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Attitude toward the Use of Information and Communication Technology among Distant Learners



Shubhpreet Kaur
Research Scholar,
Deptt. of Education And
Community Service,
Punjabi University,
Patiala, Punjab, India



Pushpinder Kaur
Associate Professor,
Deptt. of Distance Education,
Punjabi University,
Patiala, Punjab, India

Abstract

Information and communication technology has changed our education system being a boon. In the education system of twenty first century, the technology has been combined classroom instruction with online instruction, moving hand in hand both acts as support system to one another and also restricted frivolous use of paper. Use of information and communication technology is an essential factor for effectiveness of distance learning in modern era of digitalization. That's why it was thought worthwhile to study attitude toward use of information and communication technology among distant learners. For present study a sample of 50 students who have opted distance learning mode for degree of bachelor of education was selected purposively. A standardized scale on attitude toward information and communication technology was used to take data from respondents. In this study researcher intended to compare attitude of distant learners toward use of information and communication technology and found positive attitude among respondents. Results of the study divulged significant difference in attitude of male and female distant learners toward use of information and communication technology. Apart from this, locale and type of job has no significant effect on attitude toward use of information and communication technology among distant learners.

Keywords: Information and communication technology, Distant Learners, Attitude.

Introduction

Twenty first century is the phase of radical build out in which technology is spreading far and wide. Computers, laptops, tablets, internet, blogging and communication are very frequent terms that are used in every educational and societal setup. During such era of technological modernization we cannot confine our classrooms to traditional teaching and learning practice. Hence everyone is being obliged toward use of digitalization in current education structure. Digitalization is a trending locution of present period, delineating the use of technology in its most explicit manner as feasible.

Distance education encircles the flexible educational interaction of students and teachers at different times which are substantially escalated with the help of technology. Distance learning incorporates increased dependence on self instructional learning resources and activities where technologies act as boon to teaching learning process. Distance mode of education in advanced way relies on online instruction, online examination, digital text books, interactive presentations and many more.

Librero (2006) explained that traditional universities and educational institutions are currently using information and communication technology to provide blended learning environments which admixture traditional face to face classroom instructions with distance delivery of teaching.

Attitude is a complex mental state which entails beliefs, feelings, values and dispositions to act in a particular ways or more precisely it is composed of positive or negative views. Attitude can be well defined as a hypothetical construct which represents an individual's degree of like or dislike toward something. Similarly attitude of distant learners toward ICT deals with preference and dispositions toward use of technology in educational process.

Related of Literature

Pant (2005) undertook a descriptive survey study to investigate the attitude of distant learner's regarding multimedia approach for instructions. Sample of the study included 243 distant learners enrolled at Indira Gandhi Open University in various courses using random sampling technique. An attitude scale designed by M. B. Menon (1984) was used to take responses from participants. Results of the study revealed a favourable attitude of participants toward multimedia approach to instruction. Learners have demonstrated good levels of inclination to learn through multimedia approach.

Manzoor (2008) investigated the application of information and communication technology among distant learners with special reference to India by taking a sample comprised of 750 distance learners and 154 faculty members from the Indira Gandhi National Open University, New Delhi, B. R. Ambedkar Open University, Hyderabad and Karnataka State Open University, Mysore. Data was taken on questionnaires designed by investigators. Results reported that three of the universities differed in attitude of students toward information and communication technology. Male learners were found more aware about internet in comparison to female students. Internet use was found more among science students as compared to non- science students.

Noreen et al. (2012) proposed a research study to examine the attitude toward technology interventions among distance learners. A sample of 130 research students was selected for study randomly and questionnaire was administered for data collection. Results of the research indicated the majority of the respondents agreed that use of ICT is necessity for distance learners for educational guidance, contacting with fellows and act as facilitator in distant teaching learning process. Furthermore, maximum students were in favour of using computer in assignments rather than handwritten and many of them prefer to watch educational videos, education blogs and consult digital libraries through online mode. Kaur (2012) intended to explore the attitude toward use of ICT among students at higher level of education. A sample of 50 post graduate students was selected from Punjab University, Chandigarh. Standardized attitude scale was administered for collecting data. Results revealed a high positive attitude of students toward use of information and communication technology and no significant difference was found to exist in attitude of students belonging to arts and science stream toward use of ICT.

