

SECONDARY SCHOOL TEACHER'S ATTITUDE TOWARDS INFORMATION TECHNOLOGY IN RELATION TO THEIR GENDER AND TYPE OF SCHOOL

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ABSTRACT

The present study assesses the teacher's attitude towards information technology in selected government and private schools at the secondary level in the Jammu district. The data was collected randomly from 100 secondary school teachers from 5 private and 5 government Schools of the Jammu district. The Attitude Scale towards Information Technology for Teachers (ASTITT) developed by Nasrin & Islahi (2012) was used to assess the teacher's attitude towards information technology. Statistical techniques like Mean, SD and t-test were used to analyse the data. The results showed that the teachers in both government and private schools have a positive attitude towards information technology. But the attitude of private school teachers towards information technology was found significantly higher than government school teachers. The findings of the study also revealed that there is no significant difference in the attitude of secondary school teachers towards information technology with respect to their gender.

KEYWORDS: Attitude, Information Technology, Secondary School Teachers.

Introduction

The COVID-19 pandemic disrupted the global conventional education system and compelled the teachers and students to follow the online system of education. This transformation has immensely affected the process of teaching and learning. Online teaching has turned up as a massive shock for both teacher's productivity and also student's social life and learning. To maintain continuity in the teaching-learning process, information technology brought the revolution in all the aspects of educational dimension and enhanced the teaching learning process. For this system to run, the infrastructure, technical know-how, internet facility are some of the integral components. This was an abrupt change from conventional to online mode for all the stakeholders of education system.

The quality of education as well as teachers, both are interconnected. From the very beginning, teacher educators have been the promoters in any educational reformation movement. Teachers who contribute in educational improvement were an effective and dominating personality. The teacher's effectiveness depends upon their attitude, characteristics and their classroom environment and its organization and management. (Goswami, 2020)

The teaching learning process has been greatly inclined by rapid advancement in Information and Communication Technology. The greatest challenge of society is related to face with knowledge and technological expertise that is necessary for finding, applying and evaluating information.

Advent of information technology has complemented in our civilization where digitalization has almost become a better alternative. It is influencing every aspect of human life including education. The introduction of information technology in school education is now encouraging and motivating the students as well as teachers to explore new areas of advancement with reference to its latest developments in various stages.

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Information technology refers to the knowledge process and its applying methods, processing, transferring and making information in progress (Pour, 2003). "Information technology refers to anything related to computing technology. The Internet, for example, comes under the umbrella term IT. So does computer hardware, software, and networking." (Information Technology Trends, 2019) Attitude is the predisposition or a tendency to respond positively or negatively towards a certain idea, object or person, or situation. Attitude influences on individual's choice of action and responses to challenges, incentives and rewards. Eagly and Chaiken (1998) defined an attitude as "a psychological tendency that is expressed by evaluating a particular entity, with some degree of favour or disfavour". Research shows that the success of technology use in education mostly depends on educator's attitude towards the use of technology (Albirini, 2006) and it is considered as an important element in predicting the use of technologies in educational setting. The integration of information technology in teaching and learning is becoming almost obligatory given the imperatives of education in many countries in the world.

Review of Related Literature

Imrana (2017) discovered that secondary school teachers' attitudes towards information and communication technologies in relation to their gender and school styles. At the secondary school, woman teachers have a more positive outlook towards ICT than male teachers. Compared to private school teachers, government school teachers demonstrated a higher tolerance towards the use of ICT in schooling.

Chakraborty et.al. (2018) find out the effectiveness of ICT in Strengthening the process of higher education system in India. The study was conducted on a sample of 386 which was taken from various colleges and universities of West Bengal, India. The data was collected with the help of five point Likert scale. The collected data was analyzed with the help of exploratory factor analysis and multiple regression analysis and it was found that the cost of ICT is one of the most influencing factors on effectiveness of ICT.

Kaur (2019) revealed that attitude of Indian teachers towards the use of ICT is positive but the use of ICT in Indian classrooms is not sufficient. The major concerns and problems identified by this study in the use of ICT tools by teachers include limited modern and technological infrastructure, rigid time table and fixed curriculum, low technical support, lack of effective training, rigid curriculum and time table, lack of modern methods of evaluation, diploma oriented education and less competencies and motivation on part of teachers in use of ICT. Further, this research suggested that there are no gender differences in the use of ICT by teachers. The study points out the requirement of development of new ways of teacher training which can facilitate and encourage use of ICT effectively in Indian classrooms.

