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## COMPUTER SELF- EFFICACY OF B.ED. TRAINEES

**Dr. N. Ramakrishnan[1]  and  Mrs. S. Poonguzhali[2]**
**[1]Professor and Head , Department of Educational Technology,**
**Tamil Nadu Teachers Education University , Chennai .**
**[2]Assistant Professor , Vels University , Chennai.**

### ABSTRACT

*Self-efficacy is the belief in one's ability to successfully perform a technologically sophisticated new task. This is a specific application of the broader and more general construct of self-efficacy, which is defined as the belief in one's ability to engage in specific actions that result in desired outcomes.Self-efficacy does not focus on the skills one has, but rather the judgments of what one can do with his or her skills. Traditionally, a distinguishing feature of self-efficacy is its domain-specificity. In other words, judgments are limited to certain types of performances as compared to an overall evaluation of his or her potential.  This study is intended to find out the self-efficacy of B.Ed. trainees. The objectives of the study were : 1. To find out the computer self-efficacy of B.Ed. trainees and 2. To dinf out the differences incomputer self-efficacy of B.Ed. trainees in terms of  gender and marital status. The tool used in the study was Computer Self-efficacy scale. The sample technique used in the study is a random sampling. The findings of the study revealed that the B.Ed. trainees have high level of computer self-efficacy and there were no differences in computer self-efficacy among B.Ed. trainees in terms of gender and marital status.*

**KEYWORDS:** *Computer, Self-Efficacy, B.Ed. Trainees .*

### INTRODUCTION

Self-efficacy is the belief that one has the ability to perform a particular behavior is an important construct in social psychology. Self-efficacy perceptions have been found to influence decisions about what behaviours to undertake ( e.g. Bandura et. al., 1977 Betz and Hackett, 1981.)Technological self-efficacy (TSE) is "the belief in one's ability to successfully perform a technologically sophisticated new task". This is a specific application of the broader and more general construct of self-efficacy, which is defined as the belief in one's ability to engage in specific actions that result in desired outcomes.Self-efficacy does not focus on the skills one has, but rather the judgments of what one can do with his or her skills. Traditionally, a distinguishing feature of self-efficacy is its domain-specificity. In other words, judgments are limited to certain types of performances as compared to an overall evaluation of his or her potential.

### COMPUTER SELF-EFFICACY

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. New technology use is advanced by those with self-efficacy, with confidence in their abilities to perform the learning tasks. Computer self-efficacy (CSE) was derived from the social–psychological concept of self-efficacy which postulates that an individuals' perception of his/her abilities affects his/her actual performance (Bandura, 1994).



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As applied to the field of computer usage, Computer Self Efficacy is believed to influence an individual affect, persistence, motivation (Deng, Doll, Truong, 2004),

## 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 self-efficacy is the moot question in this study. With the intention to know the truth behind this computer self-efficacy among B.Ed. trainees, this study has been taken up.

## TERMS AND DEFINITIONS
Computer Self- Efficacy – refers to individual's perception and abilities in computer
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 self-efficacy of B.Ed. trainees.
2.  To find out the significant difference in the computer self-efficacy of B.Ed. trainees in terms of Gender.
3.  To find out the significant difference in the computer self-efficacy of B.Ed. trainees in terms of marital status.

## HYPOTHESES FORMULATED FOR THE STUDY
The hypotheses stated are as follows:
1.  The computer self-efficacy of B.Ed. trainees is average.
2.  There is no significant difference in the computer self-efficacy of B.Ed. trainees in terms of Gender.
3.  There is no significant difference in the computer self-efficacy of B.Ed. trainees in terms of marital status.

## INSTRUMENTATION
The investigator used the computer self-efficacy scale by DelphineCoover (1989).  There are 32 items in the scale. It is 5point rating scale. The ratings were: Very Good, Good, Average, Poor and Very Poor.

## ESTABLISHING VALIDITY OF THE TOOL:
The investigator has consulted experts in the field of computer education to check the content in the rating scale and its suitability to Indian contexts. 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 inventory was administrated among the 40 B.Ed. trainees in Chennai 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 rating scale. The correlation between the two responses was 0.87.  It is high correlation. Hence, it is assumed that it has reliability.

