingua franca for dispersion of knowledge via online mode, given the plethora of languages that India has. In the plain sight, English would seem to be the first choice. However, there are several studies (Xiong (2008) Sabti and Chaichan (2014)) which have identified English as a prominent barrier in using ICT for E-learning. In this backdrop, this study tries to analyse the acceptability of English among the scholars in the context of online learning. There are studies which have analysed the factors affecting online studies (Buchanan, 1999; Draves, 2000; Liu & Ginther, 1999).

Though teachers do play an important role in promoting use of technology in teaching pedagogy (Alharbi & Drew, 2014, Siyam, 2019) the perceived usefulness (Davis, 1989; Lai & Savage, 2013) of the learning technology plays an important role in determining the usefulness of the same, which is in turn is affected by external variables(Shih-Chih et al., 2011). Thus, this study tries to analyse the perceived usefulness among the learners with respect to online and offline platforms, along with external variables in Indian context. It is to be noted that, in context of India there are very few studies which are based on empirical and inferential approach which have been undertaken for making a comparative analysis between online and offline mode of learning. The present study tries to address the same issue.

Specific objectives of the study:

- To analyse the impact of intergenerational differences in learning experience.
- To analyse whether the area and infrastructure of residence among the scholars does play an important role in influencing their chosen mode of learning.
- To analyse whether any particular stream, of students are more adept in choosing one form of learning over the other.
- To analyse whether the choice of platform has an impact on the medium of instruction.

Hypothesis:

- Socio-Academic Variables like residence, designation, stream of learning & medium of instruction are having influence on preference for the mode of learning.
- Intrinsic factors like ease of access, registration process, hands on experience, academic networking along with clarity of understanding are having influence on selection for mode of learning.

Methodology of the Study:

The study is based on analysis and interpretation of primary data. The investigator has made use of online survey method to collect the data via google forms. The questionnaire was prepared and sent via electronic mail to 1643 scholars belonging to Science and Humanities streams who had recently attended E-Workshops conducted by the Departments of Davangere University. Out of 1643, 253 scholars (15.39%) have responded. The questionnaire was prepared to collect information about 13 variables. The reliability of the questionnaire was established via Cronbach's alpha which reflected a scale reliability coefficient of 0.76 which does reflect acceptable reliability. 'Chi- Square' test was used test the significance of association between the socioeconomic attributes of the respondents and their preference for seminar or webinar.

Results and Discussion

Preference for one mode of learning over the other is expected to be influenced by various socio-academic and intrinsic factors. Socio-academic and intrinsic factors which are likely to influence the choice of mode of learning have been selected based on the experience gained from the review of literature.

Table-1: Socio-academic attributes of respondents and their preference for mode of learning

Socio-Academic Background	Sub-Divisions	Seminar	Webinar	Total	Chi-Square Value
Residence	Metro	15 (50.0)	15 (50.0)	30(100.0)	10.083**
	Urban	72 (63.0)	41(36.0)	113(100.0)	
	Semi-Urban	8(32.0)	17(68.0)	25(100.0)	
	Rural	42(49.0)	43(51.0)	85(100.0)	
	Total	137(54.0)	116(46.0)	253(100.0)	
Designation	Students	28 (40.0)	42(60.0)	70(100.0)	10.577**
	Research Scholars	40(58.0)	28(42.0)	68(100.0)	
	Asst. Professors	51(56.0)	40(44.0)	91(100.0)	
	Associate Professors & Professors	18(75.0)	06(25.0)	24(100.0)	
	Total	137(54.0)	116(46.0)	253(100.0)	
Stream of Respondents	Social Sciences & Literature	62(58.0)	45(42.0)	107(100.0)	2.36
	Commerce and Management	07(39.0)	11(61.0)	18(100.0)	
	Science and Technology	68(53.0%)	60(47.0)	128(100.0)	
	Total	137(54.0)	116(46.0)	253(100.0)	
Medium of Instruction	English	73(48.0)	79(52.0)	152(100.0)	5.75**
	English & Regional Language	64(63.0)	37(37.0)	101(100.0)	
	Total	137(54.0)	116(46.0)	253(100.0)	

Note: Figures in parenthesis are percentage to respective row total

** indicates significance at 5 percent probability level

Primary data collected from the sample respondents pertaining to the socio-academic attributes and their preference for mode of learning have been consolidated in table-1.

