RELATIONSHIP BETWEEN PRIMARY SCHOOL TEACHERS' COMPUTER COMPETENCY AND ATTITUDE TOWARDS COMPUTER USAGE

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ABSTRACT

Normative survey research was used in this study to look into the issue. The study's sample population consists of 320 elementary school educators. The sample was selected using a random sampling method. The educators came from a variety of public, private, and independent institutions. The findings show that there is a statistically significant correlation between primary school teachers' computer competence and their computer anxiety. The results also show that elementary school educators' computer knowledge and enthusiasm are positively related. The results indicated that elementary school instructors older than 40 had the lowest levels of computer literacy. There was moderate computer concern among elementary school teachers (55%). Over half (57%) of primary school educators have a neutral or positive outlook on students using computers. The results also showed that the computer skills of primary school teachers were affected by factors such as gender, age, qualification, experience, and school type. Based on these findings, it is vital that primary school educators have access to and are trained to effectively use ICT resources in the classroom. The results of this research may have significant implications for how we now understand educators' level of computer literacy. The researcher also believes that raising awareness in academic institutions is an important goal of this study.

KEYWORDS:

INTRODUCTION

The mentality of teachers is crucial to the success of any curricular or pedagogical changes. It's crucial to make sure teachers are on board with using new technology before implementing it in the classroom. Instructors with a can-do attitude will be important in making this change stick in the classroom. The "attitude" in question is how teachers feel about the widespread usage of computers by their pupils. An interest in expanding one's knowledge of computers and their applications is evident from such an attitude. The ubiquity of computer usage in the classroom seems to correlate with teachers' opinions about such use. The way teachers conceptualize technology shapes their views on it. It's comforting to know that computers won't be able to

replace teachers any time soon. If instructors have a positive outlook on educational technology, they will be able to shed light on how to best integrate it into classroom practice. According to the authors, "teachers' attitudes were predicted by computer attributes, cultural perceptions, computer access, computer competence, and training." Implementing ICT successfully in classrooms "depends less on the sophistication of the equipment and more on the readiness and positive disposition of the teachers."

Researchers have shown that people's perceptions of an item change depending on how close or far away they are from it. Furthermore, research shows that instructors' views regarding the use of computers are determined by their own level of computer expertise. If those educated in the ways of modern technology might adopt more optimistic perspectives.

Computer anxiety is the outcome of a general distrust of technology. Anxiety related to using a computer is characterized by feelings of worry, lack of self-assurance, and stress. Anxiety may also be caused by people's general mistrust of and misunderstanding of technology. The instructors will avoid utilizing computers because of the intricacy of their use and the lack of training they get. Factors that influence computer competence include both prior experience and accessibility to computers. Expert computer users have been proven to suffer reduced computer anxiety. Anxiety may also be brought on by factors like a lack of computer understanding or a negative attitude toward technology. Teachers who are too afraid to utilize computers in the classroom sometimes end up with a genuine fear of using computers themselves. Anxiety causes insomnia, fatigue, difficulty relating with others, etc. Teachers who aren't comfortable using technology in the classroom often report feeling anxious as a result of the pressure to include it into their lessons. Anxiety over using a computer is considered an emotional reaction. One's unfavorable attitude toward computers stems from one's own thoughts and sentiments about computers, whereas computer anxiety stems from one's emotions related to using computers, as stated by the authors.

Teachers are expected to know how to effectively integrate technology into their lessons. Teachers may feel overwhelmed and stressed out when faced with this obligation. It's clear that educators older than 30 never had access to technology in the classroom. Therefore, educational technology must be user-friendly and straightforward for instructors to effectively implement. It might help ease their fears. The degree to which instructors are comfortable utilizing technology is correlated with their levels of worry. Teachers' comfort with and acceptance of technology in the classroom is directly related to their own level of confidence. Several studies have shown a correlation between negative feelings towards computers and how often people use them. Those with a higher baseline level of anxiety are more likely to have symptoms of computer anxiety.