Sareen (2019) investigated the attitude of school teachers towards ICT in relation to their perceptions about self-efficacy in ICT. The study was carried out on a sample of 250 teachers from government and private schools situated in Chandigarh. 130 teachers were selected from government schools and 120 teachers were selected from the private schools. Attitude towards ICT scale constructed by Cavas Bulent (2003) and perceptions about self-efficacy in use of ICT developed by Gulbahar Yasemin, and Ismail Guven (2008) tools were used for collecting the data. Results showed that teachers working in private schools were found to be having significantly favourable attitude and high level of perceived self-efficacy than those working in government schools. It was also found that teachers with high level of self-efficacy have favourable attitude than those with low level of self-efficacy.

Goswami (2020) studied the secondary school teachers' attitude towards ICT in Meerut City. A sample of 120 secondary school teachers from government and private secondary schools was taken from Meerut city. Simple random sampling technique was employed for collecting the data. The data was analyzed by using the mean, standard deviation and 't' test. The findings showed that secondary school teachers have a favorable attitude towards ICT. And there is no significant difference in the secondary school teachers' attitudes towards ICT in relation to stream, gender and areas of school.

Pandey and Pandey (2020) revealed the positive effect of the use of ICT in teaching and learning. Further, it has also been observed that use of ICT in developing countries like India is at lesser side as compare to developed countries.

Chandwani, Singh and Singh (2021) revealed no significant difference in attitude of teachers towards online teaching in context of their gender and type of institution, whereas the marital status of teachers was found to have a significant impact. A significant negative correlation was found between the age, familiarity with online learning tool(s) and the attitude of teachers with respect to online teaching.

Sehjal, Grewal and Kumar (2021) accessed the teacher effectiveness of secondary school teachers in relation to their attitude towards Information Technology. For the conduct of the research, the survey approach was used. 100 secondary school teachers from the Jalandhar district of Punjab were stratified randomly chosen for this research. To analyze the results, statistical techniques such as Mean, SD, t-test and Co-efficient of Correlation were used. The result showed that there exists no significant relationship between Teacher Effectiveness and Attitude towards Information Technology of Secondary School Teachers. There exists no significant difference in the Teacher Effectiveness and attitude towards information technology of Male and Female secondary school teachers. **Karasneh, R., et al., (2021)** assessed the online learning experience during the pandemic and recognize its perceived barriers according to university professors in Jordan. Positive attitudes towards online teaching were seen, Institutional support for online learning also appears to have increased following the coronavirus outbreak. An overwhelming majority (81.9%, n=416) stated that their universities supported online education during the pandemic, compared to 56.5% (n=287) before. The main recognized barriers for online teaching were poor internet connection (78.3%, n=398), disadvantages in old learning tools (e.g., uploading capacity) (70.9%, n=360), and family atmosphere (69.3%, n=352). Participants also recognized technical (74.0%, n=376) and computer skills (49.2%, n=250) as areas requiring development.

Information technology has been playing an important role in our life. Information technology such as immersive multimedia, computer conferencing, and the internet are being used by a variety of organizations in developing countries to provide guides. So, it becomes essential to promote knowledge of information technology to students as well as teachers at different levels of education. It is important to integrate technical developments into the classroom in order to keep up with the technological transition in the developing worlds' educational-learning systems. It is also important to develop attitudes towards information technology in our secondary school teachers so that they may solve their problems and can adjust themselves in society. Hence, this investigation was conducted

Objectives of the Study

The objectives of the present research study are:

- To study the attitude of secondary school teachers towards information technology.
- To compare the attitude of secondary school teachers towards information technology with respect to their gender.
- To compare the attitude of government and private secondary school teachers towards information technology.

Hypotheses of the Study

The hypotheses of the present research study are:

- There is favourable attitude of secondary school teachers towards information technology.
- There is no significant difference between the attitudes of secondary school teachers towards information technology with respect to their gender.
- There is no significant difference between the attitude of government and private secondary school teachers towards information technology.

Research Methodology

In this study, the researcher intends to investigate the attitude of secondary school teachers towards information technology. Thus, a descriptive survey method was used in this study.

Sample for the Study

In the present study, a sample of 100 secondary school teachers from 5 government and 5 private schools of Jammu district have been selected through random sampling technique. Distribution of sample is given in table 1.

Table 1: Distribution of Sample

S. No.	Type of School	Male	Female	Total
1	Government	21	28	49
2	Private	14	37	51
	Total	35	65	100

Tool Used

For the accomplishment of the objectives, the tool "Attitude Scale towards Information Technology for Teachers (ASTITT)" developed by Nasrin & Islahi (2012) was used.

