

Impact of Internet on the Health of Young Adults

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Abstract: In the recent days Internet has become an essential part of life. It has revolutionized communications, to the extent that it is now our preferred medium of everyday communication. In almost everything we do, we use the Internet. Chronic usage of internet affecting physical health conditions like weight gain etc., and this is causing the greatest problems among the young individuals. The main purpose of this study is to study the relationship between internet usage frequency in the University students on our GITAM University students with their BMI. The present study consists 100 Medicine students which were differentiated as males and females (43 Males and 50 Female students). Some of the students who are not responding for all the questionnaires are excluded (07 Students). Different questions were asked to the students in the class environment. A significant association was found between BMI and the intense internet usages (>5-7hrs/daily), with F value 3.55 and p value <0.05. Out of 93 students, 15 students with high internet usage (>5-7hrs) and 31 students with moderate internet usage (3-5hrs) showed positive correlation between increased internet use and obesity.

Keywords: Internet, GITAM, GIMSR, *Excessive* internet use, body mass index, university students.

INTRODUCTION

Internet use has affected physical individual health by promoting immobility and resulting weight gain. This constitutes one of the greatest problems among young people. The result of this status is spending less energy than the amount required daily. Immobility is considered a cause of being overweight, and being overweight creates a vicious cycle by leading to further lack of mobility.

The rapid expansion of the Internet has increased the ease with which the youth can access internet. Thus, the amount of time spent in the Internet have considerably increased in recent years, paralleled by emerging concerns about inappropriate Internet use, which leads to negative consequences on our health.

Most research on the effect of the Internet on mental health has evaluated the information on adult populations. Little is known about the significance of excessive internet use on the physical health of young adult population.

Following the cases reported by clinicians, discussions began as to whether the Internet led to addiction or if excessive use of Internet was a

behavioural indicator of existing psychological problems and exhibited itself through use of the Internet [1, 2].

Young [3] preferred the term "Internet addiction", and compared it with drug and alcohol addiction, since it caused academic, social and professional damage. In the later studies, Young defined problematic Internet use based on the criteria for "pathologic gambling" as contained in DSM-IV (8-9) [4, 5]. Kandell [6] defined Internet addiction as a psychological addiction and particularly considered the young adults as a risky group for this addiction, emphasizing that it may lead to problems regarding health, relationships and time management.

In addition, Yildiz and Yildirim [7] examined the influence of problematic and unhealthy Internet use not addiction on healthy lifestyle behaviours in Turkey, such as stress management, diet and exercise, which also considered the Internet usage more than 5 h a day to be problematic.

In addition to this, computer and Internet use have negative physical effects on individuals, which have been revealed in the results of many studies [8, 9].

Also, research has demonstrated the accuracy of this belief [10-11]. Consequently, it is suggested that this problem may be prevalent among the university students, especially when university students' wider access [12, 13] to the Internet is taken into account.

Some studies show that high leisure-time Internet and computer use is associated with higher Body Mass Index (BMI) and lower physical activity levels [12-14] other studies are not able to confirm this [15]. However, to our knowledge no studies have evaluated these relationships in young adults.

PURPOSE

A considerable body of literature has emerged over the past two decades assessing the relationship between problematic or addictive use of the Internet and various indices of psychological well-being. Conversely, comparatively little research has assessed the relationship between problematic or addictive use of the Internet and one's physical health.

Also, increased ease and availability of internet on various electronic devices in our daily life has impacted the way we interact with one another and our environment. This in turn has led to a vicious cycle of negative consequences on our health. Hence our study deals with role of internet on health of the youth as they are the future of our society

Aims and Objectives

The purpose of this research is to investigate the relationship between the frequency of internet usage among the university students of Visakhapatnam, India and their body mass indexes (BMI).

MATERIALS AND METHODS

Recruitments

This study was conducted in university campus with the students enrolled in undergraduate courses. Volunteers were recruited on random basis.

Inclusion criteria

- The volunteers were of age group between 17-22 years.
- Students spending at least a minimum of an hour on internet.
- Students using internet for duration of more than two years.