One's outlook on using computers is also linked to feelings of anxiousness while working with them. Women often have lower levels of confidence while using computers and a more unfavorable attitude toward them. Clearly, therefore, one of the criteria that determines a teacher's degree of competence is their own attitude.

LITREATURE REVIEW

Jyoti Bhalla (2023) It is not enough for developing nations to just provide schools with computers; they must also instill in their students the habit of utilizing computers in a wide range

of instructional contexts. There has not been a comprehensive look at how and to what degree instructors utilize computers in previous studies. This research looked at the results of a survey given to 300 teachers in India's Central School system on their experiences using technology in the classroom. For this reason, we devised a survey that probes educators on crucial aspects of edtech deployment, including CAL, CMI, and CAI (Computer Aided, Managed, and Assisted Instruction). The results showed that instructors often utilized computers to enhance their topic knowledge and pedagogical abilities, create lesson plans, compile supplemental teaching resources, disseminate information through the internet, and construct question banks. They utilized computers for demonstrations, student portfolios on the school's website, exam prep, simulations, games, and student projects. They seldom, if ever, utilized computers for delivering a whole lesson, having students give presentations in class, providing tutorials, communicating with parents, posting assignments, testing students (in-class or online), keeping student records, or providing personalized lessons. According to the data, CAL was the most common kind of computer usage among educators, while CAI was the least popular type. The findings provide light on the reasons for the apparent inconsistency and heterogeneity in how instructors utilize computers. In order to properly integrate computers into the teaching and learning process, it is important to identify complete methods in which they are used.

Ameen, Muhammad & Baig (2018) The researchers in this study set out to assess the state of computer laboratories in secondary schools throughout Punjab, both public and private. Both public and private secondary institutions in Punjab were included in the sample population. Only Faisalabad Division in Punjab was included in the analysis. From the available population, 10% were chosen as a sample. Descriptive survey methodology was used for this investigation. The researcher's primary tool was a checklist. It was discovered that the vast majority of secondary school computer laboratories contained desks, seats for pupils, an Internet connection, a printer, and a backup power supply. In most public and private secondary school computer laboratories, these essential teaching tools were not available until recently. Many secondary school computer laboratories lacked basic amenities such as a backup generator or air conditioning, and this was true both of public and private institutions.

Duru Juliet Chinenye (2022) With the Covid-19 pandemic and its attendant devastating effects that have hampered every aspect of human existence, it becomes imperative on the government, stakeholders, and the academia to invigorate possible measures to mitigate the impact of the pandemic as it relates to teaching and learning; taking into account the limiting measures of the pandemic that restricted human contacts and social gatherings; thus, the adoption of ICT by schools for teaching and learning. That's why we needed to look at the after-effects of Covid-19 on the use of ICT in Nigerian classrooms. The research method of "purposive sampling" was examined. Five private institutions in South-East Nigeria were selected, and each of their 250 students and 50 faculty members were given a well-structured questionnaire to fill out. Cronbach's Alpha was used to calculate the test's reliability. The analysis of the data included a mean, a standard deviation, and a Pearson's correlation. The findings showed that in the post-Covid-19 era of Nigeria, the provision of various ICT tools has a significant positive effect on effective teaching and learning, a significant positive effect in mitigating the problems of Students-Teacher ratio (especially in overcrowded classes), and a significant positive effect in influencing teacher subject matter mastery and lesson preparation. The findings also showed that there was no correlation between the use of ICT in schools and either improved classroom management

(through the reduction of internal learning distractions) or decreased tuition rates (by the elimination of associated costs). The study found that school-wide adoption of ICT will have a significant impact on teaching and learning effectiveness in Nigeria after Covid-19, and it made several recommendations, including that the Nigerian Government revise its curriculum to include more opportunities for students to use ICT.

