Study of Medical Students and Internet Usage

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Abstract- The Internet provides an opportunity for anyone to interact with whole of the world without any boundaries and barriers. Just think of friends and family members, to search any topic one can imagine, and to explore the world while sitting in the comfort of their own home or moving around by either desktops, laptops, or by smart phones. The popular media suggests that Internet usage decreases the amount of social interaction individuals have with the world outside of their computer and may be accompanied by social anxiety, loneliness, lowered self-esteem, or chronic depression, and the psychological dependence, literature's mixed findings on this issue and topic have not given any clear inference rather a confusion like state is being created about its usage or effects on individual and society. This study looked at the impact that Internet usage has on an individual's psychological well-being in an effort to clarify and expand on the previous researches and their outcome. Participants in this study were undergraduates' medical student of different medical college using internet as a routine for their studies, social media and interacting with society.

This study investigated three primary areas in addressing the disparate portrayals of the effect of Internet based social interactions among youth : 1) Can the amount of time spent and the level of social interaction for which a person uses the Internet predicts loneliness, level of social interaction, and social anxiety in offline settings/face-to-face relationships, and loneliness and social anxiety in online relationships; 2) Can the amount of time spent the Internet, or the amount of social interaction engaged in online predict participants reported levels of depression; and 3) Does the gender of the participant makes any difference on the amount of time spent on the Internet, their social interaction online, or their reported levels of depression?

I. INTRODUCTION

Information and communication technologies used to acquire knowledge and exchange of thoughts in any form had a significant effect on the development and behavior of human beings during the second half of the twentieth century. For this reason, the 21st century is often referred to as the "knowledge society", "knowledge period" or "knowledge revolution". To effectively fit in the global arena, almost all as individuals or organizations/ institutions have the internet as a vital tool. As we were approaching a new millennium, the internet has been and is being creating a revolution in our society on almost all fronts, either in our economy or technological advancements in education, industry, market, transport and so on. . No one knows for certain how far, or in what direction, the internet will evolve, but no one should underestimate its importance (Kahn and Cerf, 1999:15).

Adegoke (2009:122) affirms that, "Indeed, the internet is also a virtual library which is seen as virtual space containing a vast amount of information and documents including books, pictures, video, graphs and musical sounds that can be consulted." Clearly, there is a lot of information out there – too much to catalog. In fact, nobody knows exactly what is available online and where it is. The growth represents both an opportunity and a hazard...exactly a double edged sword .The opportunity is that, sitting at your desk, you can access information that you may not have been known existed. The hazard is that you waste a lot of time looking at information that is not relevant to the projects on which you are working.

The present study investigated and analyzed the extent to which medical students use the internet and effect of its use on social interaction with particular attention to the levels of social anxiety, and depression experienced by college students who engage in frequent, non-academic Internet use or exposure. In particular, these students frequently reported that they were more comfortable talking to their friends using technology such as the Internet or text messaging on their cell phones, than traditional forms of communication such as face-to-face conversations or speaking on the telephone. Anecdotally, a particular student reported that she frequently "froze up" and was unable to have an in-person conversation with her male friends but had no difficulty "talking" with text via a computer instant messaging program or online chatting.

II. METHODOLOGY

A survey was conducted on 500 students of the 2011/12 and 2012/13 academic sessions of Hamdard Institute of Medical Sciences and Research , Jamia Hamdard, New Delhi , AIIMS Jodhpur and SN Medical college Jodhpur by circulating a questionnaire , students were given time to answer the questionnaire and these were analyzed in detail.

Structured questionnaire was administered on the sample in two days to collect data. The questionnaire was segmented into four sections dealing with demographic variables, access and adoption, frequency and purpose of usage, and its effects on behavior or personality. Every question was compulsory and consisted of three options depicting maximum to minimum internet association. The individual responses thus obtained were then compiled, processed and analyzed to arrive at the certain conclusions on various issues. Involvement of students in sports and social activities was not included in the study.

