A Study On the Pattern Of Internet Use And Its Impact on Health Among Youth In The Age Group 18-21 Years

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Abstract:
Internet has become an important tool for our day to day activities such as entertainment, social interaction and information. However internet has moved into all sectors for example schools, homes, cyber café and business etc. on the other hand it can be used by some people for gambling, chatting with friends for longer duration and even for pornography. Therefore use of internet has been increasing rapidly worldwide. This excessive pattern of internet use by youths results in many problems to them as well as their parents. Most of the people have the perception that a person can only be addicted to use of chemicals such as smoking, alcohol, drug etc but according to psychologist anything which stimulates and make feel an individual energetic can be called as addictive. In view of above, the study has been conducted to assess the pattern of internet use and its impact on health. This paper will represent the approximate time use on internet for different kind of activities among youths. It will discuss the impact of inappropriate internet use on health and their routine life as reported by the students.

Index Terms- Internet Addiction, Mental Health

I. INTRODUCTION

Internet has become an important tool for our day to day activities such as entertainment, social interaction and information. However internet has moved into all sectors for example schools, homes, cyber café and business etc. on the other hand it can be used by some people for gambling, chatting with friends for longer duration and even for pornography. Therefore use of internet has been increasing rapidly worldwide. Most of the people have the perception that a person can only be addicted to use of chemicals such as smoking, alcohol, drug etc but according to psychologist anything which stimulates and make feel an individual energetic can be called as addictive. Whenever your habits turn into compulsion such as chatting, online gambling, video games can be considered as addiction(Ramezan et al; 2013). Young linked excessive internet use most closely to pathological gambling, a disorder of impulse control by considering DSM IV criteria. Internet addiction is an emerging social and mental health issue among youths. Young people are more prone to internet usage for all kind of behavior without understanding the negative perspective associated with the use of internet (Chang et al; 2012). Due to this pattern of internet use it affects social performance, psychology and lifestyle habits. It also affects the health in many ways. Regular use of internet can result in loss of sleep, skipping of meal, physical inactivity which in the end affects the health of an individual (Kim et al; 2010). Extreme use of the internet can have harmful effects on psychosocial growth and behavior of adolescents, It can also lead to Depression, anxiety, sleep problems, and mental disorders like attention deficit hyperactivity disorder(sung et al; 2013). A study conducted among the Chinese adolescents reported that extreme use of Internet might not only have direct adverse health effects but also have indirect negative effects throughout sleep deficiency(An et al; 2014). A study by Yang et al in 2014 found that the prevalence on cyber bullying is 19.2% respectively at the age of 15. A study by Barlett et al in 2014 stated that females are more likely to cyber bullied in mid-adolescence as compared to males. A study by Sampasa-Kanyinga et al; 2015 is also that there was a strong relationship between bullying victimization and psychological distress. Since it is a recent phenomenon, very few studies have been conducted on India. This study has been carried out to assess the pattern of internet use and its impact on health. It has also discussed the impact of inappropriate use of internet on health and their routine life as reported by the by the students.

GENERAL OBJECTIVE:
To study the pattern of internet use and its impact on health among youth in the age group of 18-21 years.

SPECIFIC OBJECTIVES:
1. To assess the approximate time use on internet.
2. To study their life style pattern.
3. To identify whether students are involved in cyber bullying.
4. To study the impact of internet overuse on health.

II. BRIEF REVIEW OF THE RESEARCH

A study was conducted to assess the prevalence of internet addiction and its association with psychopathology among 1000 college students in Mumbai, aged 16-18 years. Participants were asked to complete the semi structured questionnaire and diagnostic questionnaire for the diagnosis of internet addiction. The result of the study showed that out of total population about 74.5% are moderate users, 24.8% as possible addicts and 0.7% as addicts. Those who are addicted reported high anxiety, depression score, (Goel et al; 2013)

Another study was conducted to assess the prevalence of internet addiction among adolescents at Hong Kong, china. They conducted a two wave panel survey with 208 adolescents, aged 15-19 years. In this study the participants were asked to self-report their pattern of internet usage, symptoms of internet addiction, suicidal ideation, psychiatric and psychological condition during the study period. The result of the study concluded that prevalence rate for having five or more symptoms was estimated to be 6.7% (95% CI 3.3-10.2). They also reported Positive dose-response relationships between the number of symptoms of internet addiction and 1-year changes in scores for suicidal ideation and depressive symptoms. (Fu et al; 2010)