## SCORING:
The no. of responses for each item is counted and percentage worked out.

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**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 Chennai.
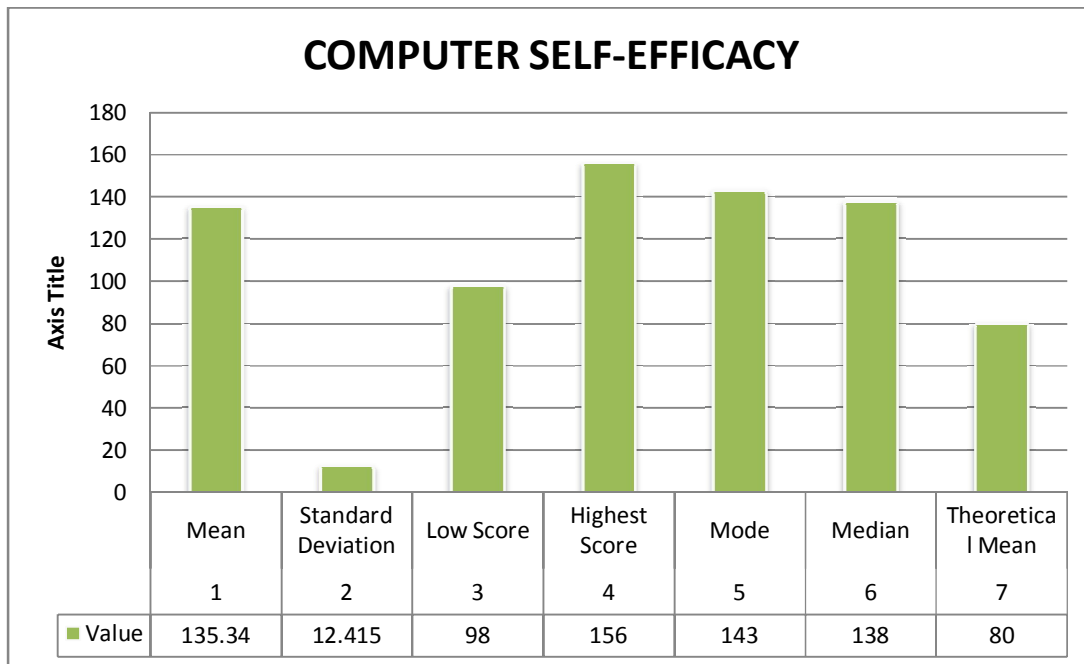
**ANALYSIS**

**Hypothesis 1.**

The computer self-efficacy of B.Ed. trainees is average.

**TABLE 4.1.DESCRIPTIVE ANALYSIS FOR THE COMPUTER SELF-EFFICACY OF B.ED.TRAINEES.**

| S.No | Description | Value |
|------|-------------|-------|
| 1. | Mean | 135.34 |
| 2. | Standard Deviation | 12.415 |
| 3. | Low Score | 98 |
| 4. | Highest Score | 156 |
| 5. | Mode | 143 |
| 6. | Median | 138 |
| 7. | Theoretical Mean | 80 |

It is evident from Table 1 that the median and mode values for the B.Ed. trainees on computer self-efficacy on E-readiness are 138 and 143 respectively. The highest score is 156 and the lowest score is 98. The mean value obtained is 135.34 with standard deviation of 12.41. It is well above the theoretical mean of 80. It is proved from the above table that the B.Ed. trainees are having computer self-efficacy at a high level. So, the hypothesis is refuted.

**FIGURE 1: BAR DIAGRAM SHOWING THE DESCRIPTIVE ANALYSIS OF THE COMPUTER SELF-EFFICACY OF B.ED. TRAINEES**



| | Mean | Standard Deviation | Low Score | Highest Score | Mode | Median | Theoretical Mean |
|---|------|-----------|-----------|---------------|------|--------|------------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Value | 135.34 | 12.415 | 98 | 156 | 143 | 138 | 80 |

**INFERENTIAL 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,

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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 self-efficacy 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 $N_1 + N_2-2$.
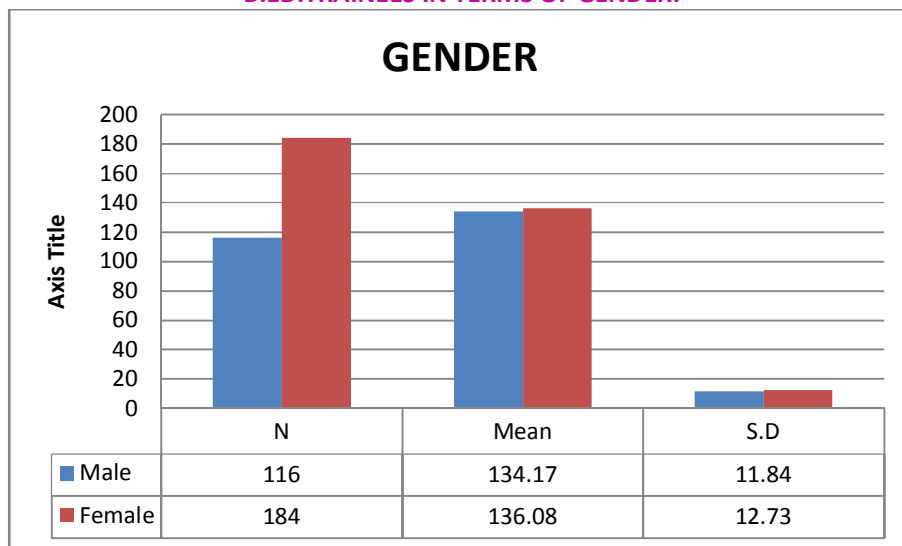
## HYPOTHESIS: 2

There is no significant difference in the computer self-efficacy of B.Ed. trainees in terms of Gender.

