

# Techno Phobia and Academic Excellence among Higher Secondary School Students in the Nilgiris District

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## Abstract

*This article focuses on the technophobia and academic excellence for the higher secondary school students in The Nilgiris district, Tamilnadu, India. The main objective of the study to find out the level of technophobia and academic excellence of higher secondary school students in The Nilgiris district based on some demographic variables (such as gender, medium of Instruction, Locality). The data were collected for the survey method at eleventh twelfth standard school students in The Nilgiris district. The researcher were used a standardised tool. The descriptive analysis and Karl Pearson correlation was used in this study. The major findings are high level of significance difference between technophobia of higher secondary school students in The Nilgiris district. The average level of significance difference between academic excellences of higher secondary school students in The Nilgiris district. There is a high positive correlation for technophobia and academic excellence of higher secondary school students in The Nilgiris district.*

**Keywords:** *Techno Phobia, Academic Excellence and Higher Secondary School Students.*

## Introduction

In today social environment, the traditional method of teaching in school is gradually declining. After 20<sup>th</sup> century digital learning has made tremendous progress and was taken root anywhere. E – Learning is becoming more and more ubiquitous and its use in the modern world is also increasing a situation has developed that no school can function without digital learning (Abbas et al., 2023).

## Technophobia

### *Meaning*

Technophobia is a type of phobia which a human being experiences a typical anxiety towards to new advance technology such as phones, computer, artificial intelligence and other image of modern tools and advances in computer technology.

### *Definition*

Computer anxiety is defined as on individual's fear, when she/he is to meet with the possibility of usage of computers. Moreover Howard (1986) defined that computer anxiety as the tendency of an individual to face a level of uncomfortableness over his /her impending use of a computer. Recently, most of the researches have been conducted in the e-learning intention to investigate the impact of computer technology.

### *Academic Excellence*

The Dictionary of education (carter 1969) defines academic excellence as, the knowledge attained or skills developed in school subject designated by test scores or marks assigned by teachers or both.

Academic excellence in education precisely speaking is with reference to one's knowledge, understanding skills in specific subject and groups of subjects. Academic grades/marks assigned by teachers are scores on

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standardised achievement test. Academic excellence score was to take students quarter yearly commerce subject marks.

## Review of Literature

**Selvaganapathi.R and P.Vaiyapuri Raja (2021)** in their study titled “Technophobia of Higher Secondary School Teachers”. This study has been carried out to know about the “teachers” technophobia”. Many teachers do not use the available latest technology in teaching due to many reasons and one such reason is due to fear in using them and that fear which is irrational in nature is known as techno-phobia. Therefore, it is a felt need to study the techno-phobia of teachers and hence the authors decided to study the same. Technophobia scale (TPS) constructed and validated by Prabakaran, A.J.F(2006) was used in this study. As many as 300 teachers working in the higher secondary school situated in the Kumbakonam Taluk, Thanjavur District of Tamilnadu, India has been 79 selected as the sample. The findings revealed that the majority of the teachers are having relatively a low level of technophobia.

**Soric, Penezic and Buric (2017)** examined whether achievement goal orientations mediate the relationship between personality traits (Extroversion, Agreeableness, Conscientiousness, Emotional Stability and Intellect) and academic achievement. The participants were 501 (160 boys and 341 girls) high school students in Croatia. The IPIP Big-Five factor markers (Goldberg, 1999), the Achievement Goals Questionnaire (Rovan & Jelic, 2010), and the mid-term grade in chemistry were used for collecting data. The mediation analysis (a bootstrapping method) revealed that learning approach; performance-approach and work-avoidance and goal orientations fully mediate the relationship between students' personality traits and their academic achievement, but only for Conscientiousness.

### *Statement of the Problem*

The statement of the problem is “**Techno Phobia and Academic Excellence among Higher Secondary School Students in The Nilgiris District**”

### *Objectives of the Study*

The following objectives have been set in the present study.