Another study was conducted to assess the relationship of emotional intelligence and mental disorders in internet users among the 200 students of the universities of Isfahan. All the students were asked to complete the questionnaire. The result of the study reported that there was a significant relationship among emotional intelligence, mental disorders and internet addiction. (Khoshakhlagh et al; 2012)

Another study was performed to examine the effects of excessive internet use on health and the behavior pattern of internet dependency among 300 students at the university of Catania (Italy) where all the students were asked to complete the questionnaire aimed at identify their attitude and behavior toward the internet use and psychosomatic consequences of internet overuse.

The results that emerged from the participants responses revealed that about 5% of the participants were emotionally dependent on internet in various ways such as: internet facilitates social life relationship (5%), feeling of excitement while on-line (4%), way of escaping from real life (1%). The prevalence of the participants who spent excessive time to stay on-line was 8%, not able to end an on-line session (8%), who lied to family members to escape their nature of involvement with internet (3%), stop doing physical activities or skipping meals (1%), negative impact on grades (3%), sleep problems (4%), physical difficulties; backache (2%), arm or wrist pain (2%), vision disturbances (6%). (Coniglio et al; 2007)

III. ANALYSIS AND DISCUSSION

Methods: A descriptive cross sectional study among 201 youths of the graduate courses in the age group 18-21 years studying in Amity University, Noida has been conducted. The sampling technique adopted was convenient Sampling Technique. A structured and pretested self administered questionnaire was prepared to collect the data. The questionnaire was prepared in English language for better understanding of the questionnaire by the students.
Statistical Analysis

Study forms was scrutinized and coded before entering in the computer. The data was coded to ensure the confidentiality of data. Collected data was tabulated in Microsoft excel sheet and analyzed using the software ‘Statistical package for social science’ (SPSS). The entered data was verified and checked for data errors during coding and data entry. The group characteristics were presented in frequency and proportions. Chi-square test was used to test the significance of the study. P value less than 0.05 was considered statistically significant.

Results:

1. Time spent for entertainment on internet
Table shows that highest percentage of (45.27%, n= 91) respondents spend 1-2 hour for entertainment. It was seen that 31.34% (n=63) spend 3-5 hours, 12.94% (n=26) spend more than 5 hours for entertainment whereas 10.45% (n=21) do not spend time on internet for entertainment activities.

<table>
<thead>
<tr>
<th>Percentage (%)</th>
<th>Time spent on internet for entertainment in a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.27%</td>
<td>1-2 hours</td>
</tr>
<tr>
<td>31.34%</td>
<td>3-5 hours</td>
</tr>
<tr>
<td>12.94%</td>
<td>More than 5 hours</td>
</tr>
<tr>
<td>10.45%</td>
<td>Nil</td>
</tr>
</tbody>
</table>

![Fig 2: Time spent on internet for entertainment in a day](image)

2. Time spent on internet for social networking activities
Table shows that highest percentage 61.69% (n=124) of respondents spend 1 to 2 hours for social networking then respectively 16.42% (n=33) spend 3-5 hours, 11.44% (n=23) spend more than 5 hours on for social networking in a day. 10.45% (n=21) do not spend time for social networking activities on internet in a day.

<table>
<thead>
<tr>
<th>Percentage (%)</th>
<th>Time spent on internet for social networking in a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>61.69%</td>
<td>1-2 hours</td>
</tr>
<tr>
<td>16.42%</td>
<td>3-5 hours</td>
</tr>
<tr>
<td>11.44%</td>
<td>More than 5 hours</td>
</tr>
<tr>
<td>10.45%</td>
<td>Nil</td>
</tr>
</tbody>
</table>
3. Academic performance and internet use
Table shows that out of total respondents (n=201) 58.21% (n=117) feel rarely which is the highest performance, 26.37% (n=53) feel often, 11.94% feel often, 3.48% (n=7) always feel that their academic performance suffer because of internet use.

