

## **A STUDY ON COMPUTER PHOBIA AMONG SECONDARY SCHOOL TEACHERS WITHIN AIZAWL CITY IN RELATION TO AGE GROUP, PROFESSIONAL STATUS, MARITAL STATUS AND TYPE OF FAMILY**

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### **Abstract**

*This paper is based on the investigation conducted to study the level of Computer Phobia among Secondary School Teachers within Aizawl City. The sample consisted of 200 secondary school students. Computer Phobia was measured by “Computer Phobia Scale” developed by Dr. S. Rajasekar and Dr. P. Vaiyapuri Raja. Mean, Standard Deviation and ‘t’ test was used for analysing the data. There is significant difference between Computer Attitude of male and female higher secondary school students. The result revealed that there is a significant difference in the level of Computer Phobia between different age groups of Secondary School Teachers. It also revealed that there is no significant difference in the level of Computer Phobia between Secondary School Teachers with B.Ed. degree and without B.Ed. degree, between married and unmarried and between Secondary School Teachers coming from joint family and nuclear family.*

**Keywords:** Computer Phobia, Secondary School Teachers, Aizawl City

### **INTRODUCTION**

Phobia is an excessive and irrational fear reaction. Computer Phobia can be described as the abnormal anxiety or fear related to the effects of using computer and its related technology. Computer phobia is the phobia associated with the anxiety about learning to use computers and its related technology or not being able to learn to successfully use computers and related technology which results in the avoidance or fear of learning the new skills required by increasing the use of computers in the school or workplace.

“Teachers” are one of the most influential and powerful forces for equity, access and quality in education and key to sustainable global development. Teachers must be creative and up-to-date with secondary education's current trends, which heavily emphasise the use of computers and related technologies in the teaching and learning process. According to National Curriculum Framework for Teacher Education (NCFTE) 2009, teacher quality depends on several factors like teacher’s status, remuneration, conditions of work and professional development. In the present era, the professional development of a teacher is not possible without having knowledge of using digital technology like computers in education. A teacher will not be able to have such knowledge if a teacher has difficulty in leaning and implementing the use of computer technology in the teaching and classroom process. In

short, having computer phobia could result in many barriers for any teacher to have professional development which is a necessity in the modern technological society. A study of computer phobia among teachers will help in solving such barriers.

Research studies show that computer phobia among teachers is one of the barriers to have an effective and efficient teaching and learning process in the modern era of education. A study on computer phobia among school teachers is crucial and essential to understand and measure teacher's level of computer phobia as well as identify factors which causes such phobia among teachers; factors can be due to age, professional status, marital status, type of family etc.

## LITERATURE REVIEW

McLnerney, McLnerney & Sinclair (1994) conducted a study on "Student Teachers, Computer Anxiety and Computer Experience". The paper reveals that increased computer experience leads to a decreased in computer anxiety. However, the high levels of anxiety remaining for some students after treatment suggest that a simplistic belief that increased computer experience alone will reduce computer anxiety is not justifiable.

Russell and Bradley (1997) in their research on "Teachers' Computer Anxiety: Implications for Professional Development." The study reveals that computers play an important role for the professional development of teachers. So, it is crucial to diagnose computer anxiety and support teachers in using computers.

Mcilroy, Sadler & Boojawan (2007) together conducted a research study on "Computer Phobia and Computer Self-efficacy: their association with Undergraduates' use of University Computer Facilities". The major findings of the study reveal that students who reported either high computer phobia or low computer self-efficacy were less likely to maximize their use of university' computer facilities. Moreover, arrange of background measures like initial computer experience, regular home use, successful completion of a computer course and introductory tutor's characteristics have an impact on computer phobia and computer self-efficacy.

Padmavathi (2013) conducted research on "A survey of secondary school teachers' perceptions, competency and use of computers." On this paper he found out that the majority of teachers know the purpose and usefulness of using computer technologies in the teaching-learning process and that gender does not play a role in differentiating the perception towards computer usage. He also found out that teachers in the age group 30-39 have used computer in the class more than the teachers of other groups (40-49 and 50+) and also found out that that science teachers have used computers frequently for teaching and others still did not exploiting the benefits of using computers for their subjects.

