INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

Internet Addiction among college students

Psychology

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ABSTRACT

In a highly digitized era, people can hardly live without computer, mobiles, tablet and the internet. While we are admiring the conveniences and advantages brought by the internet, there is a growing concern about problematic internet use and whether it can lead to addiction. The current research focuses to assess the personality traits and psychological well being of the internet addicts. 1872, sample, both males and females drawn from the three engineering colleges, were screened with Young's internet addiction questionnaire. Among them 100 students were found to have scores above the cut-off indicating problematic usage. Internet Addiction Test (IAT), Eysenck Personality Questionnaire (EPQ) and Psychological Well-being Scale were used to assess the type of personality, internet addiction and psychological well-being among the sample. The data were collected and statistically analyzed using t test and Pearson co-relation co-efficient. The results indicates that among the 100 students 70% of the sample are classified as average internet users and 27% of the sample were problem over- users and 3% were pathologically addicted to internet. This research concluded that there is significant relationship between neuroticism, anxiety and excessive internet use.

KEYWORDS:

Internet Addiction, Personality, Psychological Well-being, Neuroticism and Anxiety.

Internet is a "network of networks". Consist of millions of smaller domestic, academic, business and government networks. Which together carry various information and services, such as electronic mails, online chat, file transfer and interlinked web pages and other resources of World Wide Web (WWW). It has many important and necessary benefits. It is a fast, ecologically sound, convenient and informative. In ways it makes our lives much simpler. Internet addiction can be simply termed as 'addiction over Internet or over activities dependent exclusively on the use of Internet. Internet addiction was first introduced in a pioneer study by Kimberly Young (1996), it sparked a controversial debate by both psychologists and academicians. The problem of Internet overuse was included as "Internet use gaming disorder" in DSM-5 section 3 which highlights the need for more research to diagnose the formal disorders. According to DSM-5 addiction criteria, there is no difference between "chemical" and "behavioral" addiction. DSM-5 focuses on personal experiences rather than drug types (2013). Internet use may be beneficial or benign when kept to 'normal' levels, however high levels of internet use which interfere with daily life have been linked to a range of problems, including decreased psychosocial well-being, relationship breakdown and neglect of domestic, academic and work responsibilities (Beard 2002; Weiser 2001; Widyanto & McMurran 2004; Yao-Guo, Lin-Yan & Feng-Lin 2006; Young 1998).

Need for the study:

Most of the colleges and universities having internet connection are available on campus 24 hours per day. Parents welcomed the internet in their homes, believing that they are opening up an exciting new world of educational opportunities for their children. Poor integration in extracurricular activities is due to excessive Internet use on campus (Murphey, 1996). About 86 % of teachers, librarians & computer coordinators believe that Internet usage by children does not improve performance (Barber, 1997). Young (1996) also found that 58% of students reported a decline in study habits, a significant drop in grades, missed classes, or being placed on probation due to excessive Internet use.

METHODOLOGY
Objectives:
- To assess the level of internet addiction, personality traits and psychological Well-being of the college students.
- To compare the Personality and Psychological well –being of average users and excessive internet users.
- To find the relationship between personality traits and internet addiction.

Sample:
1872 students who are studying first and second year in Electronic communication Engineering and Computer Science Engineering courses from Narayana engineering college, Sri Sai Aditya engineering college and Adithya engineering college at Andhra Pradesh were included in this research. Their age range was 17 to 25. Entire sample were screened with Young's (1996) Internet Addiction 8 item diagnostic questionnaire, out of them, 100 sample were found to have above the cut-off score (5 and above) were included in this research. Sample with present or past history of mental illness, drug abuse or any other serious physical illness were excluded from this research.

Tools used:
- Demographic data Sheet
- Young's Internet Addiction Diagnostic Scale (1998)

This eight item screening instrument was based on DSM-IV diagnostic criteria for Internet addiction.

® Internet Addiction test (IAT - young's, 1998).
It is a 20- item questionnaire, answered in a five –point likert scale. The minimum score is 20 and maximum score is 100; the higher the score, the greater the problems internet use causes. Young K.s., (1998) suggests that a score of 20-39 point is an average online user, who has complete control over his/her usage, A score of 40-69, signifies frequent problems due to Internet usage, and a score of 70-100 mean that the internet is causing significant problems. A high reliability estimate of IAT was consistently reported in adolescents with chronbach's a >.80 in the previous studies (Bayarktat & Gun, 2007; Milani, Osualdella, & Di Blasio, 2009; Wang etal., 2011). The scale showed very good internal consistency, with an alpha coefficient of .93 in the present study- Young (1996).

