



# TO STUDY PREVALENCE OF INTERNET ADDICTION IN MEDICAL COLLEGE STUDENTS IN INDIA

**Tirumala C<sup>1</sup>, Venkatesh T<sup>2\*</sup>**

<sup>1</sup>Associate Professor of Respiratory Medicine, Sri Lakshmi Narayana Institute of Medical sciences, Pondicherry, (Affiliated to Bharath University, Chennai), India

<sup>2</sup>Assistant Professor of General Medicine, Sri Lakshmi Narayana Institute of Medical sciences, Pondicherry, (Affiliated to Bharath University, Chennai), India

## ABSTRACT

To estimate the prevalence of internet addiction and relationship with the personality traits in the medical students. A cross sectional study using Youngs Internet Addiction Test (IAT) and Neo-Five Factor Inventory (NEO-FFI) was applied on 100 medical students under the age group of 21 to 23 years and appropriate statically test were applied to check the correlation. 65%, 22%, 1% is the prevalence of mild, moderate, and severe addiction in medical undergraduates respectively. Overall 88% of medical students were addicted to internet, among which 52% were females and 36% were males. And the personality trait neuroticism is significantly correlated with internet addiction ( $P = 0.032$ ). High prevalence of internet addiction in medical undergraduates and Internet addiction is associated with personality trait neuroticism.

**Keywords :-** Internet addiction, Medical Student, Personality Trait

Access this article online

Home page

[www.mcmed.us/journal/abs](http://www.mcmed.us/journal/abs)

Quick Response code



Received:10.12.14

Revised:22.12.14

Accepted:07.01.15

## INTRODUCTION

To estimate the prevalence of internet addiction and relationship with the personality traits in the medical students. A cross sectional study using Youngs Internet Addiction Test (IAT) and Neo-Five Factor Inventory (NEO-FFI) was applied on 100 medical students under the age group of 21 to 23 years and appropriate statically test were applied to check the correlation. 65%, 22%, 1% is the prevalence of mild, moderate, and severe addiction in medical undergraduates respectively. Overall 88% of medical students were addicted to internet, among which 52% were females and 36% were males. And the personality trait neuroticism is significantly correlated with internet addiction ( $P = 0.032$ ). High prevalence of internet addiction in medical undergraduates and Internet addiction is associated with personality trait neuroticism. The Internet has become an important information and entertainment source for adolescents, serving substantial role in [1,2] changing the social lives

of people. The vast majority of teens in the world are using internet. India is no exception to this global trend of excessive internet use. Few studies have explored problematic internet use in Indian context. It is therefore important to investigate the factors that predispose to problematic internet use among college students in the Indian context.

An internet addict may typically spend 4080 hours (3) weekly online. Some researchers observed that among all types of addictions, [3] Internet addiction is seen at earlier ages in both sexes. Prevalence statistics of Internet addiction among adolescents vary (4) (5) widely from 2% to 20% across cultures and societies. Internet addiction is typically characterized by psychomotor agitation, anxiety, craving, loss of control, impairment of function, reduced decision-making ability which might lead to negative impact on [4,5,6] academic performance

A series of problems resulting from the misuse of internet accompanying the excessive use of internet is a primary attention of researchers all over the world. In fact prior to the publication of the latest DSM-5, there had been some debate as to whether internet addiction should be included as an independent entity. The DSM-5 has included "Internet Gaming Disorder" - a subtype of internet addiction, in section 3 as an area that needed future research before being included in future [7] editions of the DSM. Some studies have postulated relationships between Internet [8,9] addiction, shyness and attention deficit hyperactivity disorder. One of the studies also tested sensation-seeking and Internet dependence in college students, the findings of this study seem to suggest that specific personality traits may predispose individuals [10] to develop IAD. There have been a number of longitudinal studies examining the relationship between general Internet use (including heavy use) and various aspects of psychosocial (10) wellbeing. However, none of these studies show consistent findings and none of these studies specifically investigated Internet addiction or attempted to measure it. Numerous studies on the psychologically addictive characteristics of Internet use have led to a growing concern among educators about the impact of the Internet on children and adolescents wellbeing and a number of other studies have highlighted the danger that excessive Internet use may pose to students as a population [11] group. This population is deemed to be vulnerable and at risk given the accessibility of the Internet and the flexibility of their [12] schedules.