## OBJECTIVES OF THE STUDY

1. To compare the level of Computer Phobia between different age groups of Secondary School Teachers.
2. To compare the level of computer phobia of Secondary School Teachers in relation to their professional status.

3. To compare the level of Computer Phobia of Secondary School Teachers in relation to their marital status.
4. To compare the level of Computer Phobia of Secondary School Teachers in relation to type of family.

### **HYPOTHESES OF THE STUDY**

1. There is no significant difference in the level of Computer Phobia between different age groups of Secondary School Teachers.
2. There is no significant difference in the level of Computer Phobia between Secondary School Teachers with B.Ed. degree without B.Ed. degree.
3. There is no significant difference in the level of Computer Phobia between married and unmarried Secondary School Teachers.
4. There is no significant difference in the level of Computer Phobia between Secondary School Teachers coming from joint family and nuclear family.

### **METHODOLOGY**

In order to describe, record, analyse, and interpret the data about the degree of computer phobia among secondary school teachers within Aizawl, the investigator used a descriptive survey method combined with a quantitative approach for the current study.

The researcher employed simple random sampling to choose twenty-five (25) schools for the current study, of which fifteen (15) were privately managed schools and ten (10) were government-run schools.

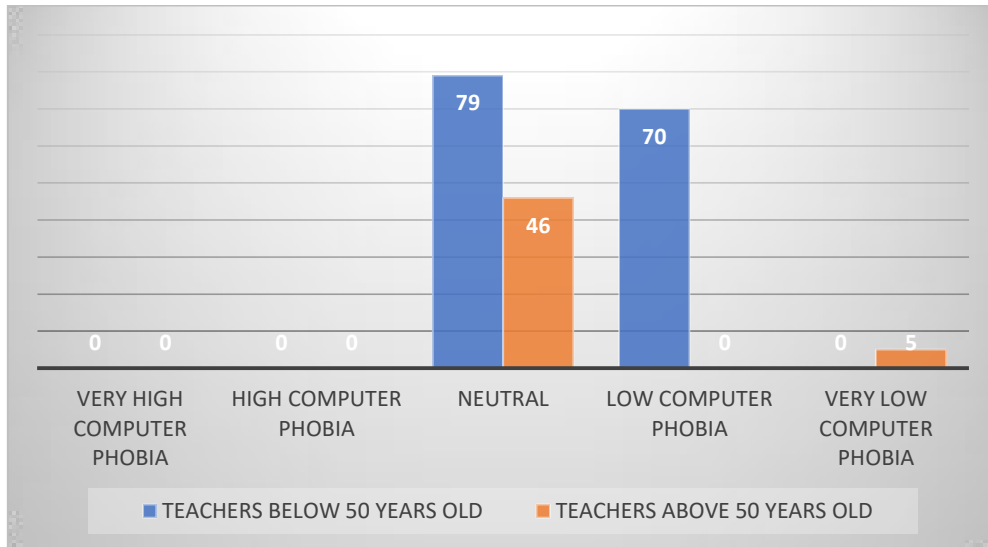
Two hundred (200) secondary school teachers are randomly chosen from the twenty-five (25) sample of schools, including one hundred (100) secondary school teachers from government schools and one hundred (100) secondary school teachers from privately managed schools.

### **FINDINGS OF THE STUDY**

The analysis and interpretation of the level of Computer Phobia among Secondary School Teachers are as follows:

- 1. To compare the level of Computer Phobia between different age groups of Secondary School Teachers.**

**Figure 1: Level of Computer Phobia among Secondary School Teachers of age below 50 years old and above 50 years**



From Figure 1.1, it can be observed that the majority of Secondary School Teachers of age below 50 years and above 50 years is Neutral Computer Phobia. Out of 149 Secondary School Teachers of age below 50 years, 53% falls under the category of Neutral Computer Phobia and 47% falls under the category of Low Computer Phobia. It can also be observed that out of 51 Secondary School Teachers of age above 50 years, 90.2% falls under the category of Neutral Computer Phobia and 9.8% falls under the category of Very Low Computer Phobia.

