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### RESEARCH ARTICLE

#### A STUDY TO ASSESS THE EFFECTS OF CYBER ADDICTION ON THE SELECTED PSYCHOSOCIAL BEHAVIOUR OF NURSING STUDENTS AT SELECTED NURSING COLLEGES, CHENNAI

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#### Abstract

An all-encompassing word for the compulsive needs to spend a lot of time online to the point where relationships, job, and health are permitted to suffer is "Internet addiction or Cyber addiction or Digital addiction. "A descriptive correlational study was conducted on 106 nursing students who were selected by nonprobability convenience sampling technique. The data was collected by using Internet Addiction Scale (Chen), Depression, Anxiety, Stress Scale for youth Szabó and Lovibond, Russell, D Peplau's UCLA Loneliness Scale. Results of the study showed that 4.7% of nursing students had cyberaddiction, 95.3% of nursing students did not have cyber addiction. 67.9% of nursing students were normal without depression, 27.4% had mild level of depression, 4.7% had moderate level of depression. 67.9% of the nursing students were normal without anxiety, 27.4% had mild level of anxiety, 4.7% had moderate level of anxiety. 96.2% of the nursing students were normal without stress, 3.8 had mild level of Stress. Pearson's correlation coefficient showed that there was direct relationship between the Cyber Addiction score and the Anxiety score ( $r = 0.410$ ,  $p < .01$ ) and stress score ( $r = 0.423$ ,  $p < .01$ ), depression ( $r = 0.432$ ,  $p < .01$ ) among the students and as the cyber addiction increased anxiety and stress, depression also increased.

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#### Introduction:-

When someone is addicted to the internet, they allow other aspects of their lives (including relationships, employment, or health) to suffer as a result of their obsessive need to spend a lot of time online. In order to get the same "high feeling" the individual grows reliant to nursing the internet and needs to spend an increasing amount of time online. The nurse needs to assess such behaviour to prevent the psycho-social problems.<sup>2</sup>

Studies believe that the chemical abnormalities in the brain that cause drug and alcohol addiction also cause this cyber addiction. Studies also suggest that a change in the structure of the brain, specifically in the prefrontal lobe, which is in charge of setting priorities for daily tasks, may be connected to technology addiction. The nurse may find such compulsive acts during the mental status examination<sup>3</sup>

Despite the detrimental effects of technology use on the patient, technology addiction is an impulsive disease characterized by compulsive use of mobile devices, the cyber, or video games. Other names for the illness include cyber

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addiction and digital addiction. The nurses can observe the acts of increased use of digital devices and lack of attention to the present happenings or being mindful in the current scenario.<sup>4</sup>

Overuse of screens can have negative health effects, and screen addiction is a genuine thing. Spending too much time on technology has real negative repercussions on our health, ranging from physical eye strain and an increased risk of weight gain to mental health issues and sleeping difficulties. The nurse has the role to identify such symptoms to initiate early interventions for the mental well-being<sup>5</sup>

Setting boundaries around the appropriate times and locations to utilize technology. Thinking about designating the bedroom and mealtimes as tech-free zones. Give an example by putting one's own gadget in a different room before supper and charging it in the kitchen before turning in, are some ways in which a nurse can initiate interventions to reduce cyber addiction<sup>6</sup>

**Statement of the problem**

A descriptive study to assess the 'A study to assess the effects of cyber addiction on the selected psychosocial behaviour of nursing students at selected nursing colleges, Chennai.

**Objectives:-**

1. To assess the level of cyber addiction among nursing students.
2. To assess the selected psychosocial behavior problems among nursing students with cyber addiction.
3. To determine the correlation between cyber addiction and selected psychosocial behavior problems.
4. To associate between cyber addiction and selected socio demographic variables.
5. To associate between selected psychosocial behavior problems and selected socio demographic variables.

**Null Hypotheses**

**NH<sub>1</sub>** – There will be no significant the level of cyber addiction among nursing students.

**NH<sub>2</sub>** - There will be no significant selected psychosocial behaviour problems among nursing students with cyber addiction.

**NH<sub>3</sub>** - There will be no significant correlation between cyber addiction and selected Psychosocial behaviour problems among nursing students.

**NH<sub>4</sub>** - There will be no significant association between cyber addiction and selected socio demographic variables among nursing students.