SiminGhavifekr (2015) When information, communication, and technology (ICT) are integrated, they may help educators meet the growing need throughout the world for digital alternatives to more antiquated pedagogical practices. Information and communication technology (ICT) is seen as a key component in Malaysia's transformation toward the country's future growth. The current Education Blue print (2013-2025) from the Ministry of Education highlights the significance of integrating technology-based instruction into the national curriculum for students of all ages. The purpose of this research is to examine how instructors feel about the use of technology in the classroom. One hundred and one teachers from 10 different public secondary schools in Kuala Lumpur, Malaysia, were given a survey questionnaire at random. Both descriptive and inferential statistics were calculated using SPSS (version 21) on the quantitative data from this study. The findings show that there is a significant benefit for educators and students when ICT is used together. The research shows that one of the most important aspects in the effectiveness of technology-based teaching and learning is instructors' preparedness with ICT tools and facilities. Teachers' participation in ongoing professional development training was also shown to have a significant impact on student achievement. Future research should take into account the management perspective on ICT integration in terms of strategic planning and policy making.

Raman, Raghu & Venkatasubramanian (2015) Although computer science (CS) and the technology that make it possible are at the very center of the current information era, its acceptance as a required course among Indian high school students remains low and has not yet reached a tipping point. While there have been attempts to develop common curricular standards for topics like physics, chemistry, biology, and mathematics, computer science (CS) has been mostly excluded from these discussions. First, we coded and evaluated the Computer Science (CS) situation in Indian schools using the ITiCSE working group's Darmstadt model, which gives a systematic classification approach to CS instruction in schools. We then looked into the motivation subcategory of the Darmstadt model and surveyed the future actions of secondary school pupils and their instructors from across 332 Indian institutions. Taking into account CS as an educational innovation, we present a pedagogical framework for innovation features that might substantially predict-adoption of CS among potential-adopter students and instructors based on Rogers' Theory of Diffusion of Innovations. Students' and educators' perspectives on CS adoption, as well as the roles of gender, school administration, and geographic location, were investigated via the examination of collected data. It was shown that the adoption of CS was more popular among females, urban students, educators, and private schools. However, the problem of CS, Informatics, ICT, and digital literacy being used interchangeably needs to be addressed. Our post paints a positive image of India's rapidly expanding and adopting CS as a fundamental topic of study in schools, as well as the country's educational policy directives and academic atmosphere. We also examine the elements that affect the uptake of CS in the classroom and find overwhelmingly favorable responses from both instructors and students in India.

RESEARCH METHODOLOGY

The issue was looked at using a normative survey approach in this research. A normative survey is a systematic effort to assess and report on the current state of a social organization, group, or geographical region. The purpose of a normative survey is to collect reliable data on the present state of phenomena and, where feasible, to extrapolate sound conclusions from those data (Best, 2006). The survey approach reveals a wealth of data on the composition of educational phenomena.

This approach also collects data from a large number of instances simultaneously. All primary school instructors from both publicly funded and privately funded institutions are included in the sample. All elementary school teachers in Bangalore are included in this figure. The schools in both northern and southern Bangalore were chosen at random by the researcher. The participating schools were chosen from the top one percent in each group. There are a total of 42 private schools and 15 public/aided schools. Thus, 64 different educational institutions were included in the analysis. Five educators were picked at random from each institution.

As a result, 320 educators working in public, state-supported, and independent institutions served as the study's sample. Both descriptive and inferential statistics were employed in the current investigation. Means and standard deviations were employed for data description, whereas inferential statistics like the t-test, correlation, and regression were utilized to draw conclusions.

DATA ANALYSIS

CORRELATIONAL ANALYSIS

To verify this hypothesis, we used Karl Pearson's correlation coefficient method, and the findings are shown in the table below: There is no significant association between computer skill and computer anxiety among primary school teachers.