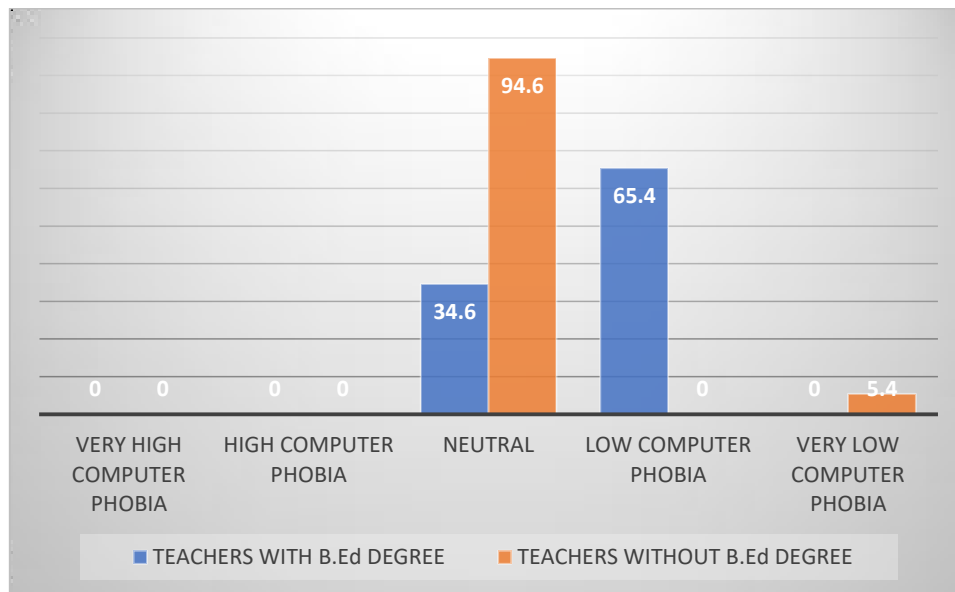
**Table 1.1: Comparison of the level of Computer Phobia between Secondary School Teachers of age below 50 years and above 50 years**

Age of Teachers	No. of Teachers	Mean	SD	SE <sub>D</sub>	t-value	Level of significance
Below 50	149	79.140	11.712	2.145	6.829	Significant at 0.01 level
Above 50	51	64.490	13.708			

From Table 2.1, the t-value when calculated is found to be 6.829. According to the calculated degrees of freedom (df), which is 198, the critical value of ‘t’ at 0.01 level is 2.61 which is less than the calculated value of ‘t’. This further signifies that there is a significant difference in the level of Computer Phobia between different age groups of Secondary School teachers within Aizawl City where Secondary School Teachers above 50 years of age have higher level of Computer Phobia as compared to Secondary School Teachers below 50 years of age. Therefore the null hypothesis that assumes there is no significant difference in the level of Computer Phobia between different age groups of Secondary School Teachers is rejected.

**2. To compare the level of Computer Phobia of Secondary School in relation to their professional status (with and without B.Ed).**

**Figure 2.1: Level of Computer Phobia among secondary teachers with B.Ed. degree and without B.Ed. degree**



From Figure 1.1, it can be observed that the majority of Secondary School Teachers with B.Ed.degree have Low Computer Phobia while the majority of Secondary School Teachers without B.Ed.degree have Neutral Computer Phobia. Out of 107 Secondary School Teachers with B.Ed.degree, 34.6% falls under the category of Neutral Computer Phobia and 65.4% falls under the category of Low Computer Phobia. It can also be observed that out of 93 Secondary School Teachers without B.Ed.degree, 94.6% falls under the category of Neutral Computer Phobia and 5.4% falls under the category of Very Low Computer Phobia.

**Table 2.1: Comparison of the level of Computer Phobia between Secondary Teachers with B.Ed. degree and without B.Ed. degree**