Babalola and Babalola (2014) investigated the use of information and communication technology among distance learners. Sample for this study consisted of randomly selected 94 students enrolled in five Faculties encircling Science, Art, Social Science, Agriculture and Education through the Distance Learning Programme at The University of Ibadan, Nigeria. For data collection structured questionnaires, including both open and close ended questions, was administered to selected participants.

Results revealed a majority of the respondents i.e. 97.9 percent possess knowledge about internet use but half of them are deprived of personal internet access. About 47.9 percent of the students agreed with the ease of use and understand the prescribed course materials online. On the other hand, majority of the students strongly disagreed with the use of electronic materials in distance mode of education. Apart from this, findings indicated that 12 percent of participants.

Omosho et al. (2015) explored the use and levels of adoption of information and communication technology among students opted distance learning in a Nigerian University. A randomly sampled sample of 280 distant learners and were administered with questionnaire. Results of the investigation reported that majority of the students responded positively toward availability of ICT facilities in campus. About 65 percent of the distant learners strongly agreed with the fact that the use of ICT in distance learning has improved their level of knowledge and 21 percent of the respondents agreed with the same. Slechtova (2015) explained the attitude of undergraduate students toward use of information and communication technology in education through a study based on sample consisted of 200 regular students belonging to different streams purposively and responses were taken on structured questionnaire. Results vividly indicated differences in group responses. Students from Computer Systems and Applied Informatics showed highest ability in skills, willingness and interest in using ICT in education. On the other hand, students belonging to Travelling and Tourism showed least interest toward use of ICT in educational process. Besides this, Clinical Social Work students were found to possess least skills associated to information and technology among all students.

Mertens (2017) conducted a survey study to evaluate the use of information and communication technology by older adults in Germany focusing on the use of ICT devices and applications. A paper-based questionnaire was used to administer on 5000 with a mean age of 69.17 years. Results provide descriptive insights and inferred that older adults already use modern ICT on a large scale including online banking, navigation, booking tickets, etc., but health-related ICT products and applications have been used less. Investigation of health information usage depicted that older adults rely on doctors and pharmacists. Two thirds of the population was satisfied with general information they got about health. The evaluation of the ergonomic use of ICT devices showed a regular way of using ICT devices in the case of a small display in portrait mode and on the other hand in case of larger displays in portrait and landscape mode was found to be common. Touch input devices are reported to be preferred than keypad operated devices.

Bagon et al. (2018) in a research study intended to compare the leisure and school-related computer use among students in inclusive classrooms including computer use, types of ICT-supported activities, and attitudes toward computer use. a

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sample of 1880 students attending inclusive classes was selected from 47 Slovenian elementary schools were randomly. Results demonstrated that the students with special needs and their peers use computers more frequently for leisure activities than school activities. Compared to their peers, students with SN use computers less frequently and are also more likely to resist computer use. No significant correlation was found to exist between the presence of special needs and a student's desire to use a computer or opinion regarding whether computer use improves learning success. The comparison revealed that male students use computers more frequently than female students and they are reported to use computers more frequently for leisure activities with the belief that computer use improves further learning success.

Significance of the Study

Following the United States and China, India has become the third highest internet consumer of the world. Presently, information and communication technology is being an integral part of educational industry due to its intensive use in admission process to examination including advertisement and result declaration. This way digitalisation of education in modern age proves to be a bonanza to our gradually changing society. It offers fluidity to education system through bringing practical approach, saving time and efforts, transparency and accountability in teaching learning process. Enormous researches have been conducted on the use of ICT, computer and internet in delivering distance education. Most of the researches have reported a positive attitude of undergraduate students, research students and distant learners from degree and diploma courses in Indian and foreigner universities. Therefore, in the present study, the investigator intended to carry out research on attitude of pupil teachers toward information and communication technology, who have opted distant mode of education for teacher training course. Apart from this differences in attitude of participants were studied with respect to gender, type of job and locale. This study was thought to be worthwhile because shaping healthy attitudes of teachers is one of the most important requisite of the educational process in modern era of change and development.

