



COMPUTER COMPETENCY AMONG B.ED. TRAINEES

Dr. M. Arockia Priscilla¹ and Dr. N. Ramakrishnan²

¹Principal , Mangayarkarasi College of Education, Madurai.

² Professor and Head , Department of Educational Technology ,
Tamil Nadu Teachers Education University , Chennai.

ABSTRACT :

Computer competency is the ability to perform essential desktop functions in the computer. The necessity to possess such skills is most important in the present day world. The term computer competency is further more skill oriented than computer literacy. The objectives of the study are to find out the computer competency among B.Ed. trainees and to find out the differences among them in terms of gender and marital status. The investigator used computer competency test to measure the competency of B.Ed. trainees. The investigator found out validity and reliability for the test. The sample consists of 100 B.Ed. trainees from Madurai district. The study has found out the computer competency is high among B.Ed. trainees. The variables gender and marital status do not show differences in the computer competency among B.Ed. trainees.



KEYWORDS : Computer, Competency, B.Ed. Trainees.

INTRODUCTION:

Computer competency is the ability to perform essential desktop functions in the computer. The necessity to possess such skills is most important in the present day world. The term computer competency is further more skill oriented than computer literacy. Computer literacy is the ability to use computers and related technology efficiently, with a range of skills covering levels from elementary use to programming and advanced problem solving. By another measure, computer literacy requires some understanding of computer programming and how computers work. Computer literacy is different from digital literacy. Digital literacy refers to the ability to communicate or find information from the Internet. Digital literacy improves computer literacy to a certain extent. Computer literacy is a part of digital literacy, but it is because of the popularization of computer literacy that Numbers have been widely used that computers have made Numbers more flexible to some extent.

COMPUTER COMPETENCY

The emergence and success of new technology sectors in both new and established educational settings is inextricably linked with individuals able to recognize new opportunities and lead their exploitation.

ESSENTIAL COMPUTER SKILLS FOR THE 21ST CENTURY

Keyboarding

How to touch-type the alphabetic, numeric, and symbol keys; create, save, and edit word processing documents.

Computer Skills for the Workplace

Most jobs today require a working knowledge of certain computer skills. Introduction to Windows 10 and Office 2016 and is designed to provide the fundamental computer competencies.

Introduction to PC Troubleshooting

Intro to PC Troubleshooting will show you how to maintain and optimize a Windows PC.

NEED FOR THE STUDY

Computer is everywhere. It has become an inseparable one in human life. The essence of computer has been felt in the parlance of education field. The computer does innumerable functions. Its use in education is an inevitable one. The B.Ed. trainees are the future teachers. The country lies on the talents of future teachers. They are going to shape the future citizens of India. The study is to know how far the B.Ed. trainees are adept in using computers. In other words, how far they are good in computer competency is the moot question in this study. With the intention to know the truth behind this computer competency among B.Ed. trainees, this study has been taken up.

TERMS AND DEFINITIONS

Computer Competency – refers to ability to work with computers

B.Ed. Trainees- refers to student teachers who are undergoing B.Ed. two year programme after graduation

OBJECTIVES OF THE STUDY

The study has formulated the following objectives:

1. To find out the computer competency among B.Ed. trainees.
2. To find out the significant difference in the computer competency among B.Ed. trainees in terms of Gender.
3. To find out the significant difference in the computer competency among B.Ed. trainees in terms of marital status.

HYPOTHESES FORMULATED FOR THE STUDY

The hypotheses stated are as follows:

1. The computer competency among B.Ed. trainees is average.
2. There is no significant difference in the computer competency of B.Ed. trainees in terms of Gender.
3. There is no significant difference in the computer competency of B.Ed. trainees in terms of marital status.

INSTRUMENTATION

The investigator used the computer competency test prepared and validated by the investigator. There are 25 multiple choice items in the scale. Each item is having a value of 1 mark. Thus total marks would be 25.

