

PERCEPTIONS OF PROSPECTIVE TEACHERS TOWARDS ONLINE TEACHING

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Abstract

The present study was conducted in the present times in which we are facing problems due to COVID-19 pandemic. The authorities are restricted to impart education through online mode in our country as well as in other countries. The students who are pursuing pre-service teacher education programme are the future teachers for the society and nation; therefore it is very important to study the perception of these students about online teaching. The present study was conducted on a sample of 50 Prospective teachers enrolled in Colleges of Education of Chandigarh. The descriptive research methodology was used in the present study and data was collected through online mode by using a self-developed questionnaire by the researcher. It is concluded that perceptions of Prospective teachers towards online teaching are positive except the students coming from rural areas. Also, there exists a significant difference in the perceptions of Prospective teachers from urban and rural backgrounds but no significant difference was found in the perceptions of Prospective teachers from arts and science streams towards online teaching.

Keywords: Perception, Teachers, Online Teaching, difference.

INTRODUCTION

The pandemic-2019 forced various institutions to suddenly modify their workflow strategies and adopt new technologies. In most cases, these institutions did not get enough time to reflect upon how the new strategies and the associated technologies should be introduced and integrated to their existing setup (Carroll & Conboy, 2020).

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Researchers have tried to understand the viewpoint of students on online education during the COVID-19 pandemic using empirical studies in India (Gupta et.al 2020). There existed substantial infrastructure for online education in many countries before the pandemic (Mishra et al., 2020). Thus it is difficult for anyone for a complete shift to online education. Empirical studies have found that students feel that they learn better in physical classrooms than through online education (Bojovic et al., 2020).

Students miss the help they receive from their peers in classrooms and laboratories and access to library (Patricia, 2020). Students feel that online education helped them to continue their study during the pandemic (Mishra et al., 2020).

Academic institutions are now using innovative strategies to ensure continuity of education for their students (Zhu & Liu, 2020). Teachers are now delivering course content through various online educational platforms, video conferencing software, and social media to teach their courses (Patricia, 2020). Online educational platforms, like Google Classroom and Blackboard, allow teachers to share notes and multimedia resources related to their courses with students. Video conferencing tools, like Google Meet, Zoom, and Microsoft Teams, help in organizing online lectures and discussion sessions. Some institutions are also disseminating course material through their websites (Chatterjee & Chakraborty, 2020) and their own learning management system (Mishra et al., 2020).

There is a lack of studies on how efficiently students can interact with their teachers and classmates through various online tools and how effective online assessment techniques are. Only a few researchers have covered these issues. For example, Patricia (2020) reported that students prefer face-to-face interaction with teachers and Bojovic et al. (2020) reported that many teachers lack confidence on online assessment techniques. The COVID-19 pandemic and the closing down of the schools and colleges have also affected the mental health of students (Savage et al., 2020). Empirical studies conducted in Bangladesh (Khan et al., 2020), China (Jiang, 2020), France (Essadek & Rabeyron, 2020), Greece (Kaparounaki et al., 2020), UK (Savage et al., 2020), and USA (Copeland et al., 2020) found that a large proportion of students are suffering from mental disorders of varying severity. Students are worried about both the

pandemic in general and their careers (Hasan & Bao, 2020). Lack of motivation and negative emotions make it difficult for many students to focus on online education (Patricia, 2020).

It is of utmost importance that teachers are available and open to students' needs in order to increase their engagement and involvement in the educational process (which is lower in the online environment). It was found that more is needed to know about student online experiences and what motivates students to participate in online education. In the end, online education is about students – their learning, their academic outcomes, and much more. More knowledge about the online process and the people involved will enable online instructors and institutions to better design their courses, serve students' needs, and position themselves in a competitive global market (Sun & Chen, 2016). It is important to begin to uncover students' experiences with online learning because doing so can help to show effective online practices, student perceptions of online learning, and student satisfaction in the online environment. All of these aspects can provide data about whether students will likely continue to accept online delivery of instruction and factors that will influence their persistence and retention in these courses (Blackmon & Major 2012).

