

Relationship between Computer Competency and Self-Esteem among B.Ed. Student Teachers

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Abstract: This study aims to discover the Computer Competency and Self-Esteem among B.Ed. Student Teachers. This study was conducted on 690 B.Ed. Student Teachers in Perambalur District of Tamilnadu State in India. The Normative survey method has been followed and simple random sampling has been used in administration of the research tools. Computer Competency Scale (2023) Constructed and Validated by the Investigator and Self-Esteem Scale (2015) developed by Santosh Dhar and Upinder Dhar. Finding revealed that the Computer Competency and Self-Esteem among B.Ed. Student Teachers is average. This study also found that there is significant difference in the Computer Competency and Self-Esteem among B.Ed. Student Teachers in respect of Gender and Student Residence, there is significant difference in the Self-Esteem among B.Ed. Student Teachers in respect of Gender and Student Residence, there is significant and positive relationship between Computer Competency and Self-Esteem among B.Ed. Student Teachers.

Key Words: Computer Competency, Self-Esteem, Gender, Student Residence and B.Ed. Student Teachers

1. INTRODUCTION

Competency is not just the ability to read and write. It extends to effective application of all those activities in which competency is normally assumed (Abimbade, 1996). Such application could be on computer, hence the terminology, 'computer competency'. According to the Psychology Wiki, the definition of computer competency varies from group to group and could mean the knowledge and ability to use computers and technology efficiently; the comfort level someone has with using computer programmes and other applications that are associated with computers; knowing how computers work and operate; or having basic computer skills. The first concrete definition of self-esteem was given by James in 1890. According to him, self-esteem may be defined as to be the ratio of success and pretensions in important life domains. The individual processes have been focused to a stronger degree by

James as that forms self-esteem afterwards symbolic interactionism approaches stressed the social influences on self-esteem. It is a psychological feature related to a person's image of self-importance and self-assurance in entire aspect of human activity.

2. SIGNIFICANCE OF THE STUDY

Computer competency is defined as the ability to use computers at an adequate level for creation, communication and collaboration in a literate society. In language teacher education, it involves the development of knowledge and skills for using general computer applications, language specific software programs and Internet tools confidently and competently. It comprises a number of aspects, including technological awareness, technical vocabulary, components of a computer, concepts of data and programs, ways of computing, working on files, documents and pictures, working with multimedia, evaluating resources and communicating with others. Therefore it has felt imperative on the part of teachers, to keep themselves abreast with latest development in their subjects and develop skills in utilizing computers and technology for effective teaching.

Self-esteem is vital in every aspect of a person's life. Its need is ardently felt in teaching profession as prospective teachers are directly interacting with the whole personality of their students. This interaction needs devotion, sense of ownership, and commitments which are directly linked not only with their mind but also with their enthusiastic attachment with their profession.

3. OPERATIONAL DEFINITION OF KEY TERMS

Computer Competency

Computer competency is defined as the demonstrated ability to use information technology. This includes the ability to use computer applications in education

and the workplace, and the ability to safely use the Internet and other information technology resources.

Self-Esteem

The term 'Self- esteem' refers to a measure of self-acceptance and the ability of self-actualization which has an influence on the well-being of an individual.

4. OBJECTIVES OF THE STUDY

The following objectives have been formulated for the present study:

1. To find out the level of Computer Competency among B.Ed. Student Teachers.
2. To find out the level of Self-Esteem among B.Ed. Student Teachers.
3. To find out whether there is any significant difference in the Computer Competency among B.Ed. Student Teachers in respect of sub-samples a) Gender and b) Student Residence.
4. To find out whether there is any significant difference in the Self-Esteem among B.Ed. Student Teachers in respect of sub-samples a) Gender and b) Student Residence.
5. To find out whether there is any significant relationship between Computer Competency and Self-Esteem among B.Ed. Student Teachers.

5. HYPOTHESES OF THE STUDY

1. To the level of Computer Competency among B.Ed. Student Teachers is low.
2. The level of Self-Esteem among B.Ed. Student Teachers is low.
3. There is no significant difference in the Computer Competency among B.Ed. Student Teachers in respect of sub-samples a) Gender and b) Student Residence.
4. There is no significant difference in the Self-Esteem among B.Ed. Student Teachers in respect of sub-samples a) Gender and b) Student Residence.
5. There is no significant relationship between Computer Competency and Self-Esteem among B.Ed. Student Teachers.

6. METHOD OF THE STUDY

Normative survey method was adopted in the present study.

7. SAMPLE USED

Simple random sampling has been employed to collect the data from 690 B.Ed. Student Teachers

studying in Perambalur District of Tamilnadu State, India.

8. TOOLS USED

In order to collect the required data, Computer Competency Scale (2023) Constructed and Validated by the Investigator and Self-Esteem Scale (2015) developed by Santosh Dhar and Upinder Dhar.

9. ANALYSIS OF DATA AND INTERPRETATION

The data collected were descriptively analyzed by employing the following statistical techniques:

1. Descriptive Analyses
 - i. Measures of central tendency (Mean)
 - ii. Measures of variability (Standard Deviation)
2. Differential Analyses ('t' test and 'F' test) and
3. Co-relational Analyses (Karl Pearson Product Moment Correlation)

Descriptive Analysis

Hypothesis No.1

The level of Computer Competency among B.Ed. Student Teachers is low.

Table 1: Mean and Standard Deviation in respect of Computer Competency among B.Ed. Student Teachers

Variable	N	Mean	SD
Computer Competency	690	108.81	21.33

From table-1, it is observed the calculated mean and standard deviation for the Computer Competency scores of the entire sample were found to be 108.81 and 21.33 respectively. One can get a maximum score of 150 on Computer Competency scale. The mean score lies between the average Computer Competency value range (82-123), the framed hypothesis (1) is rejected and it is concluded that the Computer Competency among B.Ed. Student Teachers is average.