® Eysenck personality questionnaire short scale (R) S.B.G. Eyenck, H.J. Eysenck and Paul Barrelt (1985)

Eysenck Personality Questionnaire Revised - Short Form (EPQR-S; Eysenck et al., 1985). EPQR-S includes 48 items and 4 subscales: Extraversion (12 items), Neuroticism (12 items), Psychoticism (12 items), and Lie (12 items). The lie subscale is a control scale in which the whole scale is tested for social desirability bias. Eysenck et al. (1985) reported reliabilities for males and females respectively of 0.84 and 0.80 for neuroticism, 0.88 and 0.84 for extraversion, 0.62 and 0.61 for psychoticism, and 0.77 and 0.73 for the lie scale.

® The psychological general well being scale H.J Dupny (1984)

Has 22 items which includes 6 sub scales, they are anxiety, depressed mood, Positive well – being, self control, General health and vitality. It Test-retest reliability coefficient was found to be 0.68 and in internal consistency 0.95 (Dupuy, 1984) .

Procedure:

Permission was obtained from the college principals. Informed consent was obtained & purpose of the research was explained to the subject. The subject who met the inclusion criteria were selected for the research. The tools were administered with following order, Socio-demographic sheet, Young's (1996) Internet Addiction 8 item diagnostic questionnaire, Internet addition test (IAT), Eysenck's personality questionnaire – short scale (EPQ-S) and psychological general well being Scale were administered respectively. Each subject took around 60 minutes to complete the task. The data were statistically analyzed using Descriptive statistics, t-test and correlation through SPSS 13.

Results:

Table – 1 socio-demographic details of the sample

Socio demographic Variables		Percentage
AGE	17 – 19 years	47%
	20 – 25 years	53%
Sex	Male	90%
	Female	10%
Personal Computers with Net connection	Yes	47%
	No	53%
Duration of using net	<1 year	19%
	> 1 year	81%
No.of hours using net per week	<10 hours	55%
	10-20	36%
	> 20	9 %
Relationship with family	Happy	67%
	Disturbed	3%
	stable	30%
Interpersonal Relation with peers	Stable	91%
	Disturbed	9%
Academic performance	Good	59%
	Poor	5%
	Stable	36%
Type of internet applications	Chatting	41%
	Cyber sex	5%
	E-mailing	31 %
	Gaming	3 %
	Academic work	13 %
	other application	7 %
Sleeping hours	8 hours	30 %
	4 – 8 hours	67 %
	< 4 hours	3 %
Level of internet Addiction	Average (20-49)	70%
	Problematic(50-79)	27%
	Addiction (80 -100)	3%

Table I shows 47% of the sample were in the age group of 14 – 19 years and 53 of them were in the age group of 20 - 40 years. Majority of the sample were males (90%) and 10(10%) were females. Regarding family income, Rs. 10,000 – 20,000 was the income of the 39% of the sample, 16% of the sample belongs to Rs.20, 000 – 30,000 categories. 83% of the sample belongs to nuclear family and 7% belongs to extended family. 67% of subjects were belongs to happy family whereas 3% of the sample belongs to disturbed family. In respect to duration of using net, 19% were using net more than a 1year and 81% of the sample were using net less than 1year. It is alarming to find out that 3% of subjects sleeping less than 4 hours, 67% of samples were sleeping 4-8 hours and 30 % of the subjects sleeping around 8 hours per day. In respect to interpersonal relationships with peer group 91% of the subjects had stable interpersonal relationship and 9% had disturbed interpersonal relationship.

Table – 2. Personality traits among Excessive internet users and Average internet users

Psychological Well-being	Level of Internet Addiction	Mean	SD	t-value	Sign. 2 - tailed	P-value
Anxiety	Average users	14.866	4.158	2.098	.040	0.05*
	Excessive users	16.800	4.369			
Depressed Mood	Average users	10.485	3.044	1.322	.192	NS
	Excessive users	9.566	3.244			
Positive well – being	Average users	12.614	2.320	0.865	0.391	NS
	Excessive users	12.000	3.227			
self control	Average users	10.142	3.200	0.584	0.562	NS
	Excessive users	9.700	3.583			
General health	Average users	11.042	2.373	0.669	0.506	NS
	Excessive users	10.666	2.656			
Vitality	Average users	13.428	2.476	- 1.907	0.062	NS
	Excessive users	14.466	2.501			

Table-II shows the Personality traits among Excessive internet users and Average internet users. In Psychoticism, the mean value of Average Internet users is 3.29 and Excessive Internet users is 3.93 and the t.value is 2.267 ($p < 0.05$ level) which shows that there is statistically significant difference. In Extraversion, the mean value of Average Internet users is 8.13 and Excessive Internet users is 8.23 and the t.value is 0.27 ($p < 0.05$ level) which shows that there is no statistically significant difference between the two groups. In Neuroticism, the mean value of Average Internet users is 3.74 and Excessive Internet users is 5.23 and the t.value is 2.26 ($p < 0.05$ level) which shows that there is statistically significant difference.