The data was collected to explore the information on demographic and psychographic aspects of the respondents. The

demographic questionnaire (Appendix A) consisted of 10 questions that included participants' current academic standing, gender, family income and parental levels of education. This questionnaire also assessed participants' current ability to access the Internet and the typical locations of their access. Additionally, the demographic questionnaire asked participants to list the three most important activities in which they engage on the Internet. The psychographic variables included attitude towards usage of internet, its dependence and associated anxiety.

III. MAIN RESEARCH QUESTIONS

1. How often do students use the Internet?
2. Does access to the internet influence students' use of the Internet?
3. For what purpose do students use the Internet most?
4. Is there any relationship between students' use of the internet and their academic performance?

IV. OBSERVATIONS

All the 500 questionnaires distributed were retrieved, representing a hundred per cent response rate. Data showed that demographic variables were divided into three namely gender, level and age. Out of the 500 respondents 194 (38.8%) were male while 306 (61.2%) were female. As many as 418 (83.6%) of total respondents were within the age bracket 18-25, 82 (16.4%) were within age bracket 26-30.

Research Question One: How often do students use the internet?

From data collected, 256 (51.2%) respondents used it daily, 178(35.6%) used the internet on weekly basis, while 66 (13.2 %) used the facility ones in a while. This is presented in Table 1 below.

Table I: Frequency of Usage of the Internet

Responses	Frequency	Percentage
Daily	256	51.2
Weekly	178	35.6
Seldom	66	13.2

Research Question Two: Does accessibility affect students' use of the internet?

Table II: Accessibility of Respondents to the Internet

Questions	Responses		
	Yes	No	No Response
Is your department connected to net?	331 (66.2%)	133 (26.6 %)	36 (7.2 %)
Have you acquired a Laptop/desktop?	285 (57 %)	215 (43 %)	
Is there any cluster of computer systems you could use at any time to have access to the internet?	332 (66.4%)	168 (33.6 %)	

As shown in Table 2 above, 331 (66.2%) respondents agreed that their departments are connected to the internet as against the 133 (26.6%) who disagreed, while 36 (7.2%) did not respond. To the question of whether they acquired laptop or not, 285 (57%) agreed whereas 215 (43%) said they have not got a laptop. Similarly, 332 (66.4%) admitted that there is a cluster of computers at their disposal to access the internet as against the 168 (33.6%) whose responses were on the contrary.

Research Question Three: For what purpose do students use the internet most?

Table III: Main Purpose of usage of the Internet

Purposes	Frequency	Percentage (%)
Mails	183	36.6
Academic	176	35.2
Fun	86	19.2
Social networking	50	10
No Response	5	1

As depicted in table 3 above, as many as 183 (36.6%) respondents admitted that they mostly use the internet for mailing, while 176 (35.2%) used it mostly for academic purpose, 86 (19.2%) used it most for fun, while 50 (10 %) used it for social networking sites. One respondent 5 (1%) did not respond to this question.

About 67% students admitted that they spend 45hr/ wk along with internet while 23% spend time in between 35- 45hr/ wk and rest of them spend less than 35hr. Most of student spend their time for emailing and chat purpose rather than academics. According to data collected 45% of students spend 36hr /wk for emailing and 27.2% spend around 30hr/wk for chatting and blogging on social networking sites.

V. DISCUSSION

Like any other academic endeavor, this work is pegged on a theory which is that of uses and gratification. The bottom line of uses and gratification theory is that media do not do things to people; rather, people do things with media. In their contribution, Baran and Davis (2001) conclude that audience members actively seek out the mass media to satisfy individual needs. These include learning, passing time, companionship, escape from tension, excitement and relaxation.

McQuail (2005: 424) adds that the media serve the various needs of the society, which include cohesion, cultural continuity, social control and large circulation of public information of all kinds. This pre-supposes that individuals also use media for related purposes such as personal guidance, relaxation, adjustment, information, and identity formation.