## MATERIAL AND METHODS:

The current study a descriptive and correlative study, was carried out on undergraduate medical students of Sri Lakshmi Narayana Institute of Medical sciences, Pondicherry. Both male and female undergraduate

medical students in the age group of 21-23 years are included in the study, conforming to internet use for the last 6 months or more, were enrolled. A total of 120 student volunteers were thus selected by random sampling among them only 100 students participated by giving consent. The study was approved by the research ethics committee. Subjects were briefed in detail about the nature and purpose of the study. Confidentiality was assured and informed consent was taken. Two questionnaires were administered to the subjects as described below. Young's Internet Addiction Test (IAT) is a 20-item scale with a scoring of 0-5 for each question and a total maximum score of 100. Based on the scoring, subjects were classified into normal users (79) internet addiction groups covering the degree to which use of internet disrupts everyday life with the score ranging from 20 to 100. The internal reliability of the scale is 0.93. This test assesses the (13) generalised internet. Yoo and co-workers have reported reliability coefficient of the test with Cronbach's alpha method (9). equal to 0.90 The Neo-Five Factor Inventory (NEO-FFI), the short version, is 60-item (12 items per domain) questionnaire measuring the big five personality traits: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. The test was developed by Paul T. Costa, Jr. and Robert R. McCrae for use with (14) adult (17+) men and women without overt psychopathology. Statistical Analysis Correlation between the variables was assessed by means of the Pearson's correlation coefficient by using SPSS Software version 11.5

## RESULTS:

Based on this study sample, prevalence of mild addiction in undergraduates is 65%, moderate addiction is 22%, and severe addiction is 1% which is showed in table-1

**Table 1: Various degrees of addiction in male and female**

Internet addiction	Male	Female	Total
Mild	23 %	42 %	65 %
Moderate	12 %	10 %	22 %
Severe	1 %	0 %	1 %

## DISCUSSION:

Internet addiction is a vast concept. The usage of internet is rapidly increasing each year among adolescents. But sometimes the use of the Internet has become very dangerous. Because when people use it too much, it affects them greatly. Internet is a source of information, a medium that support education, a channel of communication and a platform for supporting research. It provides access to a multitude of internet service round the clock. According to Internet World Status, the population of worldwide is 7,796,615, covering 100 %

of the total world population in the year 2020, March 3, the internet usage of statistic estimates are for Dec 31, 2019 as of March 3, 2020 is 4,574,150,134. The population composition of the internet users ranges from decision makers to commoners, professionals to students, business giants to common workers, producers to consumers, irrespective of age, gender, generation, religion and, region. The highest percentage of internet users belongs to younger generation. They are usually affected by their behaviour and in a variety of ways.

Usually when using the Internet, many people spend a lot of time in online games and social media.

Our study found that Internet addiction affects around 88 % of the undergraduate medical students, moreover, adolescents and young adults are specifically deemed to be vulnerable and at risk, [15,16] comprising a large percentage of the online population. Young and Lee postulated that some online users consider the internet as an alternative, text-based reality where users are able to immerse themselves by taking on another social person through shaping a false and assumed identity, which in itself would be highly rewarding psychologically to guard against the attendant risks and difficulties of social relationship and avoiding the [17] challenges of life in the real world. Gender can be taken into [18] account as one of the key contributory factors of Internet use. Gender appears to be not significant in the level of Internet usage in this study ( $P = 0.96$ ). These results suggest that both female and male students are likely to become addicted to the Internet. Neuroticism scores are significantly related to internet addiction in the present study, neuroticism involves attributes like shyness, [21] guilt being tense, and being moody. Scholars described how those who were high on the trait of neuroticism were likely to use the Internet to avoid loneliness. They found that individuals who were high on neuroticism reported the lowest levels of perceived (2) social support. On the other hand, excessive and pathological Internet use is significantly correlated to neuroticism and not significantly correlated to extraversion, agreeableness, and openness to experience in this study. Those who score high on conscientiousness have control over their impulses and are orderly, diligent, and strive to achieve goals. In contrast, unconscientious individuals are predisposed towards acting impulsively, being disorganised, and tend to procrastinate on tasks. Individuals who score high on agreeableness tend to be prosocial, warm, trusting and friendly to others. Disagreeable individuals, on the other hand, are less pleasant to others, argumentative, uncooperative, and harsh disagreeable individuals may turn to the Internet as a means to (19) satisfy their needs for antagonism. The characteristics of welladjusted individuals make them not

seek social contacts on the Internet. The results of the present study are explainable in terms of extraversion and the individual's tendency to invest time in social relationship, to experience positive emotions and community participation, extrovert individuals as web users do not (20) consider online or cyber-relationships as social support. Based on the study findings, it is concluded that excessive Internet use is related to their personality traits which are prone for addiction. Excessive time spent in front of a computer and web overuse may be detrimental to various aspects of their lives including the social, functional, physical, and psychological aspects, forsaking other important priorities in the process, at risk for a range of morbidities and, in the extreme, even mortality. With continuing advances in computing and Internet power and availability, this issue is likely to become increasingly prevalent. Although some researchers have suggested that people who have (21) easier access to the Internet are more likely to become addicted, additional research is nevertheless needed to determine what factors may cause individuals to become addicted to the Internet. As a result, further experimentation with a more comprehensive level of analysis is necessary to examine cause and effects of pathological Internet use. Neither premorbid nor post morbid personality of internet addicted was assessed in the study and thus we can draw inference for personality at morbid state only. There is need to study those persons who are non-addicted and share common personality with internet addicted and later develop any kind of addiction longitudinally. There is study limitation that we could not control severity of internet addiction.