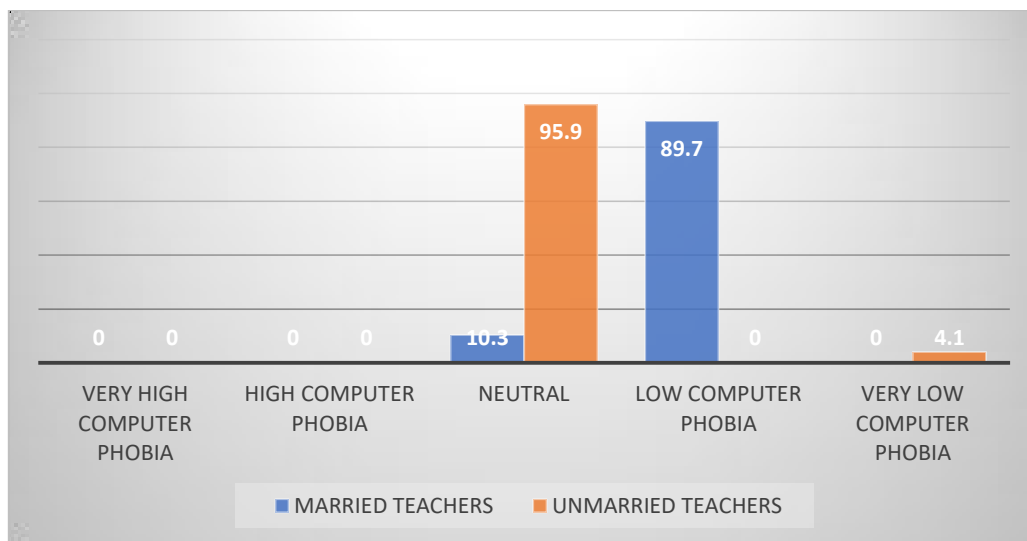
Teachers with or without B.Ed. degree	No. of teachers	Mean	SD	SE <sub>D</sub>	t-value	Level of significance
With B.Ed. degree	107	74.915	15.331	1.924	0.546	Not significant
Without B.Ed. degree	93	75.967	11.883			

From Table 4.6.2, the t-value when calculated is found to be 0.546. According to the calculated degrees of freedom (df), which is 198, the critical value of ‘t’ at 0.05 level is 1.96 which is more than the calculated value of ‘t’. This further signifies that there is no significant difference in the level of Computer Phobia between Secondary School Teachers with B.Ed. degree and without B.Ed. degree within Aizawl City. Therefore the null hypothesis no. 5 that assumes there is no significant difference in the level of Computer

Phobia between Secondary School Teachers with B.Ed. degree and without B.Ed. degree cannot be rejected.

**3. To compare the level of Computer Phobia of Secondary School Teachers in relation to their marital status.**

**Figure 3.1: Level of Computer Phobia among married and unmarried secondary school teachers**



From 3.1, it can be observed that the majority of married Secondary School Teachers have Low Computer Phobia while the majority of unmarried Secondary School Teachers have Neutral Computer Phobia. Out of 78 married Secondary School Teachers, 10.3% falls under the category of Neutral Computer Phobia and 89.7% falls under the category of Low Computer Phobia. It can also be observed that out of 122 unmarried Secondary School Teachers, 95.9% falls under the category of Neutral Computer Phobia and 4.1% falls under the category of Very Low Computer Phobia.

**Table 3.2: Comparison of the level of Computer Phobia between married and unmarried Secondary School Teachers**

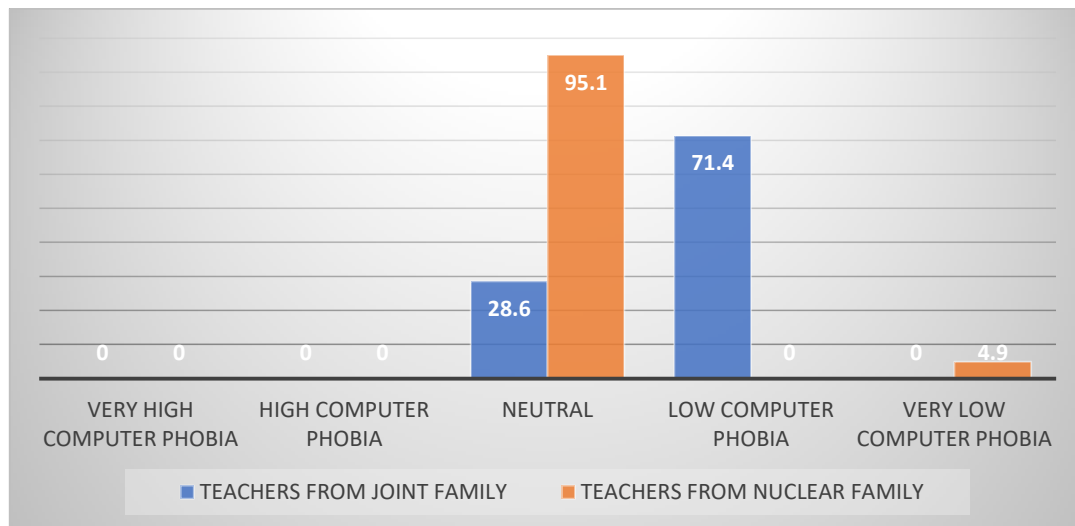
Marital status of Teachers	No. of Teachers	Mean	SD	SE <sub>D</sub>	t-value	Level of significance
Married	78	74.320	14.508	2.038	0.872	Not significant
Un-married	122	76.098	13.328			