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

| Gender | N | Mean | S.D | 't' | Critical Value | Level of Significance |
|--------|-----|--------|-------|-------|---------------------------------|-----------------|
| Male | 116 | 134.17 | 11.84 | 1.299 | 1.960 for df of 298 at 0.05 level | No Significant |
| Female | 184 | 136.08 | 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 self-efficacy of B.Ed. trainees in terms of gender.

### FIGURE 2: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN COMPUTER SELF-EFFICACY OF B.ED.TRAINEES IN TERMS OF GENDER.



| | N | Mean | S.D |
|--------|-----|--------|-------|
| Male | 116 | 134.17 | 11.84 |
| Female | 184 | 136.08 | 12.73 |

## HYPOTHESIS: 3

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

**TABLE: 3 ANALYSIS OF VARIANCE FOR SIGNIFICANT DIFFERENCE IN THE COMPUTER SELF-EFFICACY 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 | 2.739 | NS |
| | Within Groups | 45251.124 | 297 | 152.361 | | |
| Total | | 46085.637 | 299 | | | |

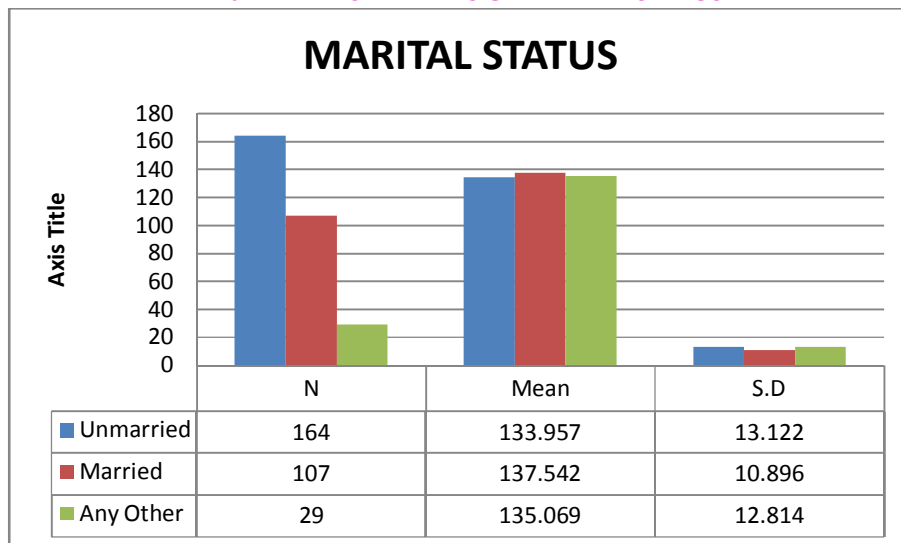*S-Significant*                                         *NS-No Significant*

It is evident from table 4.3 that the obtained F value is 2.739. 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 self-efficacy on E-readiness of teacher trainees in terms of marital status. Hence, the null hypothesis stated as there is no significant difference in the computer self-efficacy 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 self-efficacy of B.Ed. trainees in terms of marital status.

**FIGURE 3: BAR DIAGRAM SHOWING THE SIGNIFICANT DIFFERENCE IN THE COMPUTER SELF-EFFICACY OF B.Ed.TRAINEES IN TERMS OF MARITAL STATUS.**



| MARITAL STATUS | N | Mean | S.D |
|----------------|-----|---------|--------|
| Unmarried | 164 | 133.957 | 13.122 |
| Married | 107 | 137.542 | 10.896 |
| Any Other | 29 | 135.069 | 12.814 |

**FINDINGS**
1. It is revealed from the study that the B.Ed. trainees are having computer self-efficacy at a high level.

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2.  Further in differential studies, it has been proved that there is no significant difference in the computer self-efficacy of B.Ed. trainees in terms of gender.
3.  The variable marital status does not influence the computer self-efficacy 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 self-efficacy at high level. The variables gender and marital status do not influence the computer self -efficacy of B.Ed. trainees.

## EDUCATIONAL IMPLICATIONS

The study has brought out an important finding that is the B.Ed. trainees have computer self-efficacy 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 in the world. SO, it is not a surprise that the B.Ed. trainees must have known about computer. We can assume from the present finding that the B.Ed. trainees are having computer self-efficacy.

Further it is to be noted from the differential studies that the personal variables gender and marital status do not influence the computer self-efficacy of B.Ed. trainees. It seems that male and female B.Ed. trainees are alike in their computer skills. Likewise, the married and unmarried are also uniform in computer skills. 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.

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