Objectives of the Study

Findings and Discussion

Table 1: Showing Calculated t-values for Attitude toward Information and communication technology among Different Group

S.No.	Group	Mean	Standard Deviation	t-value	Significant / Not Significant
1.	Male	127.17	4.98	3.194	Significant*
	Female	118.	10.96		

Calculated mean, standard deviation and t values for attitude of distant learners toward use of information and communication technology for the comparison on the basis of gender, locale and type of job whether it is in private or government school given

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1. To compare the attitude toward the use of information and communication technology among male and female distant learners
2. To compare the attitude toward the use of information and communication technology among distant learners employed in government and private schools.
3. To compare the attitude toward the use of information and communication technology among rural and urban distant learners.

Hypothesis of the Study

1. There is no significant difference in attitude toward the use of information and communication technology of male and female distant learners
2. There is no significant difference in attitude toward the use of information and communication technology of distant learners employed government and private schools.
3. There is no significant difference in attitude toward the use of information and communication technology of rural and urban distant learners.

Sample for the Study

Sample for this study consisted of 50 distance education students pursuing degree of bachelor of education. Students employed in private and government elementary schools opting distant mode of education for two year training course are included in this study.

Delimitation of the Study

This study is delimited to distance education students pursuing degree of bachelor of education in department of distance education of Punjabi University Patiala. It involves only those pupil teachers who are employed in private and government schools and have opted the distant mode of education for two year B.Ed. training course.

Research Tool

Responses of participants have been taken with the help of Attitude Scale toward Information and communication technology for Teachers designed by Nasrin and Fatima Islahi.

Statistical Procedure

Analysis of data was conducted using statistical procedures like mean, standard deviation and t-test to compare the mean differences in attitude toward information and communication technology on the basis of gender, locale and type of job among distant learners.

		32			
2.	Urban	118.07	9.89	0.748	Not Significant**
	Rural	120.60	11.14		
3.	Government Job	120.07	11.54	0.752	Not Significant**
	Private Job	117.36	8.17		

*at 0.01 level of significance

** at 0.05 level of significance

in table 1. It lucidly indicates that there is a significant difference in attitude of male and female participants toward use of information and communication technology. As it is apparent that there is a noteworthy difference in mean scores of male and

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female distant learners therefore t value comes out to be 3.19. This value is significant at 0.01 level of significance, hence hypotheses 1 is rejected. Male candidates scored more than female candidates.

Calculated t-value for comparison of groups comprising of teachers belonging to rural and urban area is 0.748, which is not significant. Hypothesis 2 is retained as results confirmed that there is no significant difference exists in attitude toward use of information and communication technology among distant learners from rural and urban area.

Apart from this, t value for attitude toward use of information and communication technology among distant learners working as government and private school teachers was calculated to be 0.752 being not significant, suggests retention of hypotheses 3. There is no significant difference found to exist in attitude toward use of information and communication technology in government and private employees.

Conclusion and Suggestions

The results of present study confirmed a significant difference in attitude of distant learners toward use of information and communication technology with respect to gender. Male distant learners have been found to demonstrate better levels of attitude toward using information and communication technology as compared to female participants. A study by Handcock (2014) revealed over 7000 students in Vancouver, Canada reported lower degree of interest in computer science in comparison to males. Cornelia (2007) in an article published in New York Times stated that a geek factor affects interest in computer in both male and female students, but this seems to have more of a negative impact on the female students. Similar results have been reported by Bagon et al. (2018) stating that male students use computers more frequently than female students. Therefore, there is need to aware women and build confidence in them about use of technology as males do.

Moreover, no significant difference in attitude toward use of information and communication technology found with respect to locale i.e. rural or urban and with respect to type of job in which participant is involved i.e. government job or private job. These results revealed advancement of life style and access to technology in urban and rural area as well. Both government and private school teachers involved in distant learning demonstrated almost equal use of technology.

