A Study On Computer Phobia Among Secondary School Teachers Within Aizawl City In Relation To Gender, Teaching Subject And Type Of School Managment

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Abstract

This study aimed to examine the level of Computer Phobia among Secondary School Teachers within Aizawl City. The sample group of the study consists of 200 Secondary School Teachers within Aizawl City. The data of the study were obtained via the "Computer Phobia Scale" developed by Dr. S. Rajasekar and Dr. P. Vaiyapuri Raja. The study revealed that the overall level of Computer Phobia among Secondary School Teachers within Aizawl City is Neutral as 62.5% of Secondary School Teachers show Neutral Computer Phobia.

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

INTRODUCTION

In simple terms, a computer is any electronic device that can be used for storing and processing data, typically in a binary form, which are given instructions in a variable program. Within the context of education, computers have revolutionized the nature of the teaching and learning process. In the teaching and learning process, computers are very useful. Knowledge about computers or computer literacy is required for both the teachers and the students. It is crucial that both teachers as well as students have the required minimum knowledge about computers in this day and age.

Phobia itself is defined as a painful uneasiness of mind or an abnormal apprehension of fear often accompanied by psychological change such as sweating or increased pulse. Jay (1981) defined Computer Phobia as

resistance to talking about computers or even thinking about computers, fear or anxiety toward computers, and hostile or aggressive thoughts about computers.

In the classroom or the teaching and learning process, the use of computers and its related technology opened a new arena. It has a great potential to improve the existing teaching and learning methods. It is an efficient tool to improve the educational process. However, despite its many advantages, the integration of computer technology in daily classroom practices has become problematic due to psychological barriers like computer phobia. As the use of computer technology is increasing in the educational system, the teacher must be skilled in integrating computer into classroom activities. All teachers do not feel comfortable with using computer in daily classroom activities. Many teachers felt problems like sweating in palms, increase in heartbeat, restlessness, fear, anxiety etc. Computer phobia is a major constraint of the to the utilization of computers. So, a study towards computer phobia among teachers could be very helpful in identifying and measuring teacher's level of computer phobia which in turn will help in the integration of computer technology in the teaching and learning process.

LITERATURE REVIEW

Rosen & Weil (1995) studied on "Computer Availability, Computer Experience Technophobia among Public School Teachers". The major findings of the study indicate that computers are available at all schools but are not being used by many teachers; many teachers are technophobic particularly among the elementary teachers and secondary humanities teachers; teachers are most worried about dealing with the actual computer machinery in their classroom, about computer errors and about learning to use computers and predictive models showed that although computer experience is the most prominent predictor of technophobia. Age, gender, teaching experience, computer availability, ethnicity, and school socio-economic status also play an important role in predicting technophobia.

Gihar & Tyagi (2012) on their study on "ICT Culture and computer phobia among pupil teacher in Indian context: Some suggestive guidelines." The paper study and compare the level of computer phobia between

private and Govt. college prospective teachers; prospective teachers having undergraduate and post graduate qualification and among prospective teachers in respect to their basic streams i.e., Arts, commerce, and science. In their findings they found a slight variation between the science and arts stream prospective teachers on personal failure dimension of computer phobia scale and no significant difference between the other objectives.

Sanalan (2015) conducted a study on "Computer phobia in pre-service teachers". The results of the paper indicate a reliable instrument and significant differences for gender, computer ownership, and computer experiences. Females had significantly higher Computer Phobia Scale (CPS) scores. The results also indicate that computer ownership and experience with computers is reversely related to computer phobia. The results suggest that the teacher candidates demonstrate reduced computer phobia when they own a computer, use a computer frequently, and receive adequate computer training.

Mittal & Kaur (2018) on their research on the topic "A study of computer phobia among school teachers", wherein the study was about the levels of Computer Phobia among secondary school teachers. The result of the paper reveals that the female secondary teachers and faculty of Arts stream teachers have more computer phobia comparing with the others. From their findings, the teachers are open to learn, but such trainings are not up to satisfaction due to lack of opportunities, practice and time which creates the phobia.

OBJECTIVES OF THE STUDY
1. To study the level of Computer Phobia among Secondary School Teachers.
2. To compare the level of Computer Phobia between male and female Secondary School Teachers.
3. To compare the level of Computer Phobia among government and private Secondary School Teachers.
4. To compare the level of Computer Phobia between science and arts subject Secondary School Teachers.