To find out the level of technophobia for higher secondary school students in The Nilgiris district.

To find out the level of academic excellence for higher secondary school students in The Nilgiris district.

To find out the significant difference between the technophobia for higher secondary school students in The Nilgiris district based on gender.

To find out the significant difference between the technophobia for higher secondary school students in The Nilgiris district based on medium of instruction.

To find out the significant difference between the technophobia for higher secondary school students in The Nilgiris district based on locality of the school.

To find out the any relationship between the technophobia and academic excellence for higher secondary school students in The Nilgiris district.

### *Hypotheses of the Study*

The following hypotheses were formulated based on the hypotheses of the study.

There is low level of technophobia for higher secondary school students in The Nilgiris district.

There is low level of academic excellence for higher secondary school students in The Nilgiris district.

There is no significant difference between the technophobia for higher secondary school students in The Nilgiris district based on gender.

There is no significant difference between the technophobia for higher secondary school students in The Nilgiris district based on medium of instruction.

There is no significant difference between the technophobia for higher secondary school students in The Nilgiris district based on locality of the school.

There is no relationship between the technophobia and academic excellence for higher secondary school students in The Nilgiris district.

## Methodology

Survey method was used for carrying out the study.

### *Population of this Study*

Population of the present study was eleventh and twelfth students studying in Government, Aided and Private Schools at The Nilgiris district.

### *Sample of this Study*

The sample consists of 117 students studying at higher secondary school students in The Nilgiris District.

### *Sampling Technique*

Random sampling technique is followed in the study.

### *Tools Used In the Study*

**Computer Anxiety scale** was developed by Dr.Manoj K.Saxena & Ms.Rajni Bala (2021).

Academic achievement for students' quarter yearly examination marks in commerce subject

### *Statistical Techniques Used in the Study*

The data collected from various schools. Investigator developed the Master table and the data has been analysed. The following Statistical Techniques were adopted to realize the given objectives and to test the hypotheses.

Descriptive Analysis (Mean and S.D)

Differential Analysis (t-test), (F-test)

Correlation Analysis

## Analysis and Interpretation of the Data

### *Hypothesis: 1*

There is low level of technophobia for higher secondary school students in The Nilgiris district.

Table-1

Variable	Level	Number of respondents	Percentage (%)
Technophobia	Low	27	24
	Average	62	53
	High	28	24

From the above table-1, it is clear that the level of Technophobia among higher secondary school students in The Nilgiris district average, confirming the hypothesis. 24% of students were found to be low, 53% of students were found to have average, and 24% of students were found to have high. Hence the hypothesis is rejected. Thus, the Hypothesis-1 stating “There is low level of Technophobia for higher secondary school students in The Nilgiris district” is rejected.

*Hypothesis: 2*

There is low level of Academic Excellence for higher secondary school students in The Nilgiris district.

Table: 2

Variable	Level	Number of respondents	Percentage (%)
Interpersonal Relationship	Low	28	24
	Average	33	28
	High	56	48

From the above table-2, it is The Nilgiris district low, confirming the hypothesis. 24% of students was found to be low, 28% of students were found to have average, and 48% of students were found to have high. Hence the hypothesis is rejected. Thus, the Hypothesis-2 stating “There is low level of Academic Excellence for a higher secondary school student in The Nilgiris district is rejected.

*Hypothesis: 3*

There is no significant difference between the technophobia among higher secondary school students in The Nilgiris district based on gender.

Table: 3

Table showing the significant difference between the technophobia for higher secondary school students in The Nilgiris district based on gender.

Sub Groups	Categories	N	Mean	S.D	t-value	Level of Significance
Gender	Boys	51	84.12	5.679	12.724	S**
	Girls	66	80.64	5.264		

S\*-0.05 level, S\*\*-0.01 level, and NS-No Significant

From the above table-3, it is observed that the calculated' - value (12.724) is greater than the table value (1.96). Hence the hypothesis is rejected. Thus, the hypothesis-3 stating there is a significant difference between the technophobia for higher secondary school students in The Nilgiris district based on gender at 0.01 level of significance.

