



ORIGINAL RESEARCH PAPER

Psychiatry

A STUDY ON PREVALENCE OF INTERNET ADDICTION IN MEDICAL STUDENTS AND ITS RELATIONSHIP WITH PERSONALITY TRAITS

KEY WORDS: Internet addiction, medical student, personality trait

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ABSTRACT

AIM: To estimate the prevalence of internet addiction and relationship with the personality traits in the medical students.

MATERIALS AND METHODS: A cross sectional study using Young's 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.

RESULTS: 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 ($P = 0.032$).

CONCLUSION: High prevalence of internet addiction in medical undergraduates and Internet addiction is associated with personality trait neuroticism.

INTRODUCTION

The Internet has become an important information and entertainment source for adolescents, serving substantial role in changing the social lives of people^(1,2). 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 40–80 hours weekly online⁽³⁾.

Some researchers observed that among all types of addictions, Internet addiction is seen at earlier ages in both sexes⁽³⁾.

Prevalence statistics of Internet addiction among adolescents vary widely from 2%⁽⁴⁾ to 20%⁽⁵⁾ 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 academic performance^(4,5,6). 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 editions of the DSM⁽⁷⁾.

Some studies have postulated relationships between Internet addiction, shyness and attention deficit hyperactivity disorder^(8,9). 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 to develop IAD⁽¹⁰⁾. There have been a number of longitudinal studies examining the relationship between general Internet use (including heavy use) and various aspects of psychosocial wellbeing⁽¹⁰⁾. 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 well-being and a number of other studies have highlighted the danger that excessive Internet use may pose to students as a population group⁽¹¹⁾. This population is deemed to be vulnerable and at risk given the accessibility of the Internet and the flexibility of their schedules⁽¹²⁾. However, the role of personality traits in using the Internet has been overlooked in the current literature, the present research aims at investigating the prevalence of internet addiction and its relationship with the personality traits.

MATERIALS AND METHODS

The current study a descriptive and correlative study, was carried out on undergraduate medical students of Asram medical college, Eluru. 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. Study period was from 1st July to 30th July 2017. 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 (<20), mild (20-49), moderate (50-79) and severe (>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 generalised internet⁽¹³⁾. Yoo and co-workers have reported reliability coefficient of the test with Cronbach's alpha method equal to 0.90⁽⁹⁾.

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 adult (17+) men and women without overt psychopathology⁽¹⁴⁾.

Statistical Analysis

Correlation between the variables was assessed by means of the Pearson's correlation coefficient by using SPSS Software version 16.0

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%

Overall 88% of students were addicted to internet. Among the addicted students 52% are females and 36% are males.

In order to test the hypothesis, correlation study was used between personality traits of internet addicted students with internet addiction scores, then the results are presented .Only neuroticism is significantly correlated with internet addiction($P = 0.032$) and there is no significant correlation with extraversion, openness, agreeableness and conscientiousness.

DISCUSSION

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, comprising a large percentage of the online population^(15,16). 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 challenges of life in the real world⁽¹⁷⁾. Gender can be taken into account as one of the key contributory factors of Internet use⁽¹⁸⁾. 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, guilt being tense, and being moody⁽²¹⁾. 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 social support⁽²⁾.

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 satisfy their needs for antagonism⁽¹⁹⁾. The characteristics of well-adjusted 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 consider online or cyber-relationships as social support⁽²⁰⁾.

CONCLUSION

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 easier access to the Internet are more likely to become addicted⁽²²⁾, 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.

LIMITATIONS

Limitations of the study are small size of the sample and the study was conducted in only one medical college, so results cannot be generalized to the population .

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