Statistical Techniques Used

Mean, standard deviation and *t*-test was employed for analyzing the data.

Results of the Study

Objective 1

To study the attitudes of secondary school teachers towards information technology.

For studying the overall attitude of secondary school teachers towards information technology, the percentage was calculated. The result is presented in Table 2.

Table 2: Levels of Attitude toward Information Technology

S. No.	Range of Raw Score	No. of Teachers	Percentages	Level of Attitude towards Information Technology
1.	143 & More	6	6	Extremely Favorable Attitude
2.	126 to 142	9	9	High Favorable Attitude
3.	109 to 125	30	30	Positively Favorable Attitude
4.	85 to 108	55	55	Moderate Favorable Attitude
5.	68 to 84	0	0	Unfavorable Attitude
6.	50 to 67	0	0	High Unfavorable Attitude
7.	49 to less	0	0	Extremely Unfavorable Attitude

From Table 2, it can be interpreted that out of 100 teachers, only 6 teachers (6%) have an extremely high favorable attitude towards information technology, 9 teachers (9%) have a high favorable attitude, 30 teachers (30%) have positively favorable attitude. And most of the teachers i.e. 55(55%) have a moderate favorable attitude towards information technology. It is interpreted that no teacher of the secondary school was having unfavorable attitude towards information technology. Thus, it can be concluded that maximum secondary school teachers have a positive attitude towards information technology.

Objective 2

To compare the attitudes of secondary school teacher towards information technology with respect to their gender.

The second objective of the study was to compare the attitude of male and female secondary school teachers towards information technology. To achieve this objective, the *t*-ratio was computed. The results are presented in Table 3.

Table 3: Mean, SD, and t-Value for the Attitude of Secondary School Teachers towards Information Technology with Respect to their Gender

Gender	N	Mean	Std. Deviation	Std. Error Mean	df	t
Female	65	108.88	13.24	1.87	98	0.89*
Male	35	111.60	17.05	2.41		

*not significant

Table 3 shows that the mean value of males and females is 111.60 and 108.88 respectively. The calculated *t*-value is 0.89, which is not significant. The mean score of male teacher is higher than of female teachers. Thus, it can be inferred that there is no significant difference between the attitudes of secondary school teachers towards information technology with respect to their gender. Thus the hypothesis, "There is no significant difference between the attitudes of secondary school teachers towards information technology with respect to their gender" is accepted.

Objective 3

To compare the attitude of government and private secondary school teachers towards information technology.

The third objective of the study was to study the attitude of secondary school teachers towards information technology in government and private secondary schools of Jammu. To achieve this objective, the *t*-ratio was computed. The results are presented in Table 4.

Table 4: Mean, SD and t-Value for the Attitude of Secondary School Teachers towards Information Technology with Respect to the Type of School

School	N	Mean	Std. Deviation	Std. Error Mean	df	t
Govt. School	49	106.55	10.88	1.55	98	2.42*
Private School	51	113.78	17.90	2.50		

*significant at 0.05 level

The data shows that the mean value of government and private school is 106.55 and 113.78 respectively. The calculated t-value is 2.42, which is significant at 0.05 level of significance. The mean score of private schools' teacher is higher than government school teachers. Thus, it can be inferred that private school teachers have a favorable attitude towards information technology as compared to government school teachers. Thus hypothesis, "There is no significant difference between the attitudes of government and private secondary school teachers towards information technology" is rejected.

Conclusion

It was found that out of the total of 100 secondary school teachers, 100% teachers have a favorable positive attitude towards information technology. Both male and female senior secondary school teachers were found to possess the same level of attitude towards information technology. Private school teachers have a favorable attitude towards information technology as compared to government school teachers.

The findings are in accordance with Mansuri (2016) who reported no gender difference in attitude towards information technology. Private The results are in accordance with results of studies by Mansuri (2016), Tyagi and Imrana (2017) who found significant difference in the attitude of government and private school teachers towards information technology.

Educational Implications of the Study

The following are the educational implications of the study:

- Both male and female senior secondary school teachers need to get deeper understanding of information technology resources to use in their teaching.
- As technology is now becoming part and parcel of education system, it can be urged that government secondary school teachers need to develop the more positive attitude towards information technology and use information technology in the classroom.
- Short duration trainings and workshops should be organised for the teachers so that they can use technology while teaching.
- It is also urged that in government schools, one technical person should be appointed for providing timely support to the teachers.
- It is suggested that efforts should be made by the authorities to provide pre-service as well as in-service training to teachers to enhance their skills in information technology so that they develop a positive outlook towards using ICT in their classrooms.

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