ESTABLISHING VALIDITY OF THE TOOL:

The investigator has consulted experts in the field of computer education to check the content in the test and its suitability to local needs. It ensures face and content validity of the inventory. According, to Garret, H.E (1967, P, 365) the index of reliability is sometimes taken as a measure of validity.

ESTABLISHMENT RELIABILITY OF THE TOOL: TEST-RETEST METHOD:

The test was administrated among the 40 B.Ed. trainees in Madurai as a try out and re-administrated among the same 40 B.Ed. trainees after a gap of 15 days. The rank order correlation was used to find out the correlation between first and second administration of the test. The correlation between the two responses was 0.87. It is high correlation. Hence, it is assumed that the test has reliability.

SCORING:

The scores for all the 25 items were counted. Master table was prepared.

SAMPLE DESIGN

The investigator has followed random sampling method for the present study. The investigator has collected a sample of 100 B.Ed. trainees in Madurai.

ANALYSIS**Hypothesis 1.**

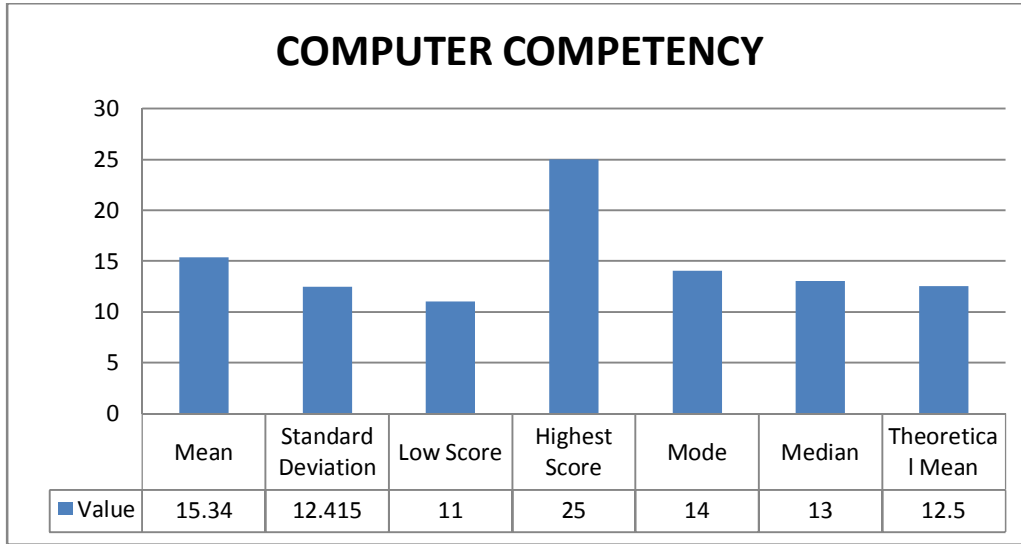
The computer Competency of B.Ed. trainees is average.

TABLE 4.1.DESRIPTIVE ANALYSIS FOR THE COMPUTER COMPETENCY OF B.ED.TRAINEES.

S.No	Description	Value
1.	Mean	15.34
2.	Standard Deviation	12.415
3.	Low Score	11
4.	Highest Score	25
5.	Mode	14
6.	Median	13
7.	Theoretical Mean	12.5

It is evident from Table 1 that the median and mode values for the B.Ed. trainees on computer competency are 13 and 14 respectively. The highest score is 25 and the lowest score is 11. The mean value obtained is 15.34 with standard deviation of 12.42. It is well above the theoretical mean of 12.5. It is proved from the above table that the B.Ed. trainees are having computer competency at high level. So, the hypothesis is refuted.

FIGURE 1: BAR DIAGRAM SHOWING THE DESCRIPTIVE ANALYSIS OF THE COMPUTER COMPETENCY OF B.ED. TRAINEES



INFERENCEAL ANALYSIS

Inferential analysis always involves the process of sampling and the selection of a small group assumed to be related to the population from which it is drawn. The small group is known as the sample, and the large group is population. Drawing conclusions about populations based on observations of samples are the purpose of inferential analysis.