From Table 3.2, the t-value when calculated is found to be 0.872. According to the calculated degrees of freedom (df), which is 198, the critical value of ‘t’ at 0.05 level is 1.96 which is more than the calculated value of ‘t’. This further signifies that there is no significant difference in the level of Computer Phobia between Married and Unmarried

Secondary School Teachers within Aizawl City. Therefore the null hypothesis stating that there is no significant difference in the level of Computer Phobia between married and unmarried Secondary School Teachers cannot be rejected.

**4. To compare the level of Computer Phobia of Secondary School Teachers in relation to type of family.**

**Figure 4.1: Level of Computer Phobia among Secondary School Teachers from joint and nuclear type of family**



From Table 4.8.1 and Figure 4.8.1, it can be observed that the majority of Secondary School Teachers coming from joint family have Low Computer Phobia while the majority of Secondary School Teachers coming from nuclear family have Neutral Computer Phobia. Out of 98 Secondary School Teachers coming from joint family, 28.6% falls under the category of Neutral Computer Phobia and 71.4% falls under the category of Low Computer Phobia. It can also be observed that out of 102 Secondary School Teachers coming from nuclear family, 95.1% falls under the category of Neutral Computer Phobia and 4.9% falls under the category of Very Low Computer Phobia.

**Table 4.1: Comparison of the level of Computer Phobia between Secondary School Teachers coming from joint and nuclear family**

Type of family	No. of teachers	Mean	SD	SE <sub>D</sub>	t-value	Level of significance
Joint	98	74.397	13.678	1.950	1.012	Not significant
Nuclear	102	76.372	13.893			

From Table 4.8.2, the t-value when calculated is found to be 1.012. According to the calculated degrees of freedom (df), which is 198, the critical value of ‘t’ at 0.05 level is 1.96 which is more than the calculated value of ‘t’. This further signifies that there is no significant difference in the level of Computer Phobia between Secondary School Teachers coming from joint and nuclear family within Aizawl City. Therefore the null hypothesis that



assumes there is no significant difference in the level of Computer Phobia between Secondary School Teachers coming from joint family and nuclear family cannot be rejected.

## DISCUSSION

In the present study, the investigator found that Secondary School Teachers above the age of 50 years have higher computer phobia as compared to Secondary School Teachers below the age of 50 years. The possible cause for this finding could be due to older teachers not being able to adapt to modern technology and cannot keep pace with the changing technological world. Such older teachers are usually overwhelmed with modern computers and have fears and anxiety when working with computers.

The investigator also found that there is no significant difference in the level of Computer Phobia between Secondary School Teachers with B.Ed. degree and without B.Ed. degree, between married and unmarried Secondary School Teachers and between Secondary School Teachers coming from joint and nuclear family within Aizawl City. The probable reason could again be due to continuous professional development of teachers where teachers' computer knowledge is increased. This type of development programmes is provided to all the teachers. The other reason for this finding could also be due to teachers having greater access to computers in the modern society.

## CONCLUSION

Based on the findings of the present study, it can be concluded that the Level of Computer phobia is higher among Secondary School Teachers above 50 years of age as compared to their counterparts who are below 50 years of age.

It can also be concluded that, from the results of the present study, there is no significant difference in the level of Computer Phobia between secondary school teachers with B.Ed. degree and without B.Ed. degree, between married and unmarried secondary school teachers and between secondary school teachers coming from joint and nuclear family.

It can also be concluded that the degree of computer phobia among secondary school teachers varies depending on their familiarity with computers, as well as their literacy and knowledge in relevant fields, if they have computers at home and their access to computers and how regular teachers engage with and use technology in their daily life.

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