**NH<sub>5</sub>** - There will be no significant association between selected psychosocial behaviour problems and selected socio demographic variables among nursing students.

**Materials and Methods:-**

The research approach used for the study was be Non experimental descriptive design and the study variables were cyber addiction and selected psychosocial problems among the nursing students and Age, gender, religion, year of study, type of family, total number of family members, family monthly income, hobbies, parent's educational and occupational status and their awareness about cyber addiction

There were demographic variables (14), selected psychosocial problems as Cyberaddiction (26), Depression, Anxiety Stress (21), Loneliness (20). The study was conducted at Sri Devi College of Nursing, Ponneri. Sample of 106 nursing students, who fulfilled the inclusion criteria and consented to participate in the study.

**The samples were selected based on the following**

**Inclusion Criteria:**

- 1.Nursing Students between the age group of 17 to 20 years.
- 2.Nursing Students who could understand Tamil or English

**Exclusioncriteria**

- 1.Nursing Students who are not willing to participate in the study

**Development and description of the tool**

**Section A: Demographic variables of nursing students**

Age in years (completed), Gender, Educational status, Religion, Marital status, Type of family, Occupation, Income of family (In Rupees), Number of children in the family other than the child with ADHD

**Section B - Internet Addiction Scale (Chen)**

Surfing the Internet (9), Online shopping (9), Recreational activities (8)

**Section C - Depression, Anxiety, Stress Scale**

Depression (7), Anxiety (7), Stress (7)

**Section D - Russell, D. Peplau's UCLA Loneliness Scale**

Isolation (10), Companionship (10)

**Data collection procedure****Phase 1:**

**Sampling selection** - 106 samples of caregivers and children with ADHD each in experimental and control group. By non-probability convenient sampling technique, samples were selected respectively from the selected nursing college.

**Phase 2:**

The demographic data was collected and the level of cyber addiction was assessed among the nursing students.

**Phase 3:**

Depression, anxiety, stress were assessed among the nursing students.

**Phase 4:**

Loneliness scale was assessed among the nursing students.

**I. Ethical considerations:**

The study proposal and plan were granted formal ethical approval, and consent was obtained from the Head of the Institution, and the principal of Sri Devi College of Nursing, Ponneri. Written informed consent was obtained from the participants after a clear explanation of the study purpose, type of data required, nature of commitment, participation, and the right to withdraw from the study at any point of time was explained. Confidentiality of all personal details disclosed by the samples was maintained, and full privacy was assured.

**Results:-****Demographic variable of Nursing students:**

It was revealed that 60.4% of the nursing students were of 19 years of age. 84.0% of them were females and belonged to Hindu religion. 26.4% of them were studying in IV year and 91.5% of them belonged to nuclear family, 90.6% of them had 6-7 members in the family. 88.7% of them had a family monthly income of 21001-35000 and 65.1% of them used social media as their hobbies. 76.4% of them had high school as father's educational qualification and 61.3% of them had their mother's educational qualification as high school.

**Cyber addiction of the Nursing students:**

It was revealed that 95.3% of them did not have cyber addiction.

**Depression, Anxiety, and Stress of Nursing students:**

It was revealed that 67.9% of the nursing students did not have depression, anxiety, and 96.2% of them did not have stress.

**Loneliness of the Nursing students:**

It was revealed that 50.9% of them had moderate degree of loneliness.

**Table 1:-** Frequency and Percentage Distribution of Demographic Variables. N=106

Demographic Variables		Frequency(n)	Percentage (%)
		N	%
Age of the nursing students	18Years	24	22.6
	19Years	64	60.4
	20Years	18	17.0
Gender	Male	17	16.0
	Female	89	84.0
	Hindu	89	84.0
	Christian	13	12.3

Religion	Muslim	4	3.8
	Total	106	100.0

The above table 1 reveals that 60.4% of the nursing students were of 19 years of age. 84.0% of them were females. 84.0% of the nursing students belong to Hindu religion.

**Table 2:-** Frequency and Percentage Distribution of Demographic Variables. N=106

Demographic Variables		Frequency N	Percentage %
Year of study	I Year	26	24.5
	II Year	26	24.5
	III Year	26	24.5
	IV Year	28	26.4
Type of family	Nuclear	97	91.5
	Joint	6	5.7
	Extended	3	2.8
Total number of family members including self	2-3	7	6.6
	4-5	96	90.6
	6-7	3	2.8

Table 2 reveals that 26.4% of the nursing students belonged to IV year of study. 91.5% of the nursing students belonged to nuclear type of family. 90.6% of the nursing students had 4-5 members as the total numbers of family members including self.