India is a progressive country. Teaching is considered a noble profession since ancient time here. Prospective teachers are the future teachers. B.Ed. is a professional degree for teaching. Teacher is the soul of whole teaching-learning process. Today world is facing intensive problems which are associated with COVID-19 Pandemic. The teacher education programmes play an important role in developing the teaching competencies among prospective teachers which are relevant in mastering specific challenges caused by the pandemic. In the present study, an attempt has been made to study the perceptions of prospective teachers of Chandigarh towards online teaching.

SIGNIFICANCE OF THE STUDY

Today the world is facing the harms of Pandemic in every field of life. The Pandemic COVID-19 was emerged in China from Wuhan laboratory. Many orders were passed by central and local administrations to deal with pandemic effectively. Education is affected by this pandemic immensely. All the universities, colleges and schools were closed due to Pandemic throughout the country. It was the biggest tragedy to education since a long interval. Traditional methods of teaching were not applicable in this era. So there was a single option in teaching and the learning

process was online teaching. In these circumstances the Chief Minister of Haryana Shri Manohar Lal Khattar gave a visionary idea as 3S formula „Stay at home, study at home and school at home“ for home-bound students. Various departments and the State Council of Education Research and Training (SCERT) launched Ghar Se Padhao Abhiyan, an E-learning campaign to connect parents and students with over 50,000 teachers through Whatsapp, SMS and phone calls across the state to start academic activities. It was a big challenge to prevent academic loss of students during the lockdown period. Hence online learning managed education for 52 lakh students of class I to XII across the state through online learning. The students are equipped to avail online learning platforms and this practice might benefit only 20 percent of the students. The educational institutions in Chandigarh were also facing the same problems. Prospective teachers are a very important aspect of our entire education system. These prospective teachers are the future teachers which are expected to deal with students at different stages of life and teach them. So it is very important to study the perceptions of prospective teachers towards online teaching.

OBJECTIVES OF THE STUDY

The objectives of the present study were:

- To study perceptions of Prospective teachers towards online teaching.
- To compare perceptions of rural and urban Prospective teachers towards online teaching.
- To compare perceptions of Prospective teachers of Arts and Science stream towards online teaching.

HYPOTHESES OF THE STUDY

To achieve the objectives of the study, following hypotheses were formulated:

- There is no significant difference in the perceptions of Prospective teachers from rural and urban areas towards online teaching.
- There is no significant difference in the perceptions of Prospective teachers of Arts and Science streams towards online teaching.

SAMPLE

The population for the present study was all the students enrolled in B.Ed. programme in Government College of Education, Chandigarh. A sample of 50 students studying in second year of B.Ed. was selected randomly.

TOOLS USED

A self - developed e-questionnaire consisting 30 items was used to collect the data. 24 Items were negative and 6 Items were positive. Five-point Likert scale was used to study the perceptions of prospective teachers towards online teaching. Questionnaires were distributed to participants by using Google form, and participants were informed that all the responses would be kept confidential. The data was collected and recorded in a systematic way, later analyzed by using Statistical Package for Social Science (SPSS). The students having mean scores in the range of 109-80 has positive perceptions about online teaching. Students whose mean scores fall in the range of 79-68 has average perceptions about online teaching and students having mean scores in the range of 67-39 has negative perceptions about online teaching.

ANALYSIS AND INTERPRETATION

The results of the present study are analyzed in the following three sections:

Section I: Perceptions of Prospective teachers towards online teaching.

Section II: Comparison of perceptions of Prospective teachers from rural and urban areas towards online teaching.

Section III: Comparison of perceptions of Prospective teachers of Arts and Science streams towards online teaching.

Section I: Perceptions of Prospective teachers towards online teaching

In this section, the findings related to perceptions of Prospective teachers towards online teaching are presented.

Table -1: Perceptions of Prospective teachers towards Online Teaching

	N	Mean	Interpretation
B.Ed. Students	50	72.56	Positive perceptions about online teaching
Rural	20	66.55	Average perceptions about online teaching
Urban	30	75.9	Positive perceptions about online teaching
Arts Stream	29	73.44	Positive perceptions about online teaching
Science Stream	21	71.33	Positive perceptions about online teaching

It is evident from the above table that the mean score of the prospective teachers studying in B.Ed. programme is 72.56 that lies in the range of 65-78. It shows that the perceptions of Prospective teachers towards online teaching is positive. Also, the mean scores of Students from urban areas, studying in arts and science streams are 75.9, 73.44 and 71.33 respectively. These students are also found to have positive perceptions about online teaching. But the students coming from rural areas don't possess positive perception about online teaching as their mean score is 66.55 which falls in the range of 67-39.