Residential status of the respondents is expected to have greater influence on the choice of mode of learning as there is significant difference between metropolitan cities and rural area with respect to network connectivity, tele-density and other online mode learning environment. In the survey results,

it was interesting to observe that the percentage of respondents having preference for webinar were found to be relatively more among semi-urban (68%) and rural (51%) residents compared to the respondents from Metro and urban places. Preference for webinar over seminar was found to be lowest among respondents from urban area (36%) followed by metropolitan cities (50%). To arrive at a conclusive result for this anomaly, a separate and detailed investigation about such preferences needs to be undertaken. In order to test the statistical significance of association between the preference for mode of learning and residential status of the respondents, chi-square value has been calculated. The calculated chi-square value found to be statistically significant at 5 percent probability level. Thus, the null hypothesis could be rejected at 5 percent probability level. Hence, it could be inferred that the residential status does have significant influence on the preference for the mode of learning.

Designation of the respondents is another important variable which could influence the preference for mode of learning. Designation not only indicates the position in the profession, but it is closely associated with the age. Students are representing the youngest age group and Associate Professors and Professors are representing the most senior age group. It was observed that the percentage of respondents having preference for webinar were found to be relatively more among students (60%), followed by Assistant Professors (44%) & Research Scholars (42%) compared to Associate Professors & Professors (25%). Preference for seminar over webinar was found to be highest among Associate Professors & Professors (75%), who belonged to the oldest age group. This reflects that younger generation of learners are more adept in using technology for supplementing their learning. The association between the designation and preference for mode of learning was found to be statistically significant as per the chi-square test results. Hence, it could be inferred that the intergenerational differences does have significant influence on the preference for the mode of learning.

Stream of learning could be considered as another important variable which is expected to influence the mode of learning as the academic environment and learning process is different across various streams of learning. It was observed that the percentage of respondents having preference for webinar were found to be relatively more among scholars belonging to Commerce & Management (61%), followed by Science & Technology (47%) and Social Sciences & Literature (42%). These results were not along expected lines, as we had hypothesized that scholars belonging to science stream would be more inclined towards online mode of learning. Even Chi Square results found the

association between stream of scholars and preference for mode of learning to be statistically insignificant at 5 percent probability level.

In programmes where medium of instruction was English, 52% of respondents preferred webinar over seminar & in the programmes where medium of instruction was a combination of English and regional language, preference for seminar was relatively more to that of webinar. This was reaffirmed by calculated chi-square test, which reflected that, the association between the medium of instruction in the programme and the preference for mode of learning to be statistically significant at 5 percent probability level. Thus, we could infer that medium of instruction in the programme has its influence on preference for mode of learning.

There are many intrinsic factors of learning which could influence on mode of learning. Based on the review of existing literature, some of the most important intrinsic factors which could influence on the preference for mode of learning has been selected and they have been cross classified with mode of learning and consolidated in Table 2. With regards to Ease of access, out of 167 respondents who opined that there was ease of access to learning platform, majority favoured webinar. Thus, we could infer that, ease of access is better in webinar as compared to seminar. Moreover, among 86 respondents who opined that, they did not have ease of access to learning platform, majority were from seminar. It means that ease of access is better in webinar as compared to seminar. Since calculated chi-square value is significant at 1% probability level, we could infer that, presence of ease of access has greater influence on choosing the mode of learning.

Out of 253 respondents, 163 respondents found the registration process to be simple and 90 respondents opined that, they faced hurdles in the same. Out of 163 respondents who found simplicity in registration, maximum were from seminar. However, Chi-Square value calculated to test the significance of association between the relationship of registration process and mode of learning was not found to be statistically significant. With regards to Registration fee, among 253 respondents 137 opined that the fee was high. Among them, majority of them were from seminar. Interestingly enough, even among the respondents, who opined that, the fee was on the lower side, majority of the respondents were from seminar. Now, on the surface it may seem contradictory, but the association between registration fee and preference for mode of learning is not statistically significant.

Table 2: Intrinsic Factors of Learning Platforms Associated with Respondents' Preference for mode of learning

Intrinsic Factors	Sub-Divisions	Seminar	Webinar	Total	Chi Square Value
Ease of Access	Present	80(47.0)	87(53.0)	167(100.0)	7.719*
	Not Present	57(66.0)	29(34.0)	86(100.0)	
	Total	137(54.0)	116(46.0)	253(100.0)	
Registration Process	Simple	87 (53.0)	76(47.0)	163(100.0)	0.11
	Faced Hurdles	50 (55.0)	40 (45.0)	90(100.0)	
	Total	137(54.0)	116(46.0)	253(100.0)	
Registration Fees	High fees	76(55.0)	55(45.0)	137(100.0)	1.63
	Less fees	61(52.0)	61(48.0)	116(100.0)	
	Total	137(54.0)	122(46.0)	253(100.0)	
Hands on Experience	Present	100(64.0)	54(36.0)	154(100.0)	18.430*
	Absent	37(37.0)	62(63.0)	99(100.0)	
	Total	137 (54.0)	116(46.0)	253(100.0)	
Academic Networking	High Possibility	100(58.0)	71(42.0)	171(100.0)	3.98**
	Low possibility	37(45.0)	45(54.0)	82(100.0)	
	Total	137(54.0)	116(46.0)	253(100.0)	
Clarity over Subject	High	102(59.0)	72(41.0)	174(100.0)	4.48**
	Low	35(44.0)	44(56.0)	79(100.0)	
	Total	137(54.0)	116(46.0)	253(100.0)	