**Table3:-** Frequency and Percentage Distribution of Demographic Variables. N=106

Demographic Variables		Frequency n	Percentage %
Family month income (in rupees/month)	Rs5001-21000	6	5.7
	Rs21,001-35,000	94	88.7
	Rs35001-50,000	6	5.7
Hobbies	Reading books	9	8.5
	Listening to music	12	11.3
	Using social media	69	65.1
	Painting	16	15.1

Table 3 reveals that 88.7% of the nursing students had family month income (in rupees/month) as 21,001-35000. 65.1% of the nursing students had hobbies as using social media.

**Table 4:-** Frequency and Percentage Distribution of Demographic Variables. N=106

Demographic Variables		Frequency n	Percentage %
Father's educational qualification	Primary	12	11.3
	Highschool	81	76.4
	Graduate	13	12.3
Mother's educational qualification	Primary	22	20.8
	Highschool	65	61.3
	Graduate	19	17.9

Table 4 reveals that 76.4% of the nursing students had father's educational qualification as high school. 61.3% of the nursing students had mother's educational qualification as high school.

**Table 5:-** Frequency and Percentage Distribution of Demographic Variables. N=106

Demographic Variables		Frequency n	Percentage %
Occupational status of the father	Professional	4	3.8
	Non-professional	41	38.7
	Unskilled/ Landless Laborer	61	57.5

<b>Occupational status of the mother</b>	Professional	25	23.6
	Non-professional	8	7.5
	Unskilled/ Landless Laborer	16	15.1
	Homemaker	57	53.8

Table 5 reveals that 57.5% of the nursing students had occupational status of the father as Unskilled/ Landless Laborer. 53.8% of the nursing students had occupational status of the mother as Homemaker

**Table 6:-** Frequency and Percentage Distribution of Demographic Variables. N=106

<b>Demographic Variables</b>		<b>Frequency n</b>	<b>Percentage %</b>
Awareness about cyber addiction	Yes	38	35.8
	No	68	64.2
Awareness about cyber addiction and its correlation with ADHD	Yes	38	35.8
	No	68	64.2

Table 6 reveals that 64.2% of the nursing students did not have awareness about ADHD. 64.2% of the nursing students did not have awareness about ADHD

**Table 7:-** Frequency and Percentage Distribution of Depression, Anxiety, and Stress. N=106

<b>Mental Health Variables</b>		<b>Frequency N</b>	<b>Percentage %</b>
Depression	Normal	72	67.9
	Mild	29	27.4
	Moderate	5	4.7
Anxiety	Normal	72	67.9
	Mild	29	27.4
	Moderate	5	4.7
Stress	Normal	102	96.2
	Mild	4	3.8

Table 7 reveals that 67.9% of the nursing students did not have depression. 67.9% of the nursing students did not have anxiety. 96.2% of the nursing students did not have stress.

**Table 8:-** Frequency and Percentage Distribution of Levels of Depression, Anxiety and Stress (DASS). N=106

<b>Mental Health Variables</b>		<b>Frequency N</b>	<b>Percentage %</b>
DASS	Normal	101	95.3
	Mild	1	.9
	Moderate	4	3.8
Degree of loneliness	Low degree of loneliness	52	49.1
	High degree of loneliness	54	50.9
Cyber addiction	Addicted to Cyber	5	4.7
	Not addicted to Cyber	101	95.3

Table 8 reveals that 95.3% of the nursing students did not have depression, anxiety, and stress. 50.9% of the nursing students had a high degree of loneliness. 95.3% of the nursing students did not have cyber addiction.