HYPOTHESES OF THE STUDY

1. There is no significant difference in the level of Computer Phobia between male and female Secondary School Teachers.
2. There is no significant difference in the level of Computer Phobia between government and private Secondary School Teachers.
3. There is no significant difference in the level of Computer Phobia between science and arts subject Secondary School Teachers.

METHODOLOGY

For the present study, the investigator used descriptive method and has utilized quantitative method to describe, record, analyze and interpret the data about the level of computer phobia among secondary school teachers of Aizawl.

For the present study, the investigator used simple random sampling to randomly select twenty-five (25) schools out of which ten (10) schools are Government Schools and fifteen (15) schools are Private managed Schools.

From the twenty-five (25) sample of schools, two-hundred (200) secondary school teachers are selected randomly, i.e., hundred (100) secondary school teachers from Government Schools and hundred (100) secondary school teachers from Private 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 study the level of Computer Phobia among Secondary School Teachers.**

Figure 1.1: Percentage of Level of Computer Phobia among Secondary School Teachers.
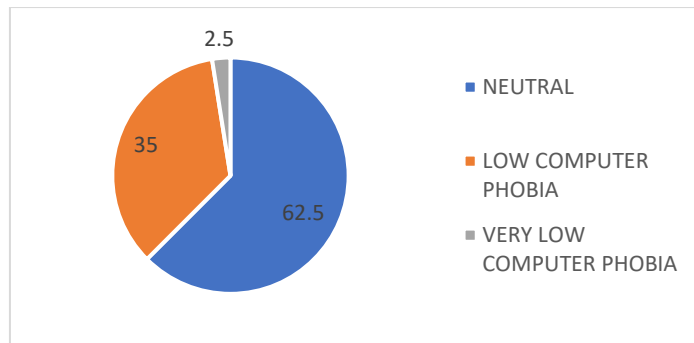
The above Figure 1.1 shows that there are no secondary school teachers who have very high and high computer phobia. The score of majorities of Secondary School Teachers lies between 37 to 79 on the Computer Phobia Scale which is interpreted as Neutral Level Computer Phobia. Out of 200 Secondary School Teachers, 125 (62.5%) Secondary School Teachers have Neutral Level Computer Phobia, 70 (35%) scores between 80 to 101 on the Computer Phobia Scale which is interpreted as Low-Level Computer Phobia. The figure also shows that 5 (2.5%) scores 102 to 116 which is interpreted as Very Low-Level Computer Phobia. Figure 1.1 also shows that 62.5% of Secondary School Teachers' shows Neutral Level of Computer Phobia, 35% of Secondary School Teachers' score shows Low Level of Computer Phobia while 2.5% of Secondary School Teachers' score shows Very Low Level of Computer Phobia on the Computer Phobia Scale.

2. **To compare the level of Computer Phobia between male and female Secondary School Teachers.**

Figure 2.1: Level of Computer Phobia among male and female Secondary School Teachers.

