

ICT Anxiety among Higher Secondary School Teachers: A Survey

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Abstract: This study explores ICT (Information and Communication Technology) anxiety among higher secondary school teachers through a comprehensive survey. As technology continues to transform educational practices, understanding the factors contributing to ICT anxiety is essential for facilitating effective technology integration. The researcher used a normative survey as their methodology for this analysis. In order to have a greater grasp of the here and now, it entails documenting, analyzing, and interpreting data. Five hundred and twenty-nine pupils from different schools in the Thanjavur region of Tamil Nadu make up the current study. We used a basic random sampling strategy to choose our samples. On the likert-type scale, respondents are asked to rate each statement from "strongly agree" to "strongly disagree" on a five-point scale. Standard notation for these points is SA for Strongly Agree, A for Agree, UD for Undecided, DA for Disagree, and SDA for Strongly Disagree. A variety of subjective weights are applied to the various places on the scale. Take the positive statements as an example: 5, 4, 3, 2, and 1 in the order of Strongly Agree to Strongly Disagree responses. In this case, the Strongly Agree answer is 5 points weighted. When a person's scores for each item are added together, their total scores are obtained. In terms of their concern around information and communication technology (ICT), male and female instructors at the secondary level in both urban and rural areas did not vary significantly.

Keywords: Secondary School, Computers And Internet, Teaching And Learning, Rural And Urban.

Introduction:

Education has been profoundly impacted by technological advancements. Educators and students alike will find it an invaluable tool for the classroom. Technology has changed the way educators approach meeting the needs of their students. In 1989, Davis et al. Projectors, computers, and the internet are among of the contemporary era's most useful tools for instructors. They also communicate with kids and parents via email and online chats. Teachers may use technology to help kids work independently, think critically, and find solutions to issues. The use of technology in the classroom allows for a more engaging, motivating, and fruitful educational experience for students. More people may have the chance to study if schools employ technology, especially the internet. Improving learning outcomes, facilitating better administration of education systems, and enhancing the quality of education via the use of sophisticated teaching techniques are all possible results. The impact of the internet on our pupils' life cannot be disregarded. On the one hand, the internet has many beneficial effects on students' lives. On the other hand, some users, especially students, might get addicted to this technology and let it control their life to an unhealthy degree. Understanding the effects of internet addiction on kids' conduct, mental health, and growth is, therefore, crucial. According to Erdmer (1999).

Fearing for their students' safety, privacy, and ability to share and receive knowledge in such an atmosphere, teachers are increasingly turning to learning-focused social networks. Some services, such as e-Pals and e-Chalk, are more stringent than others; administrators at schools and universities may frequently control who students can join and communicate with. Teachers have also noticed that students seem to approach these sites with a more serious and scholarly attitude than they would on a site where they normally hang out with friends. As stated by Inan and Lowther (2010) There are safeguards built into these platforms that may identify bullying terms or offensive language and notify an educator.

Significance of the Study:

ICT anxiety can be a significant barrier to the effective integration of technology in the classroom. By identifying the extent and nature of this anxiety, the study helps in understanding how it may impede the adoption and effective use of ICT tools in teaching. Teachers' anxiety towards ICT can affect their willingness to incorporate technology into their teaching. By addressing these anxieties, educators are more likely to embrace ICT, which can enrich the teaching and learning experience for students. this study is significant because it addresses a crucial aspect of technology integration in education—ICT anxiety among teachers. By identifying the extent, sources, and implications of this anxiety, the study provides valuable insights that can lead to improved professional development, better policy planning, enhanced teaching practices, and a more supportive educational environment.

Objectives of the study: The current study has been carried out with the following objectives-

- To know about the Higher Secondary School Teachers' ICT Anxiety
- To find out the difference in the ICT Anxiety among higher secondary school teachers in respect of gender and residence.

Hypothesis of the study:

Regarding their ICT anxiety, male and female instructors vary significantly.

Regarding their anxiety about information and communication technology, rural and urban instructors vary significantly.

METHODOLOGY:

Method of the Study: The researcher used a normative survey as their methodology for this analysis. In order to have a greater grasp of the here and now, it entails documenting, analyzing, and interpreting data.

Sample of the Study: Five hundred and twenty-nine pupils from different schools in the Thanjavur region of Tamil Nadu make up the current study. We used a basic random sampling strategy to choose our samples.