Table 3: Respondents who feel that their academic performance suffer because of internet use

<table>
<thead>
<tr>
<th>Do you feel that your academic performance suffer because of internet?</th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely</td>
<td>117</td>
<td>58.21%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occasionally</td>
<td>53</td>
<td>26.37%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Often</td>
<td>24</td>
<td>11.94%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always</td>
<td>7</td>
<td>3.48%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Fig 3: Respondents who feel internet use affect their academic performance
4. Respondents experienced Cyber bullying

Table shows that out of total respondents (n=201) 22.89% (n=46) said that they experienced cyber bullying and 77.11% (n=155) replied that they are not cyber bullied.

<table>
<thead>
<tr>
<th>Have you ever experienced cyber bullying?</th>
<th>Frequency distribution</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>46</td>
<td>22.89%</td>
</tr>
<tr>
<td>No</td>
<td>155</td>
<td>77.11%</td>
</tr>
</tbody>
</table>

5. Cyber bullying and gender of the respondents

Table shows that out of total respondents (n=46, 22.89%) who were cyber bullied percentage of female 33 (30.55%) was more as compared to males 13 (13.97%). It was also seen that out of total respondents 80 (86.02%) males and 75 (69.44%) females said that they did not experience cyber bullying.

<table>
<thead>
<tr>
<th>Option</th>
<th>Frequency distribution of the respondent on the basis of gender</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Male  13 (13.97) Female 33 (30.55)</td>
<td>46 (22.89)</td>
</tr>
<tr>
<td>No</td>
<td>Male 80 (86.02) Female 75 (69.44)</td>
<td>155 (77.11)</td>
</tr>
<tr>
<td>Total</td>
<td>93 (100) 108 (100)</td>
<td>201 (100)</td>
</tr>
</tbody>
</table>

Pearson chi square (2 tailed) df 1 & sig 0.02 (statistically significant p< 0.05)
ANOVA ( F= 8.01 df 3 & sig 0.01)
6. Cyber bullying and Stress
Table shows that out of total cyber bullied respondents 46 (22.89%) 76.08 % (n=35) feel stressed and 23.40% (n=11) do not feel stressed due to cyber bullying.

Table 6: Respondents feel stressed who experienced cyber bullying

<table>
<thead>
<tr>
<th>If yes, do you feel stressed due to this?</th>
<th>35</th>
<th>76.08%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>23.40%</td>
</tr>
</tbody>
</table>

Fig 6: Respondents in % feel stressed who experienced cyber bullying
7. Physical activity and gender of the respondents
Table shows that out of total respondents (n=54) who do physical activity percentage of female was more as compared to males (61.11%, n=33 vs. 38.8%, n=21), likewise who do physical activity occasionally (71.79%, n=28 vs. 28.20%, n= 11 out of 39) and often (54.71%, n=29 vs. 45.28%, n=24 out of 53) percentage of female was higher than the males. But % of male was more than the females (67.27%, n=37 vs. 32.72%, n=18 out of 55) who do physical activity always.

Table 7: Comparison of gender with the number of respondents who do physical activity in percentage

| Do you do physical activity for at least 30 minutes daily for 4-5 days in a week? | Frequency distribution of the respondent on the basis of gender |
|---|---|---|
| Option | Male | Female | Total |
| Rarely | 21 (38.88) | 33 (61.11) | 54 (100) |
| Occasionally | 11 (28.20) | 28 (71.79) | 39 (100) |
| Often | 24 (45.28) | 29 (54.71) | 53 (100) |
| Always | 37 (67.27) | 18 (32.72) | 55 (100) |
| Total | 93 (46.26) | 108 (53.73) | 201 (100) |

Pearson chi square (2 tailed) df 3 & sig 0.00 (Statistically significant p< 0.05)

Fig 7: Comparison graph of gender with the number of respondents who do physical activity in percentage

8. Percentage of respondents when they feel restless, moody and depressed
Table shows that 30.50% (n=18) feel rarely, 20.33% (n=12) feel often and 6.77% (n=4) always feel restless, moody and depressed when they are off-line for some time. Highest percentage of the respondents (42.37%, n=25) feel occasionally restless, moody and depressed.

Table 8: Respondents when they feel restless, moody and depressed

<table>
<thead>
<tr>
<th>If yes, when?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely</td>
<td>18</td>
</tr>
<tr>
<td>Occasionally</td>
<td>25</td>
</tr>
<tr>
<td>Often</td>
<td>12</td>
</tr>
<tr>
<td>Always</td>
<td>4</td>
</tr>
</tbody>
</table>

Discussion:

As found in present study about 45.27% spend 1-2 hours for entertainment on internet. This result is supported by a study conducted by Zhou et al (2014) where about 24.1% use internet for entertainment activities.