DIFFERENTIAL STUDIES

The dependent variable computer competency of B.Ed. trainees in terms of various subgroups of the sample is presented here. The subgroups selected for the study were gender and marital status.

DEGREES OF FREEDOM

The number of degree of freedom in a distribution is the number of observations (or) values that are independent of each other that cannot be deducted from other. The number of degrees of freedom for the significance of difference between the means of two independent groups would be $N_1 + N_2 - 2$

HYPOTHESIS: 2

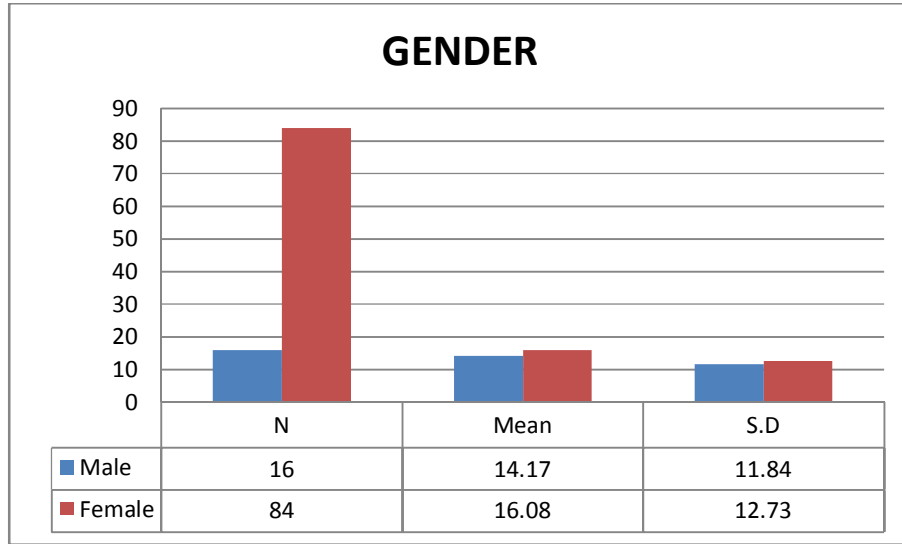
There is no significant difference in the computer competency of B.Ed. trainees in terms of Gender.

TABLE 2 : MEAN, S.D. AND 't' VALUE FOR COMPUTER COMPETENCY OF B.ED. TRAINEES IN TERMS OF GENDER

Gender	N	Mean	S.D	't'	Critical Value	Level of Significance
Male	16	14.17	11.84	1.299	1.960 for df of 298 at 0.05 level	No Significant
Female	84	16.08	12.73			

It is evident from Table 4.2 that the obtained 't' value is 1.299. It is lesser than the critical value of 1.960 for df of 298 at 0.05 level. It is not significant. Hence the hypothesis stated is accepted. There is no significant difference in the computer competency of B.Ed. trainees in terms of gender.

FIGURE 2: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN COMPUTER COMPETENCY OF B.ED. TRAINEES IN TERMS OF GENDER.



HYPOTHESIS: 3

There is no significant difference in the computer competency of B.Ed. trainees in terms of marital status.

TABLE: 3 ANALYSIS OF VARIANCE FOR SIGNIFICANT DIFFERENCE IN THE COMPUTER COMPETENCY OF B.ED. TRAINEES IN TERMS OF MARITAL STATUS

S.No	Sources of variation	SS	Df	MS	Calculated 'F' value	Level of significance
1	Between Groups	834.513	2	417.256	2.738	NS
	Within Groups	45251.124	97	152.361		
Total		46085.637	99			