Data collected provided deep insight to the subject matter. Accordingly, in order to establish how often students use the internet, Table 1 above shows that only few (35.6%) respondents

used the internet weekly, while those who seldom used it stand at (13.2%), and (51.2%) used it daily. The implication of this is that much of the use of the internet considered a routine exercise.

Table 3 is explicit on the purpose for which students use the internet most. According to respondents, 36.6% students mostly use it for mails despite the fact that most mails are mere correspondences without any academic usefulness. A few others (29.2%) use it for fun and social networking leaving a large majority (35.2%) who use the internet for academic purpose. This could be connected with the fact that users have found an enormous reservoir of information in different disciplines amid dearth of books in our libraries. So, against the backdrop that a majority of the students use the internet for mailing and fun purpose, it could be admitted that the internet enables students to solve their academic problems. This position conveys the fact that there exists a significant relationship between students' usage of the internet and their academic performance.

However, results indicated that there was a significant difference in the way that participants responded to measures of social anxiety when referencing face-to-face relationships as opposed to online relationships. Limitations included not tracking ethnicity of participants, an unequal distribution of gender across the population, and that the population was restricted to undergraduate students in a rural setting. Based on these results, future research would benefit from exploring differences in individual's perceptions of online relationships compared with face-to-face relationships, and from exploring similar questions in non-college aged, ethnically diverse populations with gender equally distributed across the sample.

There is a paucity of psychological literature concerning college student use of Internet social networking is available and those studies that are available are contradictory in nature (Brignall & Van Valey, 2005; Kraut et al., 1998, 2002; Ybarra, 2004). The popular media, who are more consistent about the issue, repeatedly infers that Internet use impairs social interaction and that increased use may even lead to chronic depression and clinical levels of social anxiety in traditional social situations (CBS News, 2007; Fox News, 2007; Geldof, 2007; USA Today, 2007).

During teaching-learning activities, females use the internet in a more functional sense than males. These results are concurrent with those from previous studies. This finding overlaps with the research conclusions in literature. According to the research conclusions of Tutkun, Erdoğan and Arslan (2010), female students hold higher standards concerning educational activities when compared with males. This may be because female students also tend to have higher standards of responsibility for teaching-learning processes and helping attitudes in a classroom environment

VI. CONCLUSIONS

In youths particularly the medical students of today's era it is clear that internet usage or knowledge of internet is almost 100%. Also it is evident that they are more into the era of e-usage and i-usage or net or tech friendly but true also is that they are using it mainly for non-academic purposes 55% like mailing ,gaming and social networking , this leads to loss in their study schedules or time as well as wastage of time is also there because

of non-focused approach as well as diversity of knowledge at net on a particular topic. On the other hand students with a focused approach go deep in subject who primarily use internet for academics are 35% and do not waste time because of proper management of time , focus of search areas and avoiding the social networking sites to minimum and if connecting that too in idle time. Psychological issues ranging from mood swings to altered behavior, withdrawn attitude and lonliness has been reported by those who have been using internet mainly for social networking and mailing, because they remain in some sort of virtual world of net. By this study this is established that 51% of students use net daily and 35% use it weekly. They are using net 16 to 22 hours on an average basis, with a range of 6to 38hrs weekly usage, for academic purposes 6 to 16 hrs were used on net on average in a week, while for other activites 14 to 34 hrs per week were used at net. 57% of study group had their own laptops or personal computers. Family income on an average ranged 5 to 8 lacs in 62% , 8 to 12 lacs in 21% , 12 to 20 lacs in 8% , above 20 lacs in 3% and 1 lac to5lacs in 11%. Net has become an integral part of today's life but should be used as a tool for coomunication and acquirement of knowledge but not as habbit forming addiction.

REFERENCES

[1] Adegoke, L. (2009). Introduction to Public Relations: Principles, Media and Methods. Amsterdam: Homelab Multiventures.

[2] Baran, J. S., & Davis, D. K. (2001). *Mass Communication Theory: Foundations, Ferment* and *Future.* (Third Edition) Belmont, CA: Thomson Wadsworth.