Similarly time spent for social networking on internet was varied. The findings of the present study reported that about 61.69% spend 1-2 hours for social networking. This findings corresponds with other studies carried out by Pantic et al (2011) and Sonal et al (2014).

A number of studies have showed that there exist a relationship between academic performance and internet use. This study reported that about 58.21% feel that their academic performance suffers because of internet use rarely and 26.37% reported occasionally. Similar findings have been reported by Sonal et al (2014) where 30% of total respondents reported that their school work and grades suffer due to social media. Similar findings have also been emerged in a study conducted by Walsh et al; 2013.

The findings of the present study reported that about 22.89% of total respondents experienced cyber bullying and this findings correspond with other studies conducted by Chang et al (2013), reported that 18.4% respondents were cyber bullied, Yang et al; 2014 reported in the findings of the study about 19.2% were cyber bullied, 19.1% cyber bullying victimization reported by Yen et al; 2014 in his study.

In this study we found that there is a higher prevalence of cyber bullying in females as compared to males. About 30.55% females experienced cyber bullying whereas 13.97% of males experienced cyber bullying out of total respondents who experienced cyber bullying. This findings also support the findings of Barlett et al; 2014 that females are more likely to be cyber bullied than males.

As consistent with other studies that out of the total (n=46) cyber bullied respondents about 76.59% feel stressed due to this. Sampasa-Kanyinga et al (2015); this study also highlighted that there exist a strong relationship between bullying victimization and psychological distress.
A variety of study showed the association between internet overuse and life style related factors. Finding of this study reported that about 26.78% rarely do physical activity, 78.61% rarely skip meals and 41.29% rarely lose sleep due to internet use. These findings were supported by a number of studies conducted by Kim et al; 2010 reported that irregular bed timing and high frequency of skipping meals were higher in high risk internet users as no risk internet users. Bener et al; 2010 showed that proportion of students participate in moderate physical activity was lower among those with problematic users.

This study also finds out that about 30.35% feel restless, moody depressed when they are off-line for some time. These findings strengthen by the research findings conducted by Alzayyat et al (2015) showed that there was a significant association between depression and internet addiction. Similar findings have been found in a study conducted by Al-Gamal et al; 2015 who reported that internet addiction was accompanying with high mental distress.

Limitation of the study:

The study was conducted in a short duration of time. Due to this the sample size was small. No funding was provided for this study. The data was collected during the exam time and the festive time that is why large amount of individuals could not participated and the participants were selected on the basis of inclusion and exclusion criteria so even though any individual willing to participate does not fulfill this criteria was not selected.

Conclusion:

The study found that time spends on internet for different activities varied among youths. More than one third of the respondents feel restless, moody and depressed when they are off-line for some time. There were statistically significant association between cyber bullying and gender. The study found that in general cyber bullying was more in females as compared to males. There is a need of doing research in this area especially in Indian context because internet is a most widely used tool in the present world.

Recommendation:

Since cyber bullying is known reason for causing stress, depression and anxiety, the youth who are cyber bullied, support can be given in colleges. It is also important to make aware about these changes in technology and its possible harmful effects to the parents of the victims. Here comes a need for organizing a counseling session to them. Since this study was conducted in the settings, a similar study can be done in rural areas keeping this study as a base guideline. The present study was based on pattern of internet use and its impact on health so a study can be done on physical effects of excessive internet use in the users. Trans-cultural studies can be conducted since internet use is more in metro Politian cities than in living in small town.
CONSENT FORM

The Internet has become an important tool for social interaction, information, and entertainment. However, as the Internet has moved into homes, schools, Internet cafes, and businesses, the prevalence of Internet addiction has been increasing rapidly. It affects both mental and physical health of an individual and becomes a public health issue worldwide. This study aims to find out the pattern of Internet use and its impact on health among youth in the age group of 18-21 years. In this regard, your responses are very important.

Please put a tick mark at the item which represents most applicable to you. Kindly fill in all the columns and do not leave any question blank. We assure you that your responses shall be kept confidential. Thank you very much for spending your valuable time.