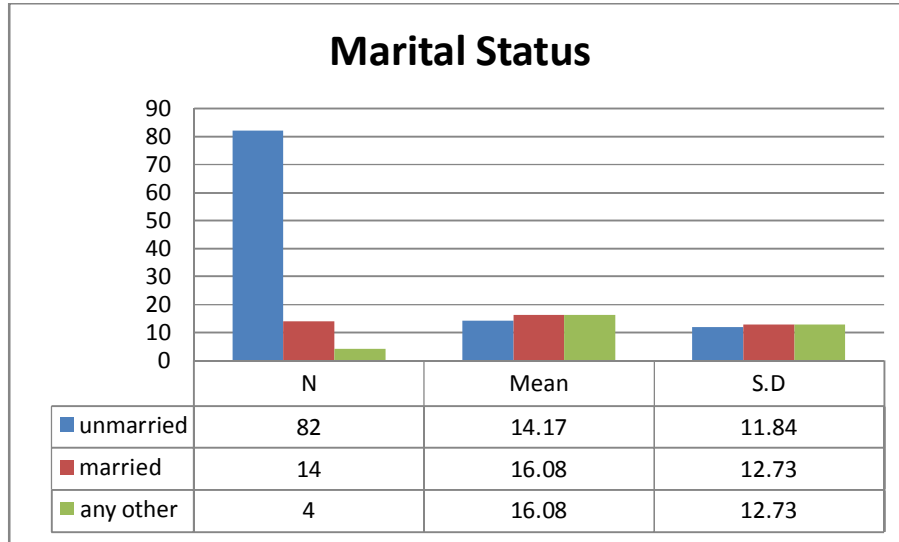
S-Significant

NS-No Significant

It is evident from table 4.3 that the obtained F value is 2.738. It is lesser than the critical value of 3.00 for df of (2/297) at 0.05 level of significance. There is no significant difference in the computer competency of teacher trainees in terms of marital status. Hence, the null hypothesis stated as there is no significant difference in the computer competency of B.Ed. trainees in terms of marital status is accepted.

It may be concluded from the above table that there is no significant difference in the computer competency of B.Ed. trainees in terms of marital status.

FIGURE 3: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN THE COMPUTER COMPETENCY OF B.Ed.TRAINEES IN TERMS OF MARITAL STATUS.



FINDINGS

1. It is revealed from the study that the B.Ed. trainees are having computer competency at a high level.
2. Further in differential studies, it has been proved that there is no significant difference in the computer competency of B.Ed. trainees in terms of gender.
3. The variable marital status does not influence the computer competency of B.Ed. trainees. Whether married or unmarried do not show difference.

CONCLUSION

It is concluded from the above findings that the B.Ed. trainees have computer competency at high level. The variables gender and marital status do not influence the computer competency of B.Ed. trainees.

EDUCATIONAL IMPLICATIONS

The study has brought out an important finding that is the B.Ed. trainees have computer competency at high level. This is due to the recent developments in computer and ICT World. Even laymen are aware of use of computer and mobile phones. In this context, the finding is in tune with the present prevailing condition of the world.

Further it is to be noted from the differential studies that the personal variables gender and marital status do not influence the computer competency of B.Ed. trainees. It seems that male and female B.Ed. trainees are alike in their computer competency. Likewise, the married and unmarried are also uniform in computer competency. This is also reflects the general trend which is prevailing in the contemporary education field. All are uniform. No gender differences and no differences in terms of marital status.

REFERENCES:

- Best, John and Kahn, James V(1992) "Research in Education" (Sixth Edition), Prentice – Hall of India Pvt.Ltd., New Delhi.
- Christine A. Murphy, DelphineCoover (1989) Development and Validation of the Computer Self-Efficay Scale, University of Connecticut.

WEB REFERENCES:

https://en.wikipedia.org/wiki/Technological_self-efficacy
https://www.jstor.org/stable/249688?seq=1#page_scan_tab_contents
<http://www.tojet.net/articles/v11i3/1137.pdf>
<http://inform.nu/Articles/Vol1/v1n3p61-68.pdf>
<http://journals.sagepub.com/doi/abs/10.1177/001316448904900412>
<https://pdfs.semanticscholar.org/391d/d4ca2ee3b2995260425d09dd97d4d9aac29.pdf>
<http://cfcc.edu/learninglab/computer-competency-practice-test/>