[3] Brignall, T.W., III & Van Valey, T. (2005). The Impact of Internet Communications on Social Interactions. *Sociological Spectrum, 25*, 335-348.

[4] CBS News (2007, July 15). *Parents Played Video Games As Kids Starved*. Retrieved from http://www.cbsnews.com/stories/2007/07/15/national/ main3058816.shtml. Article on file with author.

[5] Fox News (2007, July 15). *Nevada Couple Blame Internet for Neglect*. Retrieved from http://www.foxnews.com/2007Jul15/0,4675,Neglect InternetAddiction, 00.html. Article on file with author.

[6] Geldof, P. (2007, March 30). *It may start as innocent flirtation, but be warned; you too could become a lonely MySpace Addict.* Retrieved from http://www.guardian.co.uk/

[7] Kahn, R.E. & Cerf, V.G.(1999). *Internet as a New Medium.* (Second edition) New York:Longman.

[8] Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet Paradox: A Social Technology that Reduces Social Involvement and Psychological Well-Being? *American Psychologist, 53*(9), 1017-1031

[9] Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., & Crawford, A. (2002). Internet Paradox Revisited. *Journal of Social Issues.* 58(1), 49-74.

[10] McQuail, D. (2005). *McQuail's Mass Communication Theory.* (Fifth Edition) London: Sage Publications.

[11] Turk, C.L., Heimberg, R.G., & Hope, D.A. (2001). Social Anxiety Disorder. In. D.H. Barlow (Ed.), *Clinical Handbook of Psychological Disorders (3rd edition).* (pp. 114-153). New York: The Guilford Press.

[12] USA Today (2007, July 15). *Couple Accused of starving children while on the Internet.* Retrieved from http://www.usatoday/news/nation/2007-07-15-internet-neglect_N.htm. Article on file with author.

[13] Ybarra, M.L. (2004). Linkages between Depressive Symptomatology and Internet Harassment among Young Regular Internet Users. *CyberPsychology & Behavior, 7*(2), 247-257.

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APPENDIX A

Part One: Demographic Questionnaire
Where do you currently reside?
_____ On campus in student housing
_____ Off campus in student housing
_____ Off campus with family
_____ Off campus with friends
_____ Off campus alone
_____ Other:

Do you own a personal computer?
_____ yes
_____ no

Where do you have Internet access (check all that apply)?
_____ On campus
_____ At home
_____ At parent's house
_____ At work
_____ Other:

What are the 3 most important activities you use the Internet for?
(1)
(2)
(3

What is your gender?
_____ Male
_____ Female

What is your mother's highest level of education?
_____ Did not complete high school
_____ High school
_____ Vocational or trade school
_____ Some college
_____ Bachelor's degree
_____ Masters degree
_____ Doctorate degree
What is your father's highest level of education?
_____ Did not complete high school
_____ High school
_____ Vocational or trade school
_____ Some college
_____ Bachelor's degree
_____ Masters degree
_____ Doctorate degree

What is your family's estimated total income?
_____ less than 1,00,000

_____ between 1 and 5 lakhs
_____ between 5 and 8 lakhs
_____ between 8 and 12 lakhs
_____ between 12 and 20 lakhs
_____ over 20 lakhs

Part Two: Internet Usage Follow-up Questions
How many hours per week do you spend studying?
How many total hours per week do you spend using the Internet?
How many hours per week do you use the Internet for school related work?
How many hours per week do you use the Internet for emailing?
How many hours per week do you use the Internet for instant messaging?
How many hours per week do you spend in Internet chat rooms?
How many hours per week do you spend browsing Internet sites?
How many hours per week do you use the Internet for gaming?
How many hours per week do you use the Internet for blogging or on social networking sites (Facebook, MySpace, etc.)?

Please rank-order these Internet activities from most likely to be what you do online to least likely:
_____ Email
----------WebCT / Online Course
_____ Research for personal knowledge
_____ Sex sites
_____ Chat
_____ Shopping
_____ Researching items for purchasing
_____ News
_____ Games
_____ Music
_____ Blogs / Social networking sites
_____ Gambling