Hypothesis No.2

The level of Self-Esteem among B.Ed. Student Teachers is low.

Table 2: Mean and Standard Deviation in respect of Self-Esteem among B.Ed. Student Teachers

Variable	N	Mean	SD
Self-Esteem	690	90.28	14.17

From table-2, it is observed the calculated mean and standard deviation for the Self-Esteem scores of the entire sample were found to be 90.28 and 14.17 respectively. One can get a maximum score of 115 on Self-Esteem scale. The mean score lies between the average Self-Esteem value range (81-97), the framed hypothesis (2) is rejected and it is concluded that the

Self-Esteem among B.Ed. Student Teachers is average.

Differential Analysis

Hypothesis No.3

There is no significant difference in the Computer Competency among B.Ed. Student Teachers in respect of sub-samples a) Gender and b) Student Residence.

Table-3: Comparison of Mean Computer Competency Scores among B.Ed. Student Teachers in respect of sub-samples

Variable	Gender	N	Mean	SD	't' Value	Level of Significance at 0.05 Level
Computer Competency	Male	332	112.19	20.21	2.78	Significant
	Female	358	107.73	22.53		
	Rural	312	104.38	19.34	4.34	Significant
	Urban	378	117.86	21.64		

Table-3, shows that the computed 't' value for the mean Computer Competency scores between male and female B.Ed. Student Teachers [$t_{(690)} = 2.78 > p$] is significant. Hence, the framed null hypothesis 3(a) is rejected and it is concluded that there is a significant difference in the Computer Competency among B.Ed. Student Teachers in respect of gender. It is also inferred that male students are more Computer Competency than the female students.

$4.34 > p$] is significant. Hence, the framed null hypothesis 3(b) is rejected and it is concluded that there is a significant difference in the Computer Competency among B.Ed. Student Teachers in respect of student residence. It is also inferred that urban students are more Computer Competency than the rural students.

Hypothesis No.4

Table-3, shows that the computed 't' value for the mean Computer Competency scores between rural and urban resident B.Ed. Student Teachers [$t_{(690)} =$

There is no significant difference in the Self-Esteem among B.Ed. Student Teachers in respect of sub-samples a) Gender and b) Student Residence.

Table-4: Comparison of Mean Self-Esteem Scores among B.Ed. Student Teachers in respect of Gender

Variable	Gender	N	Mean	SD	't' Value	Level of Significance at 0.05 Level
Self-Esteem	Male	332	88.87	13.43	2.93	Significant
	Female	358	91.94	15.20		
	Rural	312	92.85	14.48	5.69	Significant
	Urban	378	85.05	12.99		

Table-5, shows that the computed 't' value for the mean Self-Esteem scores between male and female B.Ed. Student Teachers [$t_{(690)} = 2.93 > p$] is significant. Hence, the framed null hypothesis 4(a) is rejected and it is concluded that there is a significant difference in the Self-Esteem among B.Ed. Student Teachers in respect of gender. It is also inferred that

female students are more Self-Esteem than the male students.

Table-5, shows that the computed 't' value for the mean Self-Esteem scores between rural and urban resident B.Ed. Student Teachers [$t_{(690)} = 5.69 > p$] is significant. Hence, the framed null hypothesis 4(b) is

rejected and it is concluded that there is a significant difference in the Self-Esteem among B.Ed. Student Teachers in respect of student residence. It is also inferred that rural resident students are more Self-Esteem than the urban resident students.

Correlation Analysis

Table – 5: Showing the correlation values between Computer Competency and Self-Esteem among B.Ed. Student Teachers based on Entire sample

Variable	N	'r' value	Level of Significance
Computer Competency and Self-Esteem	690	0.428	Significant

Table-5 shows that, the co-efficient of correlation between Computer Competency and Self-Esteem among B.Ed. Student Teachers is found to be [N=690, r=0.428 at 0.01 level] which indicates that there is a positive correlation between Computer Competency and Self-Esteem scores. Therefore hypothesis 5 is rejected and it is concluded that there is a positive and significant relationship between Computer Competency and Self-Esteem among B.Ed. Student Teachers.

10. FINDINGS OF THE STUDY

- The level of Computer Competency among B.Ed. Student Teachers is average.
- The level of Self-Esteem among B.Ed. Student Teachers is low.
- There is a significant difference in the Computer Competency among B.Ed. Student Teachers with respect to their gender.
- There is a significant difference in the Computer Competency among B.Ed. Student Teachers with respect to their student residence.
- There is a significant difference in the Self-Esteem among B.Ed. Student Teachers with respect to their gender.
- There is a significant difference in the Self-Esteem among B.Ed. Student Teachers with respect to their student residence.
- There is a positive and significant relationship between Computer Competency and Self-Esteem among B.Ed. Student Teachers.

11. CONCLUSION

Teaching progression is not only to provided knowledge and information available in the text books, but he has to collect information from various sources like reference books, journals, encyclopedias, and more recently, electronic mass media as it has

Hypothesis No.5

There is no significant relationship between Computer Competency and Self-Esteem among B.Ed. Student Teachers.

become a store house of information. In a less time teacher can collect detailed information on any subject or topic from internet. Hence, B.Ed. teacher trainees has average level of computer competency and self-esteem. The study reveals that, there is significant difference of means score of computer competency among male, female, rural resident and urban resident students teachers, there was significant difference of mean score of self-esteem among male, female, rural resident and urban resident students teachers and also found that there is significant and positive relationship between Computer Competency and Self-Esteem among B.Ed. Student Teachers.

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