

## **INTERNET ADDICTION AND TECHNO STRESS OF STUDENTS AT HIGHER SECONDARY LEVEL IN KERALA, INDIA**

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### **Abstract**

*Beyond the numerous advantages offered by the new forms of technology, recent research has evidenced that there are physiological, biological, somatic and psychological indicators of stress that are related to work activities where human - computer interaction occurs in adolescence. High workload, high work pressure, inadequate skills to use new technology, etc. are the main factors related with stressors. They can revive somatic complaints, especially to muscular and skeletal systems, sleep disturbances, mood disturbances, anxiety, fear, anger, etc. Invention of new technology and new techniques may create fatigue and passivity among the users, make it difficult to change their working styles and active involvement and ultimately ruin their health. For the present study, the investigator adopted 'Survey Method'. The population of the study was the higher secondary school students in Kerala, India. A sample of 150 students of Class 11 and Class 12 was selected from five higher secondary schools in Thiruvananthapuram, Kollam and Alappuzha Districts of Kerala, India. The sample consisted of 75 girls and 75 boys. The following tools were prepared and used by the investigator for the present study. They are Internet Addiction Scale and Techno Stress Inventory. Descriptive and Inferential statistics were used for analysing the data. Mean, Standard Deviation, Pearson Correlation and t-test were used for the analysis of the data. The statistical analysis of the data revealed that the Co-efficient of correlation between Internet Addiction and Techno Stress of class higher secondary school students is 0.84.*

**Keywords:** *Internet addiction, techno stress, physiological, biological, somatic complaints.*

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### **INTRODUCTION**

From the last decade onwards, there has been an enormous development and diffusion occurring in the IT sector. The most important advancement of IT sector is the invention of internet accessibility and through this medium people prefer to interact and procure information. Social media, personal computer, mobile or cellular phone, and other devices are in its advancement in the IT sector. Though without any age bar all of them use it as a

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convenient platform. Adolescents are the majority users of these different devices, and the main purpose is to for social interaction and interpersonal communication. In fact, many research works opined that some adolescents tend to use this medium excessively in a maladaptive way to manage their psychological sufferings and negative emotions associated with serious relationships with parents and peers (Volpi et.al, 2018).

During the span of adolescent age numerous changes occur, capabilities of functional to self-regulation are still relatively immature proved by recent studies on adolescents' brain development which highlighted that emotion-activating experiences (including the over or misuse of Internet) could interfere with significant modifications of brain regions and systems, such as the prefrontal cortex and the limbic system.

### **NEED AND SIGNIFICANCE OF THE STUDY**

Beyond the numerous advantages offered by the new forms of technology, recent research has evidenced that there are physiological, biological, somatic and psychological indicators of stress that are related to work activities where human - computer interaction occurs in adolescence. High workload, high work pressure, inadequate skills to use new technology etc. are the main factors related with stressors. They revive somatic complaints, especially to muscular and skeletal systems, sleep disturbances, mood disturbances, anxiety, fear, anger, etc. Invention of new technology and new techniques may create fatigue and passivity among the users, make it difficult to change their working styles and active involvement and ultimately ruin their health (Priya, 2010).

Though internet contains endless information, introduction of new technology and new techniques, create fatigue and passivity among the users. The over usage results in occurrence of stress emanating from technology breakdown and slowdown. The major health problems associated with excessive internet usage are poor vision, spinal cord and backbone problems, electro-ionic influences, etc (Wallace, 1999). By sitting in the same place with minimum or less physical movement for prolonged hours cause many physical ailments in people. There have been reports of internet related deaths which indicated that cardiac arrest resulting from sleep deprivation and lack of personal maintenance and suicides due to net related stress. History of fantasy proneness cause certain persons at risk for significant psychopathology and disturbed sleep patterns because excessive fatigue impairs and decreases ones' immune system leaving the person vulnerable to disease. In addition to this, the sedentary act of

prolonged computer use may result in lack of adequate exercise which may lead to increased risk of carpal tunnel syndrome and back and eye strain (Wice, 2008). Therefore, the investigator thought of conducting such a study especially in the lockdown period due to Covid -19 pandemic where all people irrespective of age is glued to their seats either attending or conducting online classes. This situation arose due to the fact that peoples' movement outside homes were restricted due to the spread of the virus.