Note: Figures in parenthesis are percentage to respective row total

* and ** indicates significance at 1 and 5 percent probability level respectively

When we analysed hands on experience, among 253 respondents, 154 respondents reported that, they did get hands on experience. Most of these respondents favoured seminar over webinar. Among the 99 respondents who opined that they could not get hands on experience, majority of them were critical of webinar. This was on expected lines, as seminar does provide greater chance to get hands on experience for the participants. Chi Square value to test the association between exposure to hands on experience and preference for mode of learning was found to be statistically significant at 1% probability. Thus, we can infer that, one of the major drawbacks of online learning mode is that it lacks personal hands on experience. Out of 253 respondents, 171 respondents stated that, there was high possibility of academic networking by participating in academic events. Majority of the

respondents acknowledged that, seminar was more conducive for academic networking compared to webinar. Among 82 respondents who felt that there was low possibility of academic networking, majority of them acknowledged that webinar was not conducive for the same. Chi-Square value to test the significance between the relationship concerning possibility of academic networking and preference for the mode of learning was found to be statistically significant at 5% probability.

When respondents' perception towards clarity over subject was analysed, 174 respondents acknowledged that there was clarity over subject, of whom majority favoured seminar. Among the other 79 respondents, who stated that, they could not get clarity over subject, majority of them were critical towards webinar. The test result clearly indicates the significant association between clarity over subject and mode of learning. Thus, we could infer that, clarity over subject would be better in seminar as compared to webinar.

Policy Implications:

The policy implications from the study are as follows:

- From the study we observe that, younger generation of learners prefer online mode of learning (Webinars) over offline mode of learning (Seminars) to enhance their knowledge. This, indeed, supports the Government's initiatives like Swayam Portal and other online learning Platforms established by universities with the aim of conducting distance learning programmes via internet. The study also found out that webinars are more popular among semi-urban and rural scholars. A strong reason for the same may be attributed to greater digital penetration due to Digital India Programme.
- According to the study, it was observed that, offline mode of learning (seminars), is popular among scholars, mainly due to personal hands on experience, it helps in getting more clarity over the subject along with provides ample opportunity for scholars to build academic network with fellow peers. Thus, this further reinforces the need for conducting National and International Seminars which are actively being funded by UGC, ICSSR and the like.

Limitations:

The limitations of the following study are as under:

- Generally speaking, online programmes would be more popular among urban scholars due to better availability of network; However the study found it otherwise. This may also be due to the reason that, rural scholars studying in urban settings may have identified themselves as belonging to rural areas.

- The data was collected in 2021 amidst pandemic, so it might have had influence among the opinion of the scholars.

Conclusion

Learning is a lifelong process. In the competitive world that we are living in, upgrading our skills and knowledge is very much relevant. With advent of modern inventions and innovations, Information communication technology has revolutionised academic pedagogy. The growing importance of online learning platforms is reaffirmed from the rising trend of offering online courses for Masters and Bachelors programs by reputed Indian Universities. In this context, it becomes pertinent to analyse, as to what extent, online mode of learning can substitute offline mode of learning. In this study, seminar was to be representative of offline mode of learning & webinar was to be representative of online mode of learning. The study was conducted with an objective of analyzing the effectiveness of offline vis-à-vis online mode of learning by considering socio academic and intrinsic factors affecting the same.

At a superficial level, webinar was preferred over seminar for its ease of access among the respondents. However, an interesting trend which was revealed in the study with regards to webinar was, online mode of learning was highly favored by younger generation of learners relative to older generation of learners, which does have significant policy implications. At the same time, seminar was preferred among the respondents for gaining personal hands on experience which enhanced their possibility of building academic network along with helping them to get a greater clarity over the subject. From this we could infer that, traditional method of learning has its own significance and relevance which cannot be completely substituted by online mode of learning. All in all, in a nation, wherein there is a need for optimum utilization of scarce resources to foster human capital formation, both offline and online mode of learning have their own significance and role.

References:

American centre for the study of Distance education (1999). Critical success factors for online learning, [online], Retrieved 2nd March 2021 from <http://www.ed.psu.edu/acsde/researchsummaries.htm>

Alharbi S., & Drew, S. (2014). Using the technology acceptance model in understanding academics' behavioural intention to use learning management systems. *International Journal of Advanced Computer Science and Applications*, 5(1), 143–155.

