Assess the level of stress, sleep disturbance, depression with Nomophobia among undergraduate students

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Abstract

Introduction: Present day mobile phones play a great opportunity and at the same time it comforts people, they facilitate the accomplishment of tasks and have achieved generalized popularity in the present technology growing society. It is indisputable that these devices have become a part of modern life and have come to produce modifications in everyday habits and actions. Undergraduate students communicate more through mobile phones than face to face interaction, modern lifestyle has been a greatest impact on mental health and well-being. Now a day’s undergraduate students who are in the age of young adult bring their mobile phones, even to the dining table which ultimately affects the digestion, nutrition and concentration.

The aims of the study: to assess the level of stress, sleep disturbance, depression with Nomophobia among undergraduate students.

Methodology: A quantitative research approach design was used to conduct the study in Saveetha Institute of Medical and Technical Sciences. 100 samples were selected by using purposive sampling technique.

The Results: The present study result depicts that Undergraduate students between the age of 18-22 years has moderate sleep disturbance due prolonged usage of mobile phones during night time, mild depression is seen among Undergraduate students and mild Nomophobia also seen among Undergraduate students. In association, none of the demographic variable had shown statistically significant with the level of Nomophobia among undergraduate students at the level of $P<0.001$.

Conclusion: Nomophobia is an emerging horrible effect related to mobile phone use. It is unavoidable in all ages, social affairs and changed metropolitan regions and identified with the long time usage of mobile phones.

Keywords: Undergraduate students, stress, sleep disturbance, depression and Nomophobia

Introduction

Mental health plays a vital role in general health (Physical, mental, social). Undergraduate students are now easily being distracted on growing technology has greatly affected their mental health during this pandemic.

Present day mobile phones play a great opportunity and at the same time it comforts people, they facilitate the accomplishment of tasks and have achieved generalized popularity in the present technology growing society. It is indisputable that these devices have become a part of modern life and have come to produce modifications in everyday habits and actions. Undergraduate students communicate more through mobile phones than face to face interaction, modern lifestyle has been a greatest impact on mental health and well-being. Now a day’s undergraduate students who are in the age of young adult bring their mobile phones even to the dining table which ultimately affects the digestion, nutrition and concentration.

Additionally, most of the parents feel disconnected from their even when they’re together because of mobile phones. College students are greater talented in the use of smartphones as compared to different sub populations they spend sizeable time in the use of their devices, relying on them for the hardiest each day tasks. Students excessively use smartphones for looking the news, social connection, instructional tasks, games, shopping, and facts searching. Search engines and social media are the maximum not unusual place packages used for facts, social connection, instructional work, and entertainment. Search engines and social media are the maximum not unusual place packages used for facts, social connection, instructional work, and