Table – 3, Psychological well-being among Excessive internet users and Average internet users

Psychological Well-being	Level of Internet Addiction	Mean	SD	t-value	Sign. 2 - tailed	P-value
Anxiety	Average users	14.866	4.158	2.098	.040	0.05*
	Excessive users	16.800	4.369			
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	Excessive users	10.666	2.656			
Vitality	Average users	13.428	2.476	- 1.907	0.062	NS
	Excessive users	14.466	2.501			

Table-3 shows that there is a significant difference in psychological well-being - Anxiety subscale scores between excessive and Average internet users. The excessive internet users scored high on anxiety subscale (t.value - 2.098 p < 0.05 level). All other subscale in Psychological well-being is not statistically significant.

Table – 4 Relationship between Personality types, Psychological well being and level of Internet Addiction.

Personality type	Average Internet Users	Excessive Internet Users	Internet Addicts
Psychoticism	-.082	.270	.183
Extraversion	-.047	.069	.010
Neuroticism	.140	.493**	.348**
Lie scale	-.014	.183	-.051

Table -4 shows the relationship between personality types and level of internet addiction. There is a strong positive relation exist between Neuroticism and excessive internet users (0.493 p < 0.01 level) and Internet addicts (0.348 p < 0.01 level).

Table – 5 Relationship between Personality types, Psychological well being and level of Internet addiction.

Psychological well-being	Average Internet Users	Excessive Internet Users	Internet Addicts
Anxiety	.176	.240	-.030
Depressed mood	-.134	.093	-.140
Positive well-being	.108	.087	.000
Self control	-.042	.025	-.059
General Health	.078	-.076	-.038
vitality	.047	-.213	.120

** Correlation is significant at the 0.01 level

Discussion:

The present research examines the relationship between internet addiction, personality traits and psychological well being of college students. The internet addicted group differed on personality traits of neuroticism and Psychoticism with excessive users reporting highest level of neuroticism and Psychoticism. Neuroticism is the susceptibility to experience negative feelings, such as depression, anxiety, anger with low tolerance for stress or unpleasant stimuli.

Those with high score in neuroticism interpret usual situations as alarming and threatening. These problems in emotional regulation can influence the ability of thinking clearly, making decisions, and coping effectively with stress (Goldberg LR, 1993). These can be the reason that these individuals use substitute methods like internet usage in dealing with stressful situations.

Psychoticism represents unusual personality traits like aggressiveness, making cold relationship with others, weirdness, being non-emphatic, insensitiveness [Eysenck HJ & Eysenck SEG 1975]. People high on psychoticism use Internet deviantly rather than social– communal use [Amiel T, Sargent SL et al. 2004].

The present research findings was in support with the previous research showing, the Internet addiction group had significantly higher scores on neuroticism and psychoticism, than the control group   (Cao.F & Su.L, 2007 , Fisoun V. et al. 2012.,   Young K.S., 1999 and Yan W., Li. Y., and Sui. N et al., 2014). Internet-dependent individuals tended to exhibit a significantly lower degree of extraversion and a significantly higher degree of psychoticism when compared with the control group. (Xiuqin H et al. 2010).   Neuroticism positively associated with greater internet use. (Lei Li, Yanag & Mingxin , 2006 & wolfradt & Doll 2001).   Krant et al 2002 showed that personality factor of extraversion mediate the internet overuse and Engelberg & Sjoberg 2004., found that no association between personality characteristics and internet use.   These two results contradict the present results.

The users addicted to the Internet have considerable anxiety and apprehension. These individuals may therefore use the Internet as an escaping way, that is, when a person does not have access to the Internet, s/he becomes anxious and to reduce his/her anxiety, s/he precedes Internet. The group differed on (Psychological well-being sub-scale) anxiety with average internet users reporting lower level of anxiety and Excessive internet users reported increased anxiety. The finding of Roger C Ho et al. 2014., Jalalinejad Razieh., et 2012, Gholamian B et.al. 2017, also shows that internet addicts have high level of anxiety which supports the present research.   The present study finding were contrast with Jang KS et al 2008 & Whang LS, Lee S & Chang.G 2003, Cherry, Brian 2012) found that depression and obsessive compulsive symptoms are high among excessive users. There was no significant correlation between respondents Internet Addiction and their Psychological well-being. (Pandya M M et al. 2015) , decline in psychological well-being with reference to internet addiction (cherry Brian 2012., Al Jawharah et al 2016).

Conclusion:
- There is significant relationship between neuroticism, psychoticism and excessive internet use.
- There is significant relationship between anxiety and excessive internet use.
- There is no relationship between extraversion or Introversion and internet use.

Limitation:
- Sample size of 100 engineering students, generalization cannot be made.
- Larger sample with different age groups (younger, Adolescents, older, non-students group) and other subjects students could have been included for this research.
- The use of self rating measurement to detect Internet addiction can be considered as a limitation of the study. Because the study was cross-sectional, we could not establish a causal relationship.
- This study can be replicated in another setting or with participants from different age groups and backgrounds to reach at more generalizable findings

Implication of the Research:
Parents and teachers should pay closer attention on college students who have the risk for internet addiction. Mental health professionals should start early preventive programs and create therapeutic modules for internet addiction.

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