Baturay, M. H., Gokcearslan, Ş., & Ke, F. (2017). The relationship among pre-service teachers' computer competence, attitude towards computer-assisted education, and intention of technology

acceptance. *International Journal of Technology Enhanced Learning*, 9(1), 1–13. <https://doi.org/10.1504/IJTEL.2017.084084>

Bousbahi, F., & Alrazgan, M. S. (2015). Investigating IT faculty resistance to learning management system adoption using latent variables in an acceptance technology model. *The Scientific World Journal*, 2015, 1–11. IAFOR Journal of Education: Technology in Education Volume 8 – Issue 2 – 2020 102, <https://doi.org/10.1155/2015/375651>

Blocher, J. M., Demontes, L. S., Willis, E.M. & Tucker, G. (2002). ‘online learning examining the successful studentprofile’, *Journal of Interactive Online Learning* [Electronic], Vol.1, No.(2), [online], Retrieved April, 2021 from <http://www.nco1r.org/jio1/issues/PDF/1.2.2.pdf>

Bocchi, J., Eastman, J.K. & swift, C.O. (2004). ‘Retaining the online learner: Profile of student in an online MBA program and implications for teaching them’, *Journal of Education for Business*, 19 (4), 245-253.

Buchanan, E.A. (1999). ‘Assessment measures: Pretest for successful distance teaching and learning’, *Journal of Distance Learning Administration* [Electronic], 2(4), Retrieved 23 April 2021 from <http://www.westga.edu/~distance/buchanan24.htm>

Davis, F. (1989). Perceived usefulness, perceived ease of use and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>

Gomleksiz, M.N. (2004). Use of Education Technology in English Classes, *The Turkish Online Journal of Educational Technology*, Volume 3, Issue 2, Article 11.

Güzer, B., & Caner, H. (2014). The past, present and future of blended learning: An in depth analysis of literature. *Procedia - Social and Behavioral Sciences*, 116, 4596–4603. <https://doi.org/10.1016/j.sbspro.2014.01.992>

Harris, A. L. and Rea, A. (2019). "Web 2.0 and Virtual World Technologies: A Growing Impact on IS Education," *Journal of Information Systems Education*: Vol. 20: Iss. 2. Retrieved 15 April 2021 from <https://aisel.aisnet.org/jise/vol20/iss2/3>.

Internet Society (2016). Mobile Internet Usage Trends in Asia-Pacific– APAC Bureau, 9 Temasek Boulevard, #09-01 Suntec Tower 2, Singapore 038989 www.internetsociety.org Retrieved 17th May 2021 from <https://www.internetsociety.org/wpcontent/uploads/2017/08/Mobile20Internet20Usage20Trends20in20Asia-Pacific.pdf>

Kumar, B. A., Goundar, M. S., & Chand, S. S. (2020). A framework for heuristic evaluation of mobile learning applications. *Education and Information Technologies*. doi:10.1007/s10639-020-10112-8

Liu, Y. & Ginther, D. (1999). Cognitive style and distance education. *Journal of Distance Learning Administration* [Electronic], Vol.2 (3), Retrieved April 20, 2021 from <http://www.westga.edu/~distance/Liu23.htm>

Marcinkiewicz, H.R. (1994). Computers and teachers: Factors Influencing Computer use in the classroom. *Journal of Research on Computing in Education*, 26, 220-237.

Peters, O. (2000). The flexible and virtual university: Pedagogical models. In: *Open and Distance Learning in The New Millennium*, IGNOU: New Delhi.

Sabti, A.A. and Chaichan, R.S. (2014). Saudi high school students' attitudes and barriers toward the use of computer technologies in learning English, *Springerplus*. 2014; 3: 460.

Shih-Chih, C., Shing-Han, L., & Chien-Yi, L. (2011). Recent related research in technology acceptance model: A literature review. *Australian Journal of Business & Management Research*, 1(9), 124-127.

Siyam, N. (2019). Factors impacting special education teachers' acceptance and actual use of technology. *Education and Information Technologies*, 24(3), 2035-2057.
<https://doi.org/10.1007/s10639-018-09859-y>

Susman, E.B. (1998). Cooperative Learning: A review of factors that increase the effectiveness of cooperative computer-based instruction. *Journal of Educational Computing Research* Vol.18, No.4, pp. 303-322.

Xiong, X. (2008). An investigation of the use of CALL by college English teachers: Perspectives in a Chinese normal University, *Thesis Submitted for Centre for learning Innovation*, Queensland university of Technology. Retrieved 15 May 2021 from https://eprints.qut.edu.au/16645/1/Xiong_Xing_Thesis.pdf

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