*Hypothesis: 4*

To find out the any significant difference between the technophobia for higher secondary school students in The Nilgiris district based on medium of instruction.

**Table: 4**

Table showing the significant difference between the technophobia for higher secondary school students in The Nilgiris district based on medium of instruction.

Sub Groups	Categories	N	Mean	S.D	t-value	Level of Significance
Medium of instruction	Tamil	44	81.825	7.461	2.989	S*
	English	73	81.913	7.963		

S\*-0.05 level, S\*\*-0.01 level, and NS-No Significant

From the above table-4, it is observed that the calculated 't'-value (2.942) is greater than the table value (1.96). Hence the hypothesis is rejected. Thus, the hypothesis - 4 stating there is a significant difference between the Technophobia for higher secondary school students in The Nilgiris district based on medium of instruction at 0.05 level of significance.

*Hypothesis: 5*

There is no significant difference between the Technophobia for higher secondary school students in The Nilgiris district based on locality of the school.

**Table -5**

Table showing significant difference between the Technophobia for higher secondary school students in The Nilgiris district based on locality of the school.

Sub Groups	Categories	N	Mean	S.D	t-value	Level of Significance
Locality of the school	Rural	42	69.124	5.164	0.789	NS
	Urban	75	72.246	5.239		

S\*-0.05 level, S\*\*-0.01 level, and NS-No Significant

From the above table-5, it is observed that the calculated 't'-value (0.748) is less than the table value (1.96). Hence the hypothesis is accepted. Thus, the hypothesis - 5 stating there is a no significant difference between the Technophobia for higher secondary school students in The Nilgiris district based on locality of the school.

*Hypothesis: 6*

There is no relationship between the Technophobia and Academic Excellence among higher secondary school students in The Nilgiris district.

**Table -6**

Table showing relationship between the Technophobia and Academic Excellence among higher secondary school students in The Nilgiris district

Variables	N	'r' Value	Correlation
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Technophobia Vs Academic Excellence	117	0.754	High Correlated	Positive
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From the above table-6 it is observed that the calculated 'r' value (0.754) for the Technophobia and Academic Excellence among higher secondary school students in The Nilgiris district. It exists high positive correlation between the Technophobia and Academic Achievement among higher secondary school students in The Nilgiris district.

### Major Findings

The following major findings of the present study given below,

There is average level of technophobia for higher secondary school students in The Nilgiris district.

There is high level of academic excellence for higher secondary school students in The Nilgiris district.

There is a significant difference between the technophobia for higher secondary school students in The Nilgiris District based on gender at 0.01 level of significance.

There is a significant difference between the technophobia for higher secondary school students in The Nilgiris District based on Medium of Instruction at 0.05 level of significance.

There is no significant difference between the technophobia for higher secondary school students in The Nilgiris district based on Locality of school.

It exists high positive correlation between the technophobia and academic excellence for higher secondary school students.

### *Educational Implications*

It helps to easily identify higher secondary school student's academic excellence and their impact of technophobia.

To give proper ICT training as stipulated time, definitely they will reduce their fear.

It helps the higher secondary school students to copying the technophobia and enrich their academic performance.

To conduct proper computer orientation programme for higher secondary school students in consistent interval for their development.

Teachers should take some strategies to reduce their technology anxiety with the help of conducting some smart board classes, basic computer skills and ICT skills for their development.

### Conclusion

In this study easy possibility to find the technophobia and academic excellence in The Nilgiris district. It can enrich the student academic excellence and reduce the level of technophobia. This kind of research will show the technophobia's students and copying strategies were manipulated. Some of strategies can elevate the student's life such as basic office automation, providing internet facilities, using smart board classes etc., from the research article clearly shown now a das some of the students have low level of technophobia. Based on this phobia using some technique can reduces the issues in future among higher secondary school students in The Nilgiris district.

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