I request you to kindly give consent to be part of this study. (I agree /I do not agree)

SIGNATURE OF PARTICIPANT-

NAME OF THE RESEARCHER- BIRINA BHARALI
COLLEGE NAME – AMITY UNIVERSITY, NOIDA SECTOR- 125

COURSE – MPH

TOPIC – A STUDY ON THE PATTERN OF INTERNET USE AND ITS IMPACT ON HEALTH AMONG YOUTH IN THE AGE GROUP 18 – 21 YEARS

QUESTIONNAIRE:

DEMOGRAPHIC DETAILS:

Age:

Sex:

Education:

University:

Parent education:

No. Of family member:

Family income:

Current address:

1. What % of time do you spend on internet for educational activities in a day? ( for assignments, projects etc)
   a. Nil  b. 1 – 2 hrs  c. 3 – 5 hrs  d. More than 5 hrs

2. Where do you use internet often?
   a. Mobile phone  b. Desktop  c. Laptop

3. What % of time do you spend on internet for entertainment in a day? ( for songs, videos, movies etc )
   a. NIL  b. 1 – 2 hrs  c. 3 – 5 hrs  d. More than 5 hrs

4. What % of time do you spend on internet for social networking in a day? ( for comments, likes on face book, twitter etc )
   a. Nil  b. 1 – 2 hrs  c. 3 – 5 hrs  d. More than 5 hrs

5. Do you feel that you stay online more than you required?
   a. Yes  b. No

6. How frequently do you access your account in a day?
   a. Every 15- 30 mints.  b. Every 30 mints -1 hr.  c. 2 – 3 hrs.  d. 4- 5 hrs  e. Stay online always

7. Do you feel that your academic performance suffer because of internet?
   a. Rarely  b. Occasionally  c. Often  d. Always

8. How much money do you spend on internet in a month in your mobile?
   a. Less than 100 rs  b. 100- 500 rs  c. more than 500 rs  d. Nil

9. Which company of your friends you prefer more?
10. a) Have you ever experienced cyber bullying? (Cyber bullying is the use of information technology to harm other people)  
   [if answer for option “a” is No then please do not put tick mark for the option “b”]
   a. Yes   b. No 
   b) If yes, Do you feel stressed due to this?  
   a. Yes   b. No 
11. Has cyber bullying affected your on-line social networking activity?  
   a. Yes   b. No 
12. a). Have any of your friends experienced cyber bullying?  
   [if answer for option “a” is No then please do not put tick mark for the option “b”]
   a. Yes   b. No 
   b). If yes how often have your friends faced cyber bullying?  
   a. Rarely   b. Occasionally   c. Often 
13. Do you feel your routine life is affected due to consistently being on internet?  
   a. Yes   b. no 
14. If yes, how?  
   a. Do not meet friend’s   b. lack of real social relationship   c. Family is upset   d. Any other way   e. All of these 
15. Does your family complaints that you always stay online?  
   a. Yes   b. No   c. Sometimes 
16. Do you do physical activity for at least 30 mints daily for 4 – 5 days in a week?  
   a. Rarely   b. occasionally   c. often   d. Always 
17. Do you skip meals because of internet use?  
   a. Rarely   b. Occasionally   c. Often   d. Always 
18. How often do you lose sleep due to late night activity on internet?  
   a. Rarely   b. Occasionally   c. Often   d. Always 
19. Do you switched off your internet connection before you go to sleep?  
   a. Rarely   b. Occasionally   c. Often   d. Always 
20. Do you feel restless, moody, depressed when you are off-line for quite some time?  
   a. Yes   b. No   c. sometimes 
21. If yes, when  
   a. Rarely   b. Occasionally   c. Often   d. Always 

THANK YOU VERY MUCH 

BIRINA BHARALI 

DATE:
Acknowledgment

It is my privilege to express my gratitude to the people who have helped me during my thesis work, both at academic and personal level. The help I got is definitely invaluable without which the work would have been incomplete. This thesis would not have been possible without the sound advice, excellent support and undying patience of my mentor Dr. Poonam Khattar, associate professor, NIHFW, New Delhi. The unmatched ideas provided by her are invaluable on both academic and personal level for which I am extremely grateful. Inspire of her busy schedule she spared his valuable time to provide me timely help and suitable guidance. I am also thankful to Dr. Rajiv Janardhanan our HOD, Amity University for his support.

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I express my heart full thanks to all those who have helped me out for the completion of this study.

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