Section II: Comparison of perceptions of Prospective teachers from Rural and Urban Areas towards Online Teaching

The mean scores of the Prospective teachers from rural and urban areas were compared to find out the difference between their perceptions towards online teaching.

Table – 2: Significance of Difference between Mean Scores of Rural and Urban Prospective teachers regarding their Perceptions towards Online Teaching

Group	N	Mean	S.D.	t-value
Rural	20	66.55	13.3	2.18*
Urban	30	75.9	13.1	

* Significant at 0.05 level

Entries in the table-4 show the mean differentials (t-test) of perceptions of rural and urban Prospective teachers towards online teaching. From the table, it is clear that mean and standard deviation for rural group are found to be 66.55 and 13.3 respectively. Likewise, the mean and standard deviation for urban group are found to be 75.9 and 13.1 respectively. 't'-ratio is calculated as 2.18 which is greater than the 't'- value at 0.05 level of significance. This shows that the obtained 't'- value is significant at 0.05 level of confidence. Therefore, it is clear from the results that mean scores of both the groups differ significantly with respect to their perceptions towards online teaching. Also, the mean score of Prospective teachers from rural background is low in comparison to mean score of their counterparts from urban background. So, the null hypothesis that there is no significant difference in perceptions of Prospective teachers from rural and urban areas towards online teaching is rejected.

Section III: Comparison of perceptions of Prospective teachers studying in Arts and Science Streams towards Online Teaching

The mean scores of the Prospective teachers from Arts and Science Streams were compared to find out the difference between their perceptions towards online teaching.

Table – 3: Significance of Difference between Mean Scores of Prospective teachers from Arts and Science Streams regarding their Perceptions towards Online Teaching

Group	N	Mean	S.D.	t-value
Arts	29	73.44	13.61	0.533*
Science	21	71.33	14.14	

*Not Significant

Table-3 shows the mean differentials (t-test) of perceptions of Prospective teachers from Arts and Science streams towards online teaching. From the table, it is clear that mean and standard deviation for Prospective teachers of Science stream are found to be 73.44 and 13.61 respectively. Likewise, the mean and standard deviation for Prospective teachers of Arts stream are found to be 71.33 and 14.14 respectively. 't'-ratio is calculated as 0.533 which is less than the 't'- value at 0.05 level of significance. This shows that the obtained 't'- value is not significant at 0.05 level of confidence. Therefore, it is clear from the results that mean scores of both the groups don't differ significantly with respect to their perceptions towards online teaching. So, the null hypothesis that there is no significant difference in perceptions of Prospective teachers from Science and Arts streams towards online teaching is accepted.

FINDINGS OF THE STUDY

1. The perceptions of Prospective teachers towards online teaching is positive. Also students in urban areas, studying in arts and science streams have positive perceptions about online teaching.
2. The perception of Prospective teachers from rural background is low in comparison to mean score of their counterparts from urban background.
3. The perceptions of Prospective teachers from Science and Arts groups don't differ significantly with respect to their perceptions towards online teaching.

CONCLUSION

The education system around the world has been severely affected due to the ongoing COVID-19 pandemic. There is a paradigm shift in the teaching-learning process as the traditional face-to-face teaching has been shifted to online teaching. To implement it effectively, it becomes important to obtain the opinions of participants of online classes before applying for it. As the prospective teachers also have to teach students online during their internship This study may help colleges and universities to get a general view about the perceptions of student teachers related to online teaching. Teacher training institutes are to provide excellent training and support to both teacher educators as well as student teachers regarding the usage of online classes that helps in developing their positive attitude towards online teaching.

