

"To Study Effect of Levels of Computer Attitude on Teaching Competency of Teachers"

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ABSTRACT: The Presented research paper studies the effect of levels of computer attitude on teaching competency of teachers. "Random sampling is the method of drawing a portion at population or universe so that all possible samples at fired size have the same probability of being selected random sampling is free personal biases sampling. In this way 80 teachers were selected for the study. The whole group of units from which sample is to be selected in technically termed as population under the population teachers of 4 different secondary schools are included from where samples were taken. After the administration of the test the investigator has located the scores of each answer sheet and calculated it. The calculation is done is a two way ANOVA method. Result-There is no significant effect of level of computer attitude of on teaching competency of teachers. Erkan,(2004) studied on computer attitude teaching competency of the teachers. Results indicate that kindergarten teachers had positive attitude towards computer. So the study rapport our result. Effect of teaching experience on the teaching of the teachers. **Keywords:** Computer attitude, teaching Competency, Gender/Teachers

I. INTRODUCTION:

Know a day growth of information and communication technology (ICT) brought in rapid changes in various fields. It had also made entry school into education because of its appropriateness, applicability and versatility in use for classroom teaching. It is well recognized that ICT has great potential for improving the teaching learning process. It facilitates individualized learning and develops problem solving skills. Its interactive nature motivates students to learn. Educationists and teachers believe that with the help of ICT quality of education given to the students can be significantly improve.

In this era of digital communication, both students and teachers have an easy access to

sources of information. But, to take advantages of ICT, firstly, the teachers need to be aware of various information technologies and their potential uses in the field of education. It is pertinent to expose the teachers to information technology so as to realize its benefits for them and for their students. Secondly teachers will have to update their knowledge and skills using ICT to make fullest utilization of hardware and software resources' available. With changing teaching methods in curriculum transaction, it is essential that teacher have to leave their apprehensions' behind about technology mediated instruction and adopt new technology.

school and those who received training recorded a higher competency in ICT. Competent in using computer reported more favorable perception towards ICT. Bee Theng Lau and Chia Hua sim (2008) they indicated that teachers held seasonality positive attitude ICT adoption iays consistent with definitions associated with 21 century literacy. The study reports that ninety eighty percent of teachers reported that they would like to increase their integration of ICTs into instructions. Panigrahi (2011): Studied perception of teachers towards extensive utilization of information and communication technology. One hundred senior secondary school teachers from Haryana were selected through sample random sampling technique. The study reported that there is no difference between the perceptions of urban and rural teachers and male and female teachers. AnneMundy, Kupgynsk and Kee(2012) Studies teacher's perceptions of technology use in the schools in the USA. Teachers expressed that there was a significant increase in the areas of student engagement student's excitement and student acceleration of learning was observed after the compilation of teacher empowerment a programmer. Rao (2014): In this studied on knowledge attitude and usage ICT of teachers. The finding revealed that there was no significant

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diligence on the knowledge level about ICT but the study showed a significant diligence in attitude logwoods ICT use of ICT possess of secondary school teacher.

Operational Definition of key term: Computer attitude:

Computer attitudes is cited in many studies as a correlate with technology-enriched learning environments with very few exception the general finding an both students and teachers suggested attitude I related to performance and appear to have substantial influence on computer utilization and technology based perforce in education.

Teaching competency:

Competency is essential for successful integration of technology is classroom teaching.

Gender: Means male and female secondary school teachers.

Objective of the studies:

1. To study effect of levels of computer attitude on teaching competency of teachers Hypothesis:

 H_{01} There will be no significant effect of levels of computer attitude on teaching competency of the teachers.

Method: The present study Investigator use by Random sample technique.

Population:

The whole a group of units from which samples is to be selected is technically termed as population.

Simpson and Kafka(1962) Defines population as an aggregate of items possessing a common traits or traits.

Population means the entire marks of observation which is the parent groups from which sample is to be formed the population is any group of items or individuals that have one more characteristics in common. To draw the sample are must have a clear idea of the population from which the sample is to be taken for study.

Sample:

The primary purpose of research it is to discover principles that have universal application but to study a whole population and to arrive at generalization would be impracticable and not possible also some population is so large that their characteristics cannot be measure fortunately the process of sampling makes it possible to draw valid inferences or generalization on the basic of careful observation of variables with in a relatively small proportion at the population.

A sample is a small proportion of population selected for observation and analysis by observing the characteristics of the sample one can make certain inferences about the characteristics at the population from which it is draw sample are not chosen haphazardly they are chosen in a systematic random way so that the change or the operation at probability can be utilized.