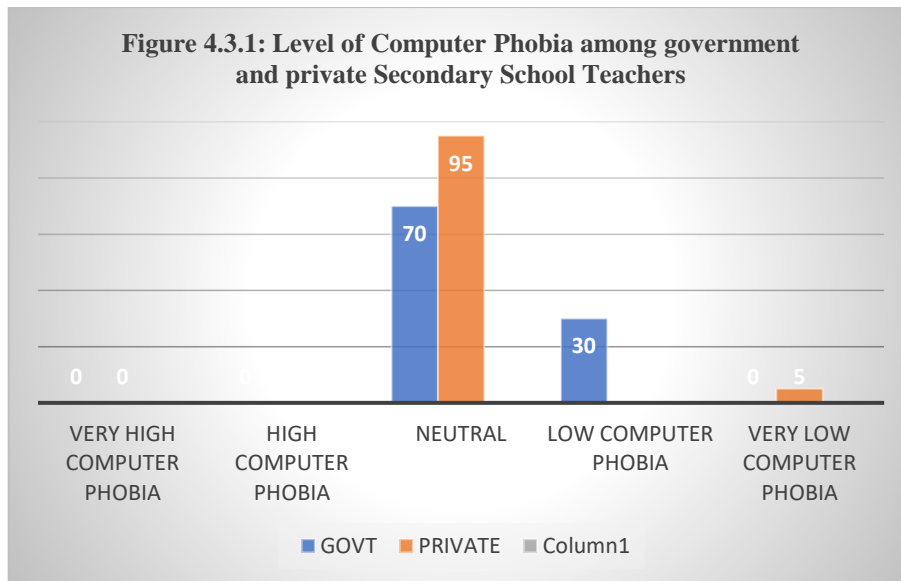Figure 4.2.1 : Level of Computer Phobia among male and female Secondary School Teachers
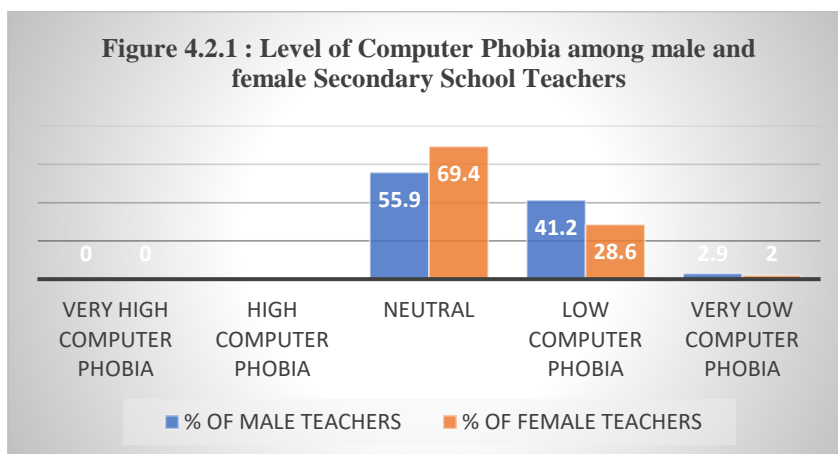
From Figure 2.1, it can be observed that the majority of male and female Secondary School Teachers have Neutral Computer Phobia. Out of 102 male Secondary School Teachers, 55.9% falls under the category of Neutral Computer Phobia, 41.2% falls under the category of Low Computer Phobia and 2.9% falls under the category of Vey Low Computer Phobia. It can also be observed that out of 98 female Secondary School Teachers, 69.4% falls under the category of Neutral Computer Phobia, 28.6% fall under the category of Low Computer Phobia and 2% falls under the category of Very Low Computer Phobia.

Table 2.1: Comparison of the level of Computer Phobia between male and female Secondary School Teachers.
From Table 2.1, the t-value when calculated is found to be 2.966. According to the calculated degrees of freedom (df), which is 198, the critcal 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 male and female Secondary School teachers within Aizawl City where females have higher level of Computer Phobia as compared to male Secondary School Teachers. Therefore, the null hypothesis that assumes there is no significant difference in the level of Computer Phobia between male and female Secondary School Teachers is rejected.

3. **To compare the level of Computer Phobia among government and private Secondary School Teachers.**

Figure 3.1: Level of Computer Phobia among government and private Secondary School Teachers

Figure 4.3.1: Level of Computer Phobia among government and private Secondary School Teachers

From 3.1, it can be observed that the majority of government and private Secondary School Teachers have Neutral Computer Phobia. Out of 100 government Secondary School Teachers, 70% falls under the category of Neutral Computer Phobia and 30% falls under the category of Low Computer Phobia. It can also be observed that out of 100 private Secondary School Teachers, 95% falls under the category of Neutral Computer Phobia and 5% falls under the category of Very Low Computer Phobia.

Table 3.1. Comparison of the level of Computer Phobia between government and private secondary school teachers.

Type of school	No. Of teachers	Mean	SD	SE$_D$	t-value	Level of significance
Government	100	75.14	14.940	6.182	0.0857	Not significant
Private	100	75.67	12.609			

From Table 3.1, the t-value when calculated is found to be 0.0857. According to the calculated degrees of freedom (df), which is 198, the critcal 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 government and private Secondary School Teachers within Aizawl City. Therefore, the null hypothesis that assumes there is no significant difference in the level of Computer Phobia

between government and private Secondary School Teachers cannot be rejected.

4.   To compare the level of Computer Phobia between science and arts subject Secondary School Teachers.

Figure 4.1 Level of Computer Phobia between science and arts subject secondary school teachers.

