

Cross-sectional study on the use of social network sites and health profile of its users between the age group of 18 to 24 from Delhi

Akriti

VMMC & SJH

e-mail: akriti.him@gmail.com

Introduction

A Social Network Service (SNS) is an online site that focuses on building of social relations among people. Facebook, Myspace, LinkedIn, Friendster, Orkut, Twitter, Classmate, Yahoo 360 are the top such sites[1]

Created by Mark Zuckerberg with Eduardo Saverin, launched in February 2004, facebook has more than 500 million active users as of July 2010. A January 2009 Compete.com study ranked Facebook as the most used SNS by worldwide monthly active users followed by MySpace.[2]. More than 150 million active users access Facebook through mobile devices across 200 mobile operators in 60 countries. [2]

Number of facebook users in India is 13188580 with male and female users being 9344040 and 3914100 respectively. The penetration of facebook in India to online population is 16.28%. The major number of users belong to age group 18 to 24 comprising 46% of total population.[3] Research shows that facebook use is associated with moderate to severe

depression. Dr Catriona Morrison says "While many of us use the Internet to pay bills, shop and send emails, there is a small subset of the population who find it hard to control how much time they spend online, to the point where it interferes

with their daily activities." [4] A study by Dr. Joanne Davila on a group of 13 year old girls showed they can be prone to anxiety and depression by talking too much to their friends through

texting, e-mailing, and social networking. Repeated conversations among adolescent girls known as co-rumination can be unhelpful particularly if it's associated with romantic disappointments.[5]

Dr Aric Sigman says, lack of "real" social networking, involving face-to-face interaction, may have wide-ranging biological effects, it could alter the way genes work, upset immune responses, hormone levels and the function of arteries, and influence mental performance increasing the risk of health problems as serious as cancer, strokes, heart disease and dementia. It's probably an evolutionary mechanism that recognises the benefits of us being together geographically". [6] Susan Greenfield told The Daily Mail: "My fear is that these technologies are infantilizing the brain into the state of small children who are attracted by buzzing noises and bright lights, who have a small attention span and who live for the moment". [7] The extensive usage of these sites is causing the Indians too find difficulty in balancing between their 'real life' and 'online life'. Questions like, How much exposure is healthy? Are the adolescents acting responsible for themselves and for their family? are being raised. This addiction is virtually same as to nicotine or heroin as Facebook Depression and Facebook Anxiety Disorder (FAD) [8] come into picture. Studies on SNS is in nascent stage in India. In order to find out what could be the future implications of the use of SNS by young population on their health and well being, current study has been planned.

Objectives

1) To study the pattern of use of social networking sites amongst population aged 18 to 24 years from Delhi.

2) To find out the prevalence of anxiety and Obsessive-Compulsive Disorder amongst the users of social networking sites in the age group of 18 to 24 years from Delhi.

Methodology

1) STUDY DESIGN - cross-sectional .

2) STUDY POPULATION - college going students between the age group of 18 to 24 from South Delhi. A list of all the colleges from South Delhi will be prepared and then colleges will be picked up for the purpose of study using simple random method of sampling technique. Every 10th student from the college will be picked up till we get a sample of 50 per college. Permission will be sought from administrative heads of those colleges to conduct the study.

3) Study Period - 3 months

4) Sample size - The prevalence rate of usage of Social Network Sites is 46% in Indians belonging to the age group 18 to 24. The size was calculated using the formula: $4pq/L^2$ (p - prevalence rate, $q=1-p$, $L=10\%$ is the relative precision). The sample size was calculated to be 470.

5) Selection criteria - All these are the college students of South Delhi in the age of 18 to 24.

Exclusion Criteria - Those who do not consent to participate in the study.

6) Instruments used -

Self administered, semi structured questionnaires will be distributed to the participants that will help us access their pattern of use of SNS . We will access the prevalence of anxiety by using Hamilton Rating Scale for Anxiety (HAMA), 14 item scale.[9]

Also the individuals will be asked about their obsessive compulsive habits towards SNS including questions about the amount of time they spend on SNS, how much impairment or distress they experience, and how much

resistance and control they have over the thoughts related. As well, the same types of questions are asked about compulsions . This will be analysed using Yale Brown Obsessive Compulsive Scale (Y-BOCS), a 10 item scale.[10]

Also a questionnaire will be administered to illicit the medical history of the participants related to their general physical state, the treatment history etc. if there had been any deterioration in eyesight, weight loss, weight gain, finger and wrist joint pain, back ache, blood pressure since they started the use of these sites. Body Mass Index (BMI) will be calculated by the standard formula = $\text{weight}/(\text{height})^2$, the unit being kg/m^2 of BMI of all the participants to draw a relationship between the SNS site use and weight issues.

7) Plan of Analysis and Statistical tools - Data will be entered in Microsoft Excel sheets. The data will be analysed using statistical package software tools. Mean, proportions and percentages will be calculated. Simple and cross tables will be made and appropriate test of significance will be applied (eg. t test, Chi square test). Also data will be represented using appropriate diagrams (bar, charts) to illustrate the result. The questionnaire will comprise of the following Annexures:

Annexure 1

Part 1 - Socio Demographic Profile and personal details of the participants

Part 2 - Pattern of the usage of SNS.

Part 3 - Questions about their medical history and general physical state.

Annexure 2

Questions to access their Anxiety level using Hamilton Anxiety

Scale (HAM-A).

Annexure 3

Questions to access the OCD prevalence in them using Y-BOCS scale.

Consent will be taken and personal information will be kept strictly confidential.

Implications

Information, Education, Communication activities in the form of sensitisation programmes should be introduced both for the faculty and students of both colleges and schools to sensitize them regarding the wiser use of various SNS and internet on the whole. Also more studies should be done at a larger scale in the country so that not only do we get a data base for technology that has become so popular but also empower the population of young responsible adults to safeguard themselves against possible health adverse effects as the country's development and economy depends on their health.

References

1. <http://www.selfgrowth.com/socialnetworkingwebsites.html> 13th January 2011.
2. http://en.wikipedia.org/wiki/Facebook-Wikipedia,the_free_encyclopedia.mht;13th January,2011.
3. Facebook India Statistics - September 2010 Social Media Marketing.com September 2,2010.
4. Morrison CM, Gore H Institute of Psychological Sciences, University of Leeds, Leeds UK; The relationship between excessive Internet use and depression : a questionnaire-based study of 1,319 young people and adults;Psychopathology 2010;43(2);121-6. Epub 2010 Jan 23.
5. Starr LR ,Davila J. Department of Psychology, State University of New York at Stony Brook, Clarifying co-rumination :associations with internalizing symptoms and romantic involvement among adolescent girls; BBC Journal of Adolescence 2009 Feb;32(1):19-37. Epub 2008 Jan 31.
6. Biologist, February 2009 Dr Aric Sigman. BBC NEWS UK Online networking 'harms health'.mht/Daily Mail Reporter 19 Feb 2009.
7. Health Effects of Social Networking - Good and Bad, [www_dilipkumar_in.mht](http://www.dilipkumar.in); 17 September 2010.
8. new_illness_facebook_depression.php.htm; Sarah Perez / February 2, 2009.
9. Kaplan and Sadock's Comprehensive Textbook of Psychiatry , seventh Edition,Volume1.Editors-BenjaminJ. Saddock, M.D, Virginia A. Saddock,M.D:Lippincott Williams & Wilkins.
10. Kaplan and Sadock's Comprehensive Textbook of Psychiatry , seventh Edition, Volume 1. Editors-Benjamin J. Saddock, M.D, Virginia A. Saddock, M.D. Lippincott Williams & Wilkins.