Table 1 Correlation coefficient between computer competency and computer anxiety of primary school teachers

Variables	N	Pearson's correlation	Significance level
Computer competency	320		
		$-.352^{**}$	0.000
Computer anxiety	320		

The data in the table above shows that primary school teachers' level of computer knowledge is negatively correlated with their level of computer anxiety (r=-.352**, p0.000). Therefore, we accept the alternative hypothesis and reject the null. This suggests that there is a strong correlation between instructors' level of computer knowledge and their level of computer anxiety.

According to the findings, educators' levels of competence improve when they experience less computer fear. When stress levels rise, so does the likelihood of mistakes be made.

Among elementary school educators, there is no correlation between computer knowledge and positive outlook.

Karl Pearson's correlation coefficient method was used to make this determination, and the findings are shown in the table below.

Table 2 Correlation coefficient between primary school teachers 'computer competency and attitude towards computer usage

Variables	N	Pearson's correlation	Significance level
Computer competency	320		
Attitude towards computerusage	320	.318[**]	0.000

The data in the table above shows that primary school teachers' computer knowledge and enthusiasm for students' use of technology have a weak but statistically significant link (r=.318**, p0.000). Therefore, we accept the alternative hypothesis and reject the null. This suggests that there is a correlation between a teacher's level of computer knowledge and their outlook on the use of computers in the classroom.

If a teacher has a positive outlook on using technology in the classroom, they are more likely to be proficient in its use. Teachers' competence with computers is likely to be poor if they have a negative attitude regarding their use in the classroom.

REGRESSION ANALYSIS

This section describes the results of a regression analysis in which computer competence served as the dependent variable and computer anxiety and attitude toward computer use served as the predictor factors.

Table 3 The values of R, R square, adjusted R square for the variables.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.429[a]	.184	.179	10.57666

a. Predictors: (Constant), b. attitude. towards. computer. usage, computer. anxiety

Coefficient of determination for computer competence is 0.184, as seen in the table above; this means that computer fear and attitude account for around 18.4% of the variance in computer

competence. Furthermore, it suggests that computer competence may be affected by factors outside education.

Table 4 The values of R, R square for the variables.

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	8014.137	2	4007.068	35.820	.000[b]
1	Residual	35461.413	317	111.866		
	Total	43475.550	319			

a. Dependent Variable: computer. Competency

b. Predictors: (Constant), attitude. towards. computer. use, computer. Anxiety

Table 5 The coefficients values for computer competency

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	30.299	3.830		7.911	.000
	computer.anxiety	-.288	.051	-.296	-5.689	.000
1	attitude.towards.computer.use	.081	.017	.252	4.843	.000
a. Dependent Variable: computer. Competency						

Since the regression coefficient for computer anxiety is considerably different from zero (t=-5.689), this finding is statistically significant. A one-unit rise in computer anxiety is associated with a.288-unit drop in computer competence, according to the coefficient for computer anxiety.

The attitude regression coefficient is considerably different from zero, as shown by the t-value for attitude towards computer use of 4.843, which is statistically significant. For every one-unit rise in

attitude toward computer use, we may anticipate a 0.081-unit improvement in computer competence (using the coefficient for attitude towards computer usage).

This investigation shows that educators' worry about and perspective on using computers significantly affects their own level of computer proficiency. The model predicts that educators' competence would decline as their anxiety levels rise and rise again when their attitudes improve.

CONCLUSION

This study also found that primary school teachers' levels of computer competence varied by gender, age, educational background, years of experience teaching, and kind of school. Teachers who are more proficient with computers report lower levels of computer anxiety and more favorable views regarding computer use. The results demonstrate that most educators are about in the middle when it comes to their level of computer knowledge, computer fear, and computer positivity. The findings also suggest a unique strategy is required for each subset of educator populations. Teachers' computer abilities should be continuously assessed so that they may be improved. Teachers' confidence with and competence in using computers will improve with consistent instruction. Teachers, too, must face the reality of change, adapt to the changing demands of their students' age, and future themselves accordingly.

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