Figure 4.4.1: Level of Computer Phobia between science and arts subject secondary school teachers
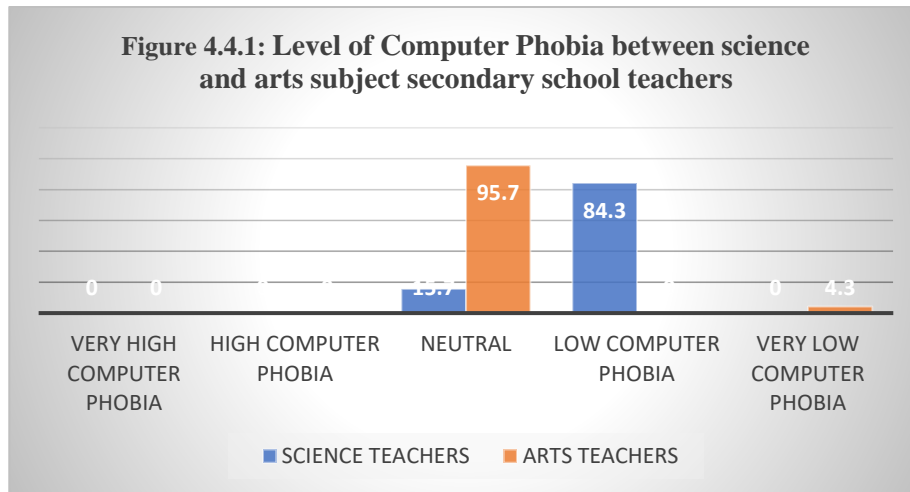
From Figure 4.1, it can be observed that the majority of science subject Secondary School Teachers have Low Computer Phobia while the majority of arts subject Secondary School Teachers have Neutral Computer Phobia. Out of 83science subject Secondary School Teachers, 15.7% falls under the category of Neutral Computer Phobia and 84.3% falls under the category of Low Computer Phobia. It can also be observed that out of 117arts subject Secondary School Teachers, 95.7% falls under the category of Neutral Computer Phobia and 4.3% falls under the category of Very Low Computer Phobia.

Table 4.1: Comparison of the level of Computer Phobia between science and arts subject Secondary School Teachers

Teaching subject	No. of Teachers	MEAN	SD	SE$_D$	t-value	Level of significance
Science	83	77.313	14.207	1.990	1.639	Not significant
Arts	117	74.051	13.386			

From Table 4.1, the t-value when calculated is found to be 1.639. According to the calculated degrees of freedom (df), which is 198, the critcal value of 't' at 0.05

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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 science and arts subject Secondary School Teachers within Aizawl City. Therefore the null hypothesis no.3 which states there is no significant difference in the level of Computer Phobia between science and arts subject Secondary School Teachers cannot be rejected.

DISCUSSION

In the present study, the investigator found that Secondary School Teachers within Aizawl City have some level of Computer Phobia. This finding is similar to the findings conducted by Rosen & Weil (1995) who also concluded that there exists some level of Computer Phobia among Secondary School Teachers. The probable reasons for the existence of Computer Phobia could be due to teachers not keeping pace with modern technology. Such Teachers are overwhelmed by modern computers and it related technology and are not confident in implementing modern technology in the teaching and learning process. Another reason could also be due to inexperience with computers and not having access to computers at home.

The investigator also found that there is a significant difference in the level of Computer Phobia between male and female Secondary School Teachers within Aizawl City where female have higher level of computer phobia as compared to their male counterparts. The plausible reasons for female Secondary School teachers having higher level of computer phobia could be due to females being less confident and showing less interest towards computers as compared to their male counterparts. It could also be due to the fact that male secondary teachers tend to be more motivated to learn and show more interest towards computer and its related technology.

In the present study, the investigator also found that there is no significant difference in the level of Computer Phobia between government and private Secondary School Teachers and between science and arts subject Secondary School Teachers within Aizawl City. This could be due to the continuous professional development of teachers where teachers' computer knowledge is

increased. This type of development programmes is provided to both government and private teachers.

CONCLUSION

Based on the findings from the present study, the investigator concludes that the overall level of Computer Phobia among Secondary School Teachers within Aizawl City is Neutral as 62.5% out of 200 Secondary School Teachers show Neutral Computer Phobia.

However, most of the scores of the Secondary School Teachers are borderline between the range of Neutral and High Level of Computer Phobia. The reason for such borderline score could be due to the fact that most secondary teachers does have some uneasiness and anxiety in using and implementing computers and its related technology in the teaching and learning process but scared to be labelled as computer phobic.

It can also be concluded that besides factors like gender and teaching subjects, the experience teachers have with computer and its related literacy and knowledge, whether they own computers at home, their access to computers and how regular teachers interact and use technology in their everyday lives determine the difference in the level of Computer Phobia among Secondary School Teachers.

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