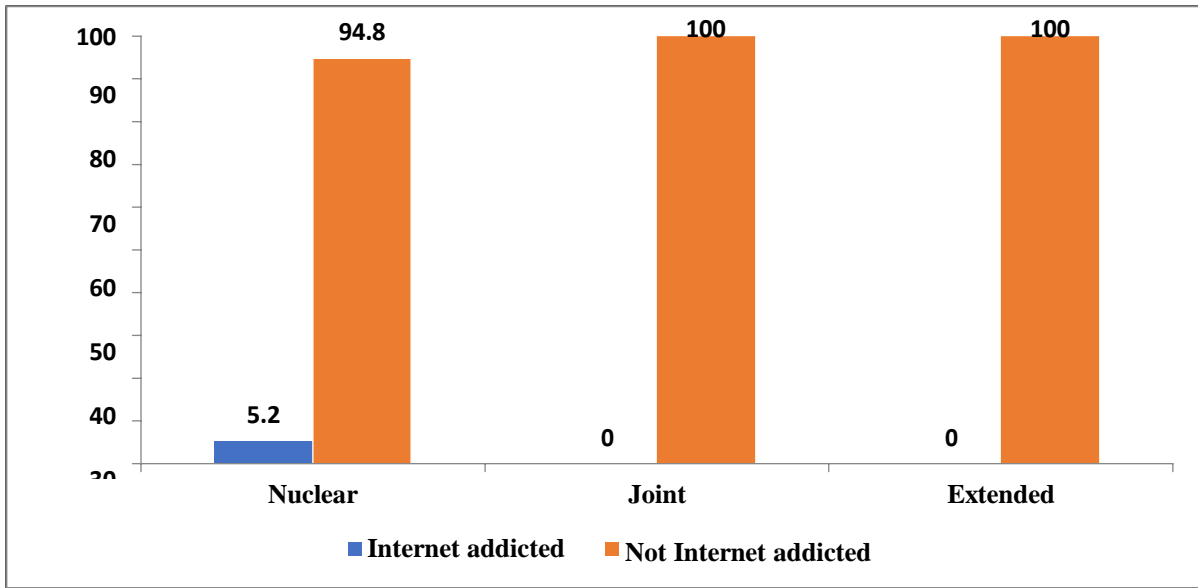


Fig 1:- Percentage of nursing students based on type of family and level of Internet addiction. N=106

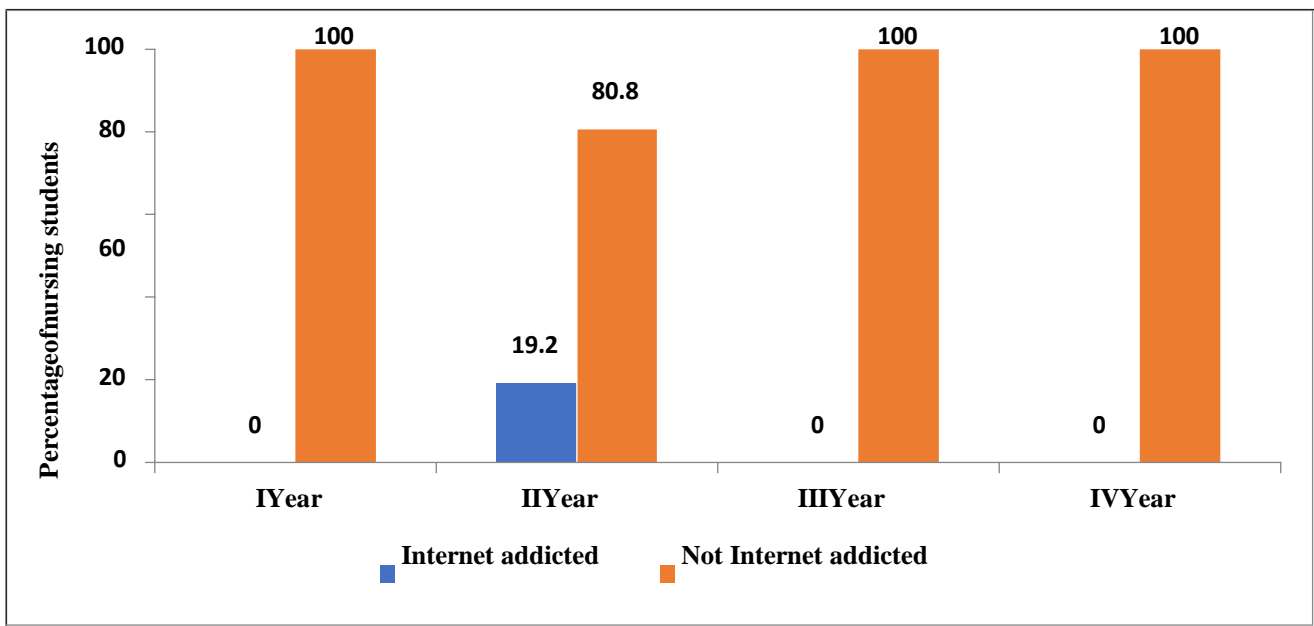


Fig 2:- Percentage of nursing students based on year of study and level of internet addiction. N=106