In the present study the different high school of private were selected randomly and from that the student were selected randomly. By this method the population has an equal and independent chance of being selected in the sample. In this way 80 teachers were selected for

the study which has been shown in table 1.1 The whole group of units from which sample is to be selected in technically termed as population under the population teachers of 4different secondary schools are included from where samples were taken table no. 1.1.

| S.N | Name of the school | Comp. Att | itude | Teaching Competency | | Total |
|-----|------------------------|-----------|-------|------------------------|----|-------|
| | | М | F | М | F | |
| 1 | MGM public school | 5 | 5 | 5 | 5 | 20 |
| 2 | KPS | 5 | 5 | 5 | 5 | 20 |
| 3 | Sent Javier school | 5 | 5 | 5 | 5 | 20 |
| 4 | Sarswati public school | 5 | 5 | 5 | 5 | 20 |
| | Total | 20 | 20 | 20 | 20 | 80 |

Sample distribution Table No. 1.1

Tools:

The tools used for the present study are 'computer attitude' constructed and standards by Dr. Sanjit Kumar. Teaching competency developed by Dr. B.K. Passi and M.S. Lalita (1971). **Selection of tools:** The research has selected computer attitudes developed by Dr. Sanjit Kumar. The test in easily available the can be easily administered on the teacher. This test in standardized test

Reliability:

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The computer attitude was directly associated with affective, perceived usefulness, perceived behavioral control and behavioral attitude and their mean differed significantly on the different levels of computer attitude.

Prior to administering the questionnaire, some item in Selwyn's has modified to fit the target to audience and lasted for construct validity through expert reviews and field testing with six comparable audiences. A reliability lost using Cranach's coefficient was computed for the overall computer attitude scale and all sub scales. Negative items constructed for internal consistency were reversed for the purpose of the analysis.

The computer attitude sub domains were analyzed for significant mean variation using ANOVA. Further analysis conducted to compare the relationship and structure between each of the sub-constructs and the general computer attitude. (B). second tools was selected teaching competency developed by DR. B.K. Passi and M.S. Lalita (1971). The test is easily administrated on the teachers. This test is standardized test.

Reliability and validity of the scale:

Since this is an observation tool the more appropriate type of reliability is the inter observe reliability. This scale has been use for doctoral research. Inter observer reliability can be better established when the observer train themselves for using ICT scale.

The scale has content validity since at every stage of its development; discussions were held with teachers and teacher's educators with regard to the different teaching skills included and their behavioral components. This finds further supports from the literature. For listing the teaching skills under each classification detailing out their concern made are: already exist icy scales abroad especially the standard teaching appraisal guide developed the scale has factorial validity this was establish by Rama in her doctoral study on factorial structure of teaching competencies among secondary school teachers.

Statistics:

After the administration of the test the investigator has located the scores of each answer sheet and calculated it. The calculation is done is a two way ANOVA method. The investigator has used the two way ANOVA to find out the effect of computer attitude on teaching competency of teachers.

Process of Research:

Before in banking on details of research methodology and technique it seems appropriate to present a brief overview of the research process. Research process consists of series of actions or steps necessary to effectively carry out research and the desired sequencing at these steps the chart shown well illustrates a research process.

The chart indicates that the research process consists of a number of closely related activities as shown through 1 to VII but such activities overlap continuously rather than following a strictly prescribed sequence. At times the first step determines the nature of the last step to be under taken.

It subsequent procedures have not been taken account in the early stages; serious difficulties may arise which may even prevent the competition of the study. One should remember that the various steps involved in a research process are not mutually exclusive or their separate and district. They do not necessarily follow each other in any specific order and the researcher had to e constantly anticipating of each step in the research process the requirement of the following order concerning.

Research Design:

Research design a sample is a mapping strategy which is bassed on sampling technique. The research designs include the proper selection sample and the tools for measurement of variables as well as the appropriate of the statistical analysis. Research design in the statement of the enquire and the strategies for colleting the evidence, analyzing the evidence and repot finding. Thus, a research design stands for advance planning of the method to be adapted for collecting the technique to be used in the analysis keeping in view the objective of the research and the availability of staff time and money.

The present study is based on survey research on that needs to prepare a layout of the method of following steps in taking a proper sample collecting data adopting the suitable technique to Arrive a desired result and verification of the hypothesis Research design for present study is as below table no. 1.2.



| Table : 1.2 | | | | | | |
|-------------|-----------------------|--------|----------|------------------------|----|--|
| | Low computer attitude | | High con | High computer attitude | | |
| | Male | Female | Male | Female | | |
| <5 years | 10 | 10 | 10 | 10 | 40 | |
| >5 years | 10 | 10 | 10 | 10 | 40 | |
| | 20 | 20 | 20 | 20 | 80 | |

Karlinoer asserts that research design has two purposes.

- 1. To provide answer to research questions
- 2. To control the variance.
- Variance is a characteristic which can take different values for different sample subject.

Variables are classified is to

- 1. Dependent variable
- 2. Independent variable

In the present study computer attitude is dependent variable and teaching competency is independent variable.