## CONCLUSION:

The present study revealed that the difference between the demographic variables respectively age, gender, order of birth, family income and internet addiction are not make changes in the Internet addiction of the college students, except two variables that are siblings and education that makes little difference in internet addiction.

## REFERENCES

1. Chou, Chien, and Hsinyi Peng. "Net-friends: Adolescents attitudes and experiences vs. teachers concerns." *Computers in Human Behavior* 23.5 (2007), 2394-2413.
2. Ross, Craig, et al. "Personality and motivations associated with Facebook use." *Computers in human behavior* 25.2 (2009), 578-586.
3. Whang LS, Lee S, Chang G (2003) Internet over-users psychological profiles: a behaviour sampling analysis on internet addiction. *Cyberpsychol Behaviour* 6, 143- 150.
4. Johansson A, Götestam KG (2004) Internet addiction: characteristics of a questionnaire and prevalence in Norwegian youth (12-18 years). *Scand J Psychology* 45, 223-229.
5. Ha JH, Yoo HJ, Cho IH, Chin B, Shin D, (2006) Psychiatric comorbidity assessed in Korean children and adolescents who screen positive for Internet addiction. *J Clin Psychiatry* 67, 821-826.

6. Young, Kimberly S. (1998), "Internet addiction: The emergence of a new clinical disorder." *CyberPsychology & Behavior* 1.3 237-244.
7. Griffiths, Mark D., Daniel L. King, and Zsolt Demetrovics. "DSM-5 internet gaming disorder needs a unified approach to assessment." *Neuropsychiatry* 4.1 (2014), 1- 4.
8. Chak, Katherine, and Louis Leung. "Shyness and locus of control as predictors of internet addiction and internet use." *CyberPsychology & Behavior* 7.5 (2004), 559- 570.
9. Yoo, Hee Jeong, (2004). "Attention deficit hyperactivity symptoms and internet addiction." *Psychiatry and clinical neurosciences* 58.5 487-494.
10. Lavin, Michael, (1999), "Sensation seeking and collegiate vulnerability to Internet dependence." *CyberPsychology & Behavior* 2.5 425-430.
11. Kraut, Robert, (1998), "Internet paradox: A social technology that reduces social involvement and psychological well-being?." *American psychologist* 53(9), 1017.
12. Moore, Dinty W. The emperor's virtual clothes: The naked truth about Internet culture. *Algonquin Books*, 1995. 13. Young, Kimberly S. Caught in the net: How to recognize the signs of internet addiction--and a winning strategy for recovery. *John Wiley & Sons*, 1998.
13. McCrae, Robert R., and Paul T. Costa. "Validation of the five-factor model of personality across instruments and observers." *Journal of personality and social psychology* 52.1 (1987), 81.
14. Aydm, Betül, and Serkan Volkan San. "Internet addiction among adolescents: the role of self-esteem." *Procedia-Social and Behavioral Sciences* 15 (2011), 3500- 3505.
15. Tsai, Hsing Fang, (2009), "The risk factors of Internet addictiona survey of university freshmen." *Psychiatry research* 167.3 294-299.
16. Young, Charmian Ming Yan, and Barbara Chuen Yee Lo. (2012). "Cognitive appraisal mediating relationship between social anxiety and internet communication in adolescents." *Personality and Individual Differences* 52.1 78-83.
17. Akman, Ibrahim, and Alok Mishra. "Gender, age and income differences in internet usage among employees in organizations." *Computers in Human Behavior* 26.3 (2010), 482-490.
18. Buckner, John E., Christopher M. Castille, and Tilman L. Sheets. (2012), "The Five Factor Model of personality and employees excessive use of technology." *Computers in Human Behavior* 28(5), 1947-1953.
19. Kim, Eun Joo, (2008), "The relationship between online game addiction and aggression, self-control and narcissistic personality traits." *European psychiatry* 23(3), 212-218.
20. Zahra Akhavi Samarein1, Neda Smaeeli Far1, Masoumeh Yekleh2, Relationship between Personality Traits and Internet Addiction of Students. *I n t e r n a t i o n a l Journal of Psychology and Behavioral Research*. 2(1), 10-17, 2013.
21. Davis, Stephen, (1999) "An examination of Internet usage on two college campuses." *College Student Journal* 33.2 257

**Cite this article:**

Tirumala C, Venkatesh T. To Study Prevalence of Internet Addiction in Medical College Students in India. *ActaBiomedicaScientia*, 2(4), 2015, 307-310.



**Attribution-NonCommercial-NoDerivatives 4.0 International**