### **STATEMENT OF THE PROBLEM**

The area selected for the present study is to collect necessary details regarding the over usage of internet and its impact of techno stress on adolescents. So the present study is entitled as **INTERNET ADDICTION AND TECHNO STRESS OF STUDENTS AT HIGHER SECONDARY LEVEL IN KERALA, INDIA.**

### **HYPOTHESES OF THE STUDY**

1. There is significant relation between internet addiction and technical stress of higher secondary school students in the Kerala State.
2. There is significant difference in internet addiction of boys and girls of higher secondary school students
3. There is significant difference in techno stress of boys and girls of higher secondary school students

### **OBJECTIVES OF THE STUDY**

1. To find out the relation between internet addiction and technical stress of higher secondary school students in Kerala.
2. To compare the internet addiction of boys and girls of higher secondary school students in Kerala.
3. To compare the technical stress of boys and girls of higher secondary school students in Kerala.

### **METHODOLOGY**

For the present study, the investigator adopted Survey Method. Higher secondary school students in Kerala formed the population of the study. A sample of 150 students of Class 11 and Class 12 was selected from five higher secondary schools in Thiruvananthapuram, Kollam and Alappuzha Districts of Kerala. The sample consisted of 75 girls and 75 boys. The

tools prepared and used by the investigator for the present study are Internet Addiction Scale and Techno Stress Inventory. Descriptive and Inferential statistics were used for analysing the data. Mean, Standard Deviation, Pearson Correlation and t-test were used for the analysis of the data.

### ANALYSIS AND INTERPRETATION OF DATA

Section 1 : For analysing the relationship between Internet addiction and techno stress, the investigator used 150 total sample. The scores on the Internet addiction scale and Techno stress inventory were correlated. The details are given in Table 1.

Table 1. Co-efficient of correlation between Internet Addiction and Techno-stress of Higher Secondary School Students

Variables	N	Co-efficient of correlation	Level of Significance
Internet Addiction	150	0.84	P<0.01
Techno Stress	150		

Table 1 revealed that the co-efficient of correlation between Internet addiction and Techno stress of higher secondary school students is 0.84. It shows that that there is significant correlation between Internet addiction and techno stress of higher secondary school students.

Section 2 : For analysing the Internet addiction scores between boys and girls, the Internet addiction test was used, after classifying the scores on internet addiction of boys and girls. The details are given in Table 2.

Table 2. Test of Significant Difference between Boys and Girls in their Internet Addiction

Variable	Gender	N	Mean	SD	t-value	LS
Internet Addiction	Boys	75	109.7	13.04	0.96	NS
	Girls	75	107.82	11.67		

Since the obtained t- value is less than the table value at any level of significance, there is no significant difference in Internet Scores of the boys and girls students at higher secondary school level.

Section 3: For analysing the Techno Stress scores between the boys and girls, the Techno Stress test was used, after classifying the scores on Techno Stress of boys and girls. The details are given in Table 3.

Table 3. Analysis of the Scores on the Techno-stress between Boys and Girls  
(Test of significant difference between boys and girls in their Internet addiction)

Variable	Gender	N	Mean	SD	t-value	LS
Techno Stress	Boys	75	98.6	10.87	0.228	NS
	Girls	75	99.02	11.67		

Since the obtained t-value is 0.228 is less than the table value, there is no significant difference in Techno stress between boys and girls higher secondary school students.

### FINDINGS OF THE STUDY

1. The statistical analysis of the data revealed that the Co-efficient of correlation between Internet Addiction and Techno Stress of higher secondary school students is 0.84. It shows that there is very high correlation between Internet addiction and Techno Stress of higher secondary school students.
2. Since the obtained t- value is less than the table value at any level of significance, there is no significant difference in Internet Scores of the boys and girls students at higher secondary school level.
3. Since the obtained t-value is 0.228 is less than the table value. There is no significant difference in Techno stress between boys and girls higher secondary school students.

### EDUCATIONAL IMPLICATIONS

Through this study, it is understood that Internet Addiction and Techno stress are highly correlated. Techno Stress makes it difficult to change their working styles and active involvement and thus ultimately ruin their health and this frequently occur in adolescent students due to the excessive use of internet gadgets makes. So in the case of adolescent students, unhealthy usage of internet need to be checked. More care should be taken by both teachers and parents. Students should be given proper awareness regarding the over usages of internet causing both mental and health issues. The teachers' role should be a model for students to refer books and newspapers. The design of intervention programmes for the

students should enable them to increase their creative endeavours. 'Souhruda', a programme implemented by Government of Kerala can help the students in solving such kind of issues, and to enhance emotional intelligence and mental health among higher students.

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