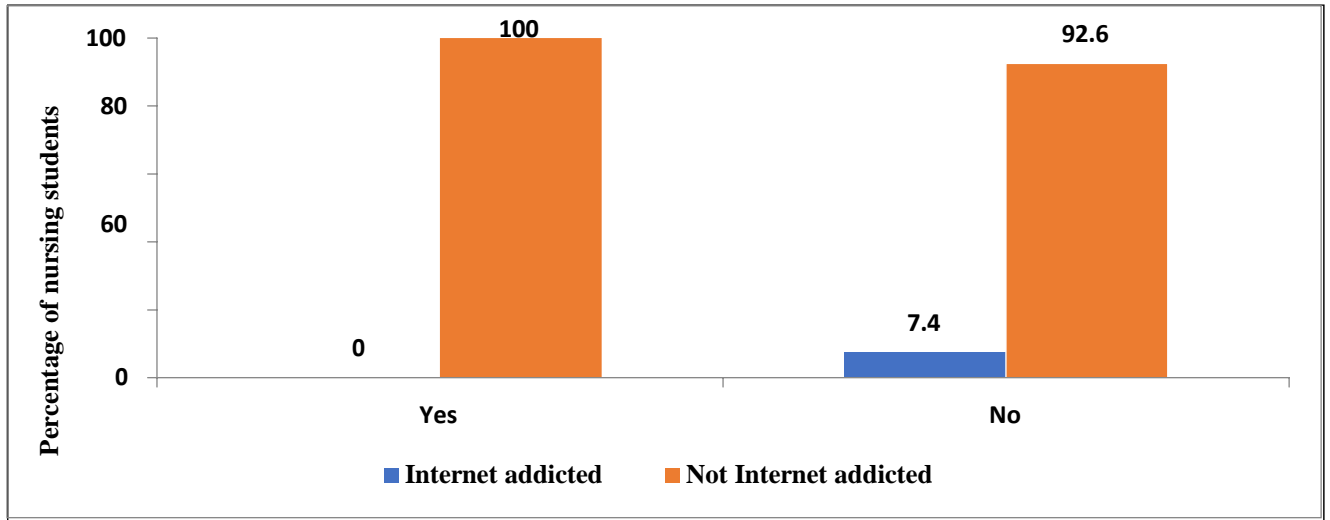


Fig 3:- Percentage of nursing student’s awareness about internet addiction and its impact on ADHD and Internet addiction scale.

Table 9:- Mean and standard deviation of mental health variables among nursing students. N=106

Mental Health Variables	Mean Score	Standard Deviation
Internet addiction scale (Chen)	56.69	4.025
Depression	3.91	3.584
Anxiety	3.74	3.142
Stress	4.00	3.591
DASS	11.64	10.265
Russell, D Peplau’s UCLA Loneliness Scale	12.45	8.767

Table 9 reveals that the mean score of Cyber addiction was 56.69, depression was 3.91, anxiety was 3.74, stress was 4.00, DASS was 11.64 and loneliness was 12.45