Tabulation of data:

The main elective of this study is to find the effect of computer altitude on teaching of teachers we have categorized the computer attitude high categorized and low categorized.

Table: 1.3

| | Computer High Attitude | | Computer Low Attitude | | |
|------------|------------------------------------|--|------------------------------------|--|--|
| | Male | Female | Male | Female | |
| | Mean = 97.8 | Mean = 102.5 | Mean = 77.3 | Mean = 76.2 | |
| | N = 10 | N = 10 | N = 10 | N = 10 | |
| < 5 Years | $\sum x = 978$ $\sum x^2 = 956484$ | $\Sigma x = 1025$ $\Sigma x^2 = 1050625$ | $\sum x = 773$ $\sum x^2 = 597529$ | $\Sigma x = 762$ $\Sigma x^2 = 580644$ | |
| | Mean = 100.4 | Mean = 110.4 | Mean = 78.3 | Mean = 89.8 | |
| > 5 Vears | N = 10 | N = 10 | N = 10 | N = 10 | |
| ~ 5 i cais | $\Sigma x = 1004$ | $\Sigma x = 1104$ | $\Sigma x = 783$ | $\Sigma x = 898$ | |
| | $\Sigma x^2 = 1008016$ | $\Sigma x^2 = 1218816$ | $\Sigma x^2 = 613089$ | $\Sigma x^2 = 806404$ | |

II. ANALYSIS AND INTERPRETATION:

The parole of analysis in to reduce data in to an interpretable form so that the relation of research proffer can be studied tested. It is throat system systematic analysis that the important characteristics which are hinder is the data are revealed and valid generation in drawn.

After this research has to draw internees form the analysis that he or she has dome this part of investigation which in associated with drawing of inferences form the collected facts after analysis in referred as 'interpretation of data' it proved certain conclusion about the problem under study interpretation takes the result of analysis makes intervener pertaining to research relations studied and draws conclusion for this accurate and adequate data must be obtains.

The main objective of this study in to find out the effect of computer attitude on teaching competency of teachers. To see the effect of high computer attitude of teaching competency and low computer attitude of teaching competency. The calculation of 2x2x2 factorial design ANOVA is done.

H₁ There will be no significant effect of levels of computer attitude on teaching competency of the teachers.

The first major hypothesis is that 'there will be no significant effect of level of computer attitude of secondary school teachers 'for sake of convenience. The information regarding the hypothesis is obtained through various statistical application is analyses to see the effect of computer attitude on teaching competency of secondary school teachers have experience of teaching low high computer attitude is computed and presented in table.



| Table : 1.3.1 (A) | | | | |
|--------------------------|----|---------|--|--|
| | Ν | Mean | | |
| Low Computer attitude | 40 | 80.4 | | |
| High Computer attitude | 40 | 102.775 | | |

This table 1.3.1 (A) shows that mean score of high computer attitude group is 102.775 which is greater than mean score of low computer attitude group which is 80.4 to test whether there is effect

of computer attitude on teaching competency of secondary school teacher are significant or not ANOVA with two sex groups (male and female) (low and high).

| Table : 1.3.1 (B) | | | | | |
|-------------------|---------|----|---------|-------|-----|
| Source | SS | df | MS | F | SIG |
| Computer attitude | 678.613 | 1 | 678.613 | 2.233 | NS |

From the table 1.3.1 (B) it can be observed that F ratio significant (F-ratio2.233, df =1.72, p<0.01) i.e. our calculated value is lesser than is table value 3.98 reflector than mean score of computer attitude level is not significant so our hypothesis is accepted.

III. RESULT

There is no significant effect of level of computer attitude of on teaching competency of teachers.

Educational implication:

The implication is that the student's teachers lacked the necessary competence in the full integration of computer attitude in curriculum. This undress core the need to improve the ICT contents of teacher education programs in schools.

In this study. It was discovered that teachers have positive attitude to woods the use of computer in teaching. Computer can improve the quality and interactive nature of lessons and ease some of the many administrative treks that a teacher must do. A computer can free up a teacher's time by acting as a tutor to repent drills and spend time with student's who need extra support. Computer in the class room can help teachers prepare materials for their lessons and activities. With access to the internet, teachers can prepare interning worksheets without relying solely on books and affine reference material.

With Within access to global to global education and instructional resource via the internet getting familiar with technology and its operations can influence filtering of information for quality and the selection of appropriate pedagogical toolkits or resources for the development of higher order cognitive skills of students.

The composite set of computer attitude can serve as precursor to computer technology proficiencies or ICT adoption, usage and performance when contextual factors are well schools. defined and established in the both theoretical and Nonetheless. practical understanding of the dynamics of human computer interaction as well as subjective human behaviors such as attitude and self efficacy can provide the means to design interventions and supportive learning and teaching environments. The aims of this study to check the effect of computer attitude on teaching competency of teach.

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