REFERENCES

- Adhikary, K., Gupta, M. S., Singh, E. P., & Singh, S. (2010). *Collaborating Towards Learning: Using Web 2.0 for Educational Idea Development*. Proceedings of the Fifth Conference of Learning International Networks Consortium, pp. 465–47.
- Arora, A., Chakraborty, P., Bhatia, M. P. S., & Mittal, P. (2020). Role of emotion in addictive use of twitter during COVID-19 imposed lockdown in India. *Journal of Technology in Behavioral Science*.
- Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, 2(2), 113– 115.
- Beaunoyer, E., Dupéré, S., & Guitton, M. J. (2020). COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Computers in Human Behavior*, 111, 106424.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88(3), 588– 606.
- Bojovic, Z., Bojovic, P. D., Vujosevic, D., & Suh, J. (2020). Education in times of crisis: Rapid transition to distance learning. *Computer Applications in Engineering Education*.

- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112934.
- Carroll, N., & Conboy, K. (2020). Normalising the “new normal”: Changing tech-driven work practices under pandemic time pressure. *International Journal of Information Management*, 55, 102186.
- Chakraborty P., Mittal P., Gupta M.S., Yadav S. & Arora A. (2020). Opinion of students on online education during the COVID-19 pandemic. Retrived from <https://onlinelibrary.wiley.com/doi/10.1002/hbe2.240>
- Chatterjee, I., & Chakraborty, P. (2020). Use of information and communication technology by medical educators amid COVID-19 pandemic and beyond. *Journal of Educational Technology Systems*.
- Coman, C., Tîru, L.G., Mesesan-Schmitz, L. , Stanciu C. & Bularca, M.C. (2020). Online Teaching and Learning in Higher Education during the Coronavirus Pandemic: Students’ Perspective. Retrived from file:///C:/Users/SR%20COMPUTER/Downloads/sustainability-12-10367-v2%20(2).pdf
- Copeland, W. E., McGinnis, E., Bai, Y., Adams, Z., Nardone, H., Devadanam, V., ... Hudziak, J. J. (2020). Impact of COVID on college student mental health and wellness. *Journal of the American Academy of Child & Adolescent Psychiatry*.
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5– 22.
- Diaz, M. C. G., & Walsh, B. M. (2020). Telesimulation-based education during COVID-19. *The Clinical Teacher*.
- Dilani S. P. Gedera(2014). Students’ experiences of learning in a virtual classroom. *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 2014, Vol. 10, Issue 4, pp. 93-101 Retrived from <https://files.eric.ed.gov/fulltext/EJ1059024.pdf>

- Essadek, A., & Rabeyron, T. (2020). Mental health of French students during the Covid-19 pandemic. *Journal of Affective Disorders*, 277, 392– 393.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39– 50.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185– 214.
- Grishchenko, N. (2020). The gap not only closes: Resistance and reverse shifts in the digital divide in Russia. *Telecommunications Policy*, 44(8), 102004.
- Hasan, N., & Bao, Y. (2020). Impact of “e-learning crack-up” perception on psychological distress among college students during COVID-19 pandemic: A mediating role of “fear of academic year loss”. *Children and Youth Services Review*, 118, 105355.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53– 60.
- Islam, M. A., Barna, S. D., Raihan, H., Khan, M. N. A., & Hossain, M. T. (2020). Depression and anxiety among university students during the COVID-19 pandemic in Bangladesh: A web-based cross-sectional survey. *PLoS One*, 15(8), e0238162.
- Jæger, M. M., & Blaabæk, E. H. (2020). Inequality in learning opportunities during Covid-19: Evidence from library takeout. *Research in Social Stratification and Mobility*, 68, 100524.
- Jain, D., Chakraborty, P., & Chakraverty, S. (2018). Smartphone apps for teaching engineering courses: Experience and scope. *Journal of Educational Technology Systems*, 47(1), 4– 16.
- Jiang, R. (2020). Knowledge, attitudes and mental health of university students during the COVID-19 pandemic in China. *Children and Youth Services Review*, 119, 105494.
- Kaparounaki, C. K., Patsali, M. E., Mousa, D. P. V., Papadopoulou, E. V., Papadopoulou, K. K., & Fountoulakis, K. N. (2020). University students' mental health amidst the COVID-19 quarantine in Greece. *Psychiatry Research*, 290, 113111.