All in all, modern society demands a revolution in Education system. There are tremendous uses of information and communication technology for the facilitation of education processes for support of learners as well as teachers. These uses can become means to imply challenges for generating awareness among distant learners. Innovations and positive attitude toward online programs and use of information technologies in instructional process and learning will surely improve the structure and outcomes of distance education. As Bagon (2018) stated that information and communication technology can be used as a powerful tool to support inclusion in

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education and that information on student's use of ICT can facilitate its integration worldwide.

Reference

- Ainslee, J. (2018). *Digitization of Education in the 21st Century*. Retrieved from <https://elearningindustry.com/digitization-of-education-21st-century>
- Babalola, A.O. & Babalola, F. (2014). *The Use of Information and Communication Technologies among Distance Learning Students of The University of Ibadan Nigeria : Covenant Journal of Communication*, vol.2, issue 1, pp 1-20.
- Bagon, S., Gacnik, M. & Starcic, A. I. (2018). *Information Communication Technology Use among Students in Inclusive Classrooms: International Journal of Emerging Technologies in Learning*. Vol. 13, issue 6, pp 56-72. eISSN: 1863-0383.
- Cornelia, D. (17 April 2007). *Computer science takes steps to bring women to the fold: New York Times*.
- Handcock, M.S. et al (2014). *Focus on women in computer science: university of British Columbia*. Retrieved from the original on February 10, 2019.
- Kaur, S. (2012). *Attitude of Students toward Use of ICT in Higher Education: International Journal of Computer Science and Technology*, vol. 3 issue 4, ISSN: 0976-8491 (Online) |ISSN: 2229-4333 (Print).
- Librero, F. (2006). *Trends in e-learning of Interest to educators. Paper presented in the National Conference of the Philippine e-learning society on 28-29 November, 2006. Diliman, Quezon City, Philippines*.
- Manzoor, B. V.(2008). *Application of Information and communication technology (It) In Distance Learning In Higher Education with Special Reference to India. Ph.D. thesis, University of Calicut*. Retrieved from <http://hdl.handle.net/10603/13370>
- Mertens, A., Peter, R., Sabine T., et al. (2017) *Use of Information and Communication Technology in Healthcare Context by Older Adults in Germany: Initial Results of the Tech4Age Long-Term Study: i-com*, vol.16, issue 2, pp 165-180. Retrieved 12 Mar. 2019, from doi:10.1515/icom-2017-0018
- Noreen, Z., Qureshi, M. B. and Kalsoom, N. (2012). *Distance Learners' Attitude toward Technological Innovations : International Journal of Computer Applications*, vol. 51 issue 22, pp 1-6, ISBN 0975-8887.
- Olofsson, A.D., Lindberg, O.J. & Fransson, G. (2018) *Students' voices about information and communication technology in upper secondary schools: The International Journal of Information and Learning Technology*, Vol. 35 Issue: 2, pp.82-92, <https://doi.org/10.1108/IJILT-09-2017-0088>
- Omotosho, A. O., Lateef, E. B., Amusa, O. I. and Bello, T. O. (2015). *Information and*

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- Communication Technology Adoption and Use Among Students Of A Nigerian University For Distance Learnin: Library Philosophy and Practice* (e-journal). 1246.
<http://digitalcommons.unl.edu/libphilprac/1246>
- Pant, H. (2005). Attitude of Distance Learners toward Multimedia Approach to Instruction: *Asian Association of Open Universities Journal*, vol. 1, issue 1, pp 65-72.
<https://doi.org/10.1108/AAOUJ-01-01-2005-B007>
- Qiu, M., Wright, C. N. and Xu, S. (2010). *Information and communication technology and Distance Education: Issues in Information Systems*, vol. 11, issue 1.
- Raymond, E. (2017). *The infusion of technology into education needs to happen at a grass-root level*. Retrieved from <https://www.thebetterindia.com/122774/digitalisation-education-india/>
- Slechtova, P. (2015). *Attitudes of Undergraduate Students to the Use of ICT in Education: Procedia - Social and Behavioral Sciences*, vol. 171, pp 1128 – 1134. Retrieved from www.science direct.com