Exclusion criteria

- Diabetes mellitus and Hypertension

Data Collection

This study comprised a sample of 100 young adults in Visakhapatnam, India. A cross-sectional research design was used to examine the impact

of Internet addiction. Data were gathered based on personal administered questionnaires.

Internet usage: Students were asked about their daily frequency of internet use. All data were collected at a convenient time.

Students were instructed not to eat or drink caffeinated beverages within 2 h of data collection. Height (to the nearest 0.5 cm) and weight (to the nearest 0.2 kg) were measured (in light clothing and without shoes) to derive the BMI (kilograms per meter squared). The BMI was calculated using Omoron digital scale.

Research limitations/implications

The present study lends interesting insight into assessing to the limited body of knowledge on Internet addiction for young adults in India. Like other empirical researches, this study is not without its limitations. The data for this study are collected by self-administered questionnaires, a method with well-known shortcomings. Secondly, the sample size itself is relatively small. This study can be strengthened by increasing the sample size and including participants in other geographical areas in India. Our sample is consisted of students from one university in India. So, the sample is small in number. The study can be strengthened by increasing the sample size and including participants from other working adults from different parts in India. Longitudinal studies that use both quantitative and qualitative techniques are required to understand the changes that the Internet addiction behaviour has on health. Finally, it is expected from other researchers to do survey on different age group to contribute to this area of research.

RESULTS AND DISCUSSION

Statistical analysis was done with SPSS version 21.0 statistical software package, mainly involving Anova analysis and Chi-squared test. Although a total of 100 students were surveyed, only 93 questionnaires were completely filled. Out of these 43 were male and 50 were female.

A significant association was found between BMI and the intense internet usages (>5-7hrs/daily), with F value 3.55 and p value <0.05.

Fifteen students with high internet usage (>5-7hrs) and thirty one students with moderate internet usage (3-5hrs) showed positive correlation between increased internet use and obesity.

Heavy Internet users were much less likely to engage in the following health promoting behaviours than the rest; attempting to eat a healthier diet, taking nutritional supplements, trying to increase physical activity levels, and were shown to be significantly more

likely to be overweight Body Mass Index (BMI >25), have hypersomnia (>10 h of sleep/day) and have adverse effects on their studies [16]. The adverse effect would be; migraine or headache, less sleep, and backaches because of prolonged hours of Internet usage [17]. Sleep patterns are disrupted due to late night logins which resulted to excessive fatigue, impairing academic or decreasing occupational performance, and may decrease the immune system, leaving the addict prone to disease. Sitting at the computer for longer hours also means that addicts are at higher risk in developing carpal tunnel syndrome [12]. The previous studies have found that excessive Internet use brings several physical problems such as backache and other body aches after Internet users spent a long time in the Internet [12]. The duration of sleeping time will be used to see the respondents passion in surfing the Internet. On the other hand, the fatigue faced by the Internet users also will determine the Internet addiction impact

to the young working adults. Migraine or headache problems also will show the correlation effects with excessive Internet usage [17, 16].

Our study indicates an increased risk of obesity as the duration of internet usage increases. We recommend that internet usage should be limited only for necessary course work to be done during the college hours. Limitation of the time spent on internet as a leisure activity and increase in physical activities and a healthy nutritious diet. Also, our results suggest that it might be necessary to also take into consideration the adverse effects of further Internet use in inappropriate time and ways. It is hoped that as more and more research are focused on this field, the negative effects of Internet use on individual physical health will be gradually eliminated to achieve that people are no longer enjoying the Internet at the expense of the physical health.

Table-1: Table shows the parameters of BMI, Time spent on the internet, Mean, SD values with F-value and P-value

Parameter	Time spend on internet	Mean	SD	F-value	P-value
BMI	1 to 3 hrs	23.75	4.24	3.55	<0.05
	3 to 5 hrs	25.49	4.03		
	5 to 7 hrs	26.93	5.48		

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