- Khan, A. H., Sultana, M. S., Hossain, S., Hasan, M. T., Ahmed, H. U., & Sikder, M. T. (2020). The impact of COVID-19 pandemic on mental health & wellbeing among home-quarantined Bangladeshi students: A cross-sectional pilot study. *Journal of Affective Disorders*, 277, 121– 12.
- Kirtman L. (2020). Online versus in-class courses: An examination of differences in learning outcomes. Retrived from files.eric.ed.gov/fulltext/EJ858508.Pdf
- König, J., Daniela J., Jäger-Biela & Glutsch. (2020). Adapting to online teaching during COVID-19 school closure: teacher education and teacher competence effects among early career teachers in German Retrived from <https://www.tandfonline.com/doi/full/10.1080/02619768.2020.1809650>
- Lassoued, Z., Alhendawi, M., & Bashitialshaaer, R. (2020). An exploratory study of the obstacles for achieving quality in distance learning during the COVID-19 pandemic. *Education Sciences*, 10(9), 232.
- Lembani, R., Gunter, A., Breines, M., & Dalu, M. T. B. (2020). The same course, different access: The digital divide between urban and rural distance education students in South Africa. *Journal of Geography in Higher Education*, 44(1), 70– 84.
- Mahmood, S. (2020). Instructional strategies for online teaching in COVID-19 pandemic. *Human Behavior and Emerging Technologies*: 199– 203. <https://doi.org/10.1002/hbe2.218>
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*.
- Naik G.L, Deshpandey M.K., Shivananda D.C, Ajay C.& Patel G.C.M. (2020). Online teaching and learning of higher education in India during COVID-19 emergency Lockdown. Retrived from files.eric.ed.gov/fulltext/EJ1287167.Pdf
- Nash, C. (2020). Report on digital literacy in academic meetings during the 2020 COVID-19 lockdown. *Challenges*, 11(2), 20.

- Nwankwo, A. A.(2015). Students' Learning Experiences and Perceptions of Online Course Content and Interactions. Retrived from <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=1187&context=dissertations>
- Patricia, A. (2020). College students' use and acceptance of emergency online learning due to COVID-19. *International Journal of Educational Research Open*.
- Peters, M. A., Wang, H., Ogunniran, M. O., Huang, Y., Green, B., Chunga, J. O., ... Khomera, S. W. (2020). China's internationalized higher education during COVID-19: Collective student autoethnography. *Postdigital Science and Education*, 2(3), 968– 988.
- Ray, S., & Srivastava, S. (2020). Virtualization of science education: A lesson from the COVID-19 pandemic. *Journal of Proteins and Proteomics*, 11(2), 77– 80.
- Savage, M. J., James, R., Magistro, D., Donaldson, J., Healy, L. C., Nevill, M., & Hennis, P. J. (2020). Mental health and movement behaviour during the COVID-19 pandemic in UK university students: Prospective cohort study. *Mental Health and Physical Activity*, 19, 100357.
- Singh, E. P., Adhikary, K., Gupta, M. S., & Singh, S. (2010). User Interface Considerations for ScalableC, An Online Collaborative Platform. *Proceedings of the International Conference on Enterprise Information Systems and Web Technologies*, pp. 111–116.
- Skulmowski, A., & Rey, G. D. (2020). COVID-19 as an accelerator for digitalization at a German university: Establishing hybrid campuses in times of crisis. *Human Behavior and Emerging Technologies*, 2(2), 212– 216.
- Sra, P., & Chakraborty, P. (2018). Opinion of computer science instructors and students on MOOCs in an Indian university. *Journal of Educational Technology Systems*, 47(2), 205– 212.
- Stephanie J. Blackmon and Claire Major (2012). Student experiences in online courses: A Qualitative Research Synthesis. Retrived from <https://www.cu.edu/doc/student-experiences-online-classesqual-study.pdf>

Toquero, C. M. D., & Talidong, K. J. B. (2020). Socio-educational implications of technology use during COVID-19: A case study in general Santos City, Philippines. *Human Behavior and Emerging Technologies*:194–198 .<https://doi.org/10.1002/hbe2.214>

Vasiliadou, R. (2020). Virtual laboratories during coronavirus (COVID-19) pandemic. *Biochemistry and Molecular Biology Education*, 48(5), 482– 483.

Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak. *Journal of Risk and Financial Management*, 13(3).

Zhu, X., & Liu, J. (2020). Education in and after Covid-19: Immediate responses and long-term visions. *Postdigital Science and Education*, 2(3), 695– 699.