Tools: On the likert-type scale, respondents are asked to rate each statement from "strongly agree" to "strongly disagree" on a five-point scale. Standard notation for these points is SA for Strongly Agree, A for Agree, UD for Undecided, DA for Disagree, and SDA for Strongly Disagree. A variety of subjective weights are applied to the various places on the scale. Take the positive statements as an example: 5, 4, 3, 2, and 1 in the order of Strongly Agree to Strongly Disagree responses. In this case, the Strongly Agree answer is 5 points weighted. When a person's scores for each item are added together, their total scores are obtained.

DATA ANALYSIS AND INTERPRETATION:

Table 1: the mean and the standard deviation of the ict anxiety

S. No.	Samples	Sub-samples	N	Mean	Standard Deviation
1	Entire sample		529	135.86	30.13
2	Sex	Male teachers	272	136.88	28.65
		Female teachers	257	134.78	31.63
3	School locality	Rural area	240	135.16	25.77
		Urban area	289	136.44	33.35

4	Residence	Rural area	244	136.84	27.36
		Urban area	285	135.03	32.33
5	Teaching experience	Up to 10 years	230	133.80	32.08
		Above 10 years	299	137.45	28.49
6	Designation	Graduate Teachers	244	133.27	29.44
		Post Graduate Teachers	285	138.02	30.62
7	Management Type	Government schools	297	135.72	27.20
		Aided schools	122	139.89	28.30
		Private schools	110	131.79	38.27
8	School type	Boys school	116	131.13	28.15
		Girls school	32	134.44	20.75
		Co-education schools	381	137.25	31.26

Examining the degree to which school instructors experience anxiety when it comes to information and communication technology is one of the main goals of this research. Table 1 displays the whole sample and its subsamples' means and standard deviations for the ICT anxiety scale. The results show that the means of the whole sample and its subsamples vary between 131.13 and 139.89. All things considered, the sample as a whole scored 135.86 on the ICT anxiety scale. The middle value is 136.00 and the highest value is 141.00. Its kurtosis is less than 0.26, coming in at 0.10. We find that its skewness is 0.48. Standard deviations are within a narrow region (20.75 to 38.27) as seen in Table 1. It follows that the group is probably very similar to one another. If the mode, median, and mean don't differ much, then the distribution is almost normal. On the ICT anxiety scale, 205 is the greatest possible score. Those who get a score between 52 and 104 are considered to have ICT anxiety, while those who get a score over 104 are also considered to have this condition.

Table 2: the significance of the difference (t-value) in ICT anxiety between the male and female higher secondary school teachers

Sub-samples	N	Mean	S.D	t value	Significance at 0.05Level
Male teachers	272	136.88	28.65	0.79	Not Significant
Female teachers	257	134.78	31.63		

The calculated t value of 0.79 is less than (1.96) at the 0.05 level of significance, suggesting that the null hypothesis should be maintained, according to table 2. Therefore, it can be inferred that when it comes to their fear around information and communication technology, male and female instructors at upper secondary schools do not vary much.

Table 3: the significance of the difference (t -value) in ICT anxiety between the higher secondary school teachers working in the schools located In the urban area and in the rural area

Sub-samples	N	Mean	S.D	t value	Significance at 0.05Level
Higher secondary school teachers working in the schools located in the rural area	240	135.16	25.77	0.49	Not Significant
Higher secondary school teachers working in the schools located in the urban area	289	136.44	33.35		

With a calculated t value of 0.49, as shown in table 3, we can see that it is less than 1.96 at the 0.05 level of significance, and so, we keep the null hypothesis. Teachers of secondary school students in urban and rural areas do not vary significantly with regard to their worry around the use of information and communication technologies.

Findings:

- Concerning their worry related to information and communication technology, male and female instructors at upper secondary schools do not vary significantly.
- When it comes to their fear of technology in the classroom, secondary school teachers in urban and rural areas do not vary much.

Recommendations

To mitigate ICT anxiety and enhance technology integration, the following recommendations are proposed:

- **Enhanced Professional Development:** Develop comprehensive and ongoing professional development programs that build teachers' confidence and technical skills in using ICT.
- **Improved Technical Support:** Establish robust technical support systems to address issues promptly and provide teachers with the assistance they need.
- **Simplified Tools:** Consider simplifying technology tools and interfaces to reduce perceived complexity and make them more user-friendly for educators.

Conclusion: This study underscores the significant levels of ICT anxiety among higher secondary school teachers and highlights the need for targeted interventions to address this issue. By improving training, technical support, and the design of ICT tools, educational institutions can better support teachers in overcoming anxiety and successfully integrating technology into their teaching practices.

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