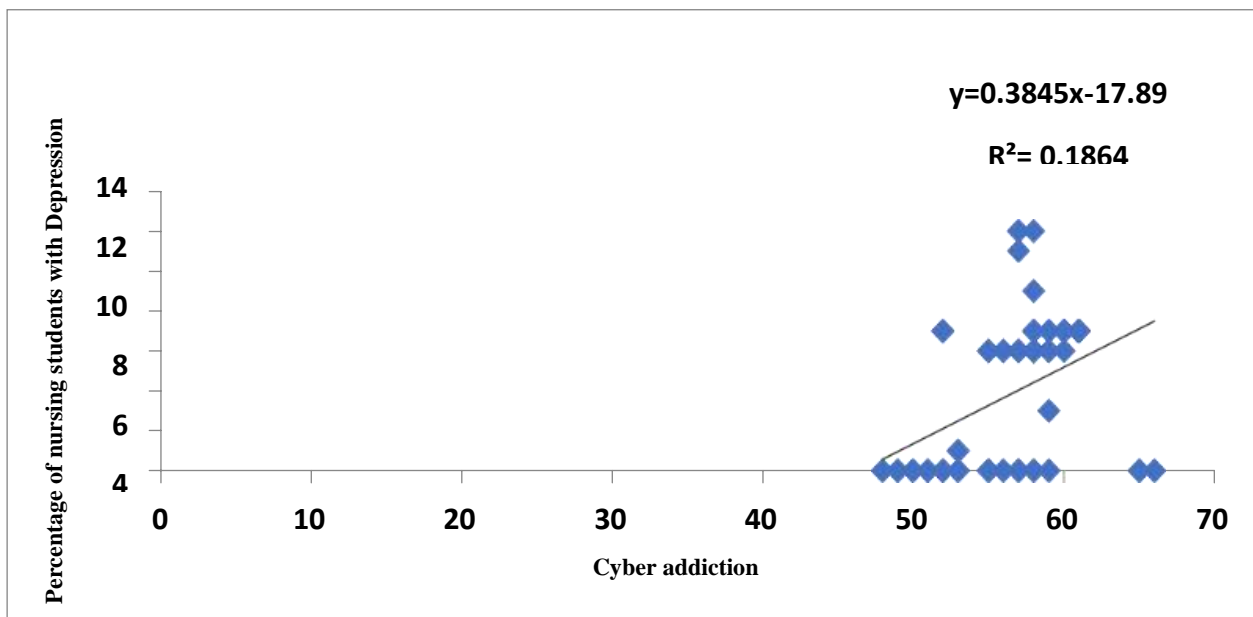


Fig 4:- Correlation Between percentage of nursing students with depression and Cyber addiction. N=106

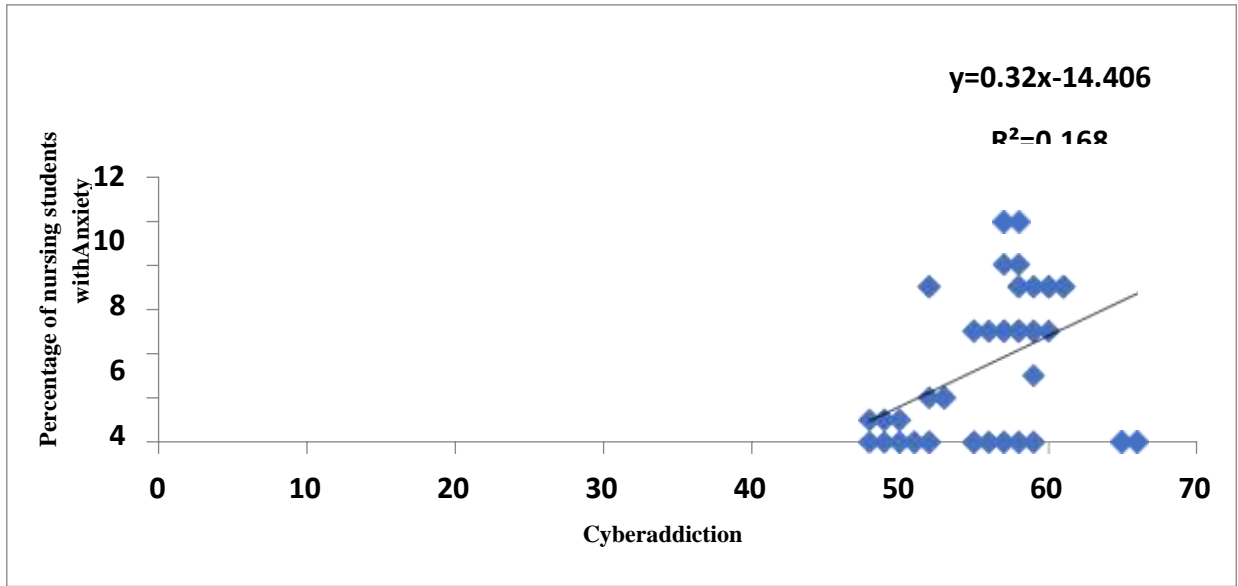


Fig 5:- Correlation Between percentage of nursing students with Anxiety and Cyber addiction. N=106

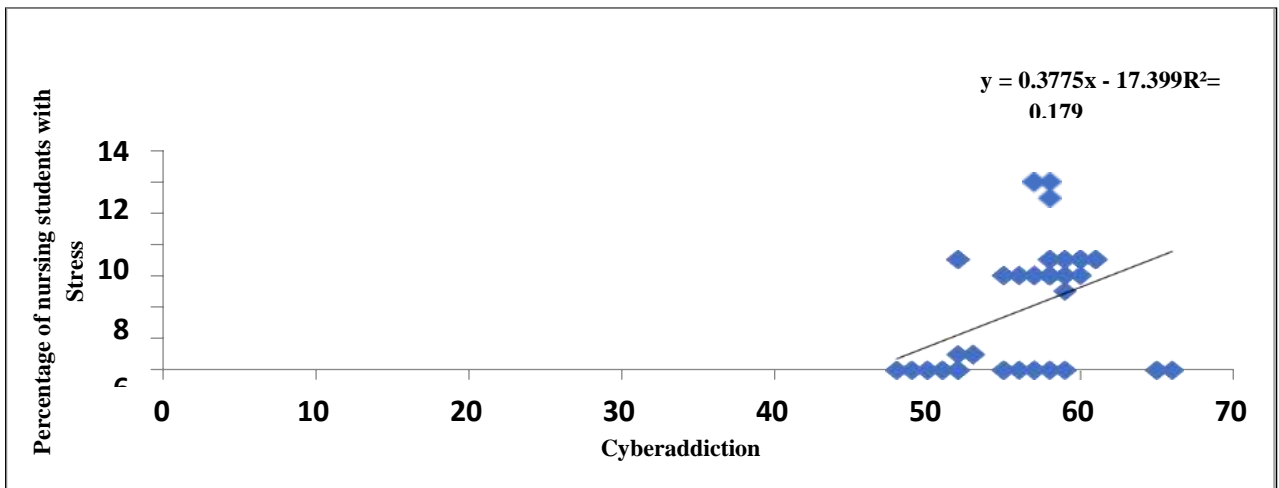


Fig 6:- Correlation Between percentage of nursing students with Stress and Cyber addiction. N=106

Table 10:- Correlation of mean differed level of cyber addiction and DASS among the nursing students. N=106

Correlation between	Karl Pearson correlation coefficients
Cyber addiction scale (Chen)	1
Depression	.432** P<0.05
Anxiety	.410** P<0.05
Stress	.423** P<0.05
DASS	.424** P<0.05
Loneliness	.318** P<.001

Table 10 reveals the correlation of mean differed level of cyber addiction score and DASS among nursing students using Karl Pearson correlation coefficient. Positive moderate correlation was identified between the cyber addiction



and DASS, which was significant at  $P \leq 0.05$ . Weak positive correlation was identified between the cyber addiction and loneliness at  $P < 0.001$ .

### **Nursing Implications**

Nurses should exhibit professional responsibility by educating the nursing students on cyber addiction through teaching and counseling. The investigator should provide health education by considering the physical and mental changes which are expected to occur due to the cyber addiction. The investigator must select and organize the learning experience for nursing students and must train novice nurses wherein they will be trained to modify their behavior of excess use of internet and improve the mental health and quality of life of nursing students. The health education exercises will be executed through nurse educators in the nursing college which will help in the promotion of health of the nursing students. The findings of the research could be disseminated through conferences, seminars, and by publishing in nursing journals and websites.

### **Limitations**

The investigator found that this research had the limitation of time consumption to complete the questionnaires by the research participants. There was difficulty in locating extensive international and national reviews on cyber addiction among nursing students in Tamil Nadu."

### **Conclusion:-**

The study findings concluded that there was more than half of the nursing students had Cyber addiction. The study showed that there was a positive moderate correlation which was identified between the cyber addiction and DASS. The findings have implications for researchers, clinicians, and nurse educators for comparative study purposes and to inform future research

### **Recommendations:-**

1. Similar study can be conducted on larger sample to generalize the findings.
2. Similar study can be conducted on different age groups.
3. Quasi-experimental study can be conducted to improve the knowledge regarding cyber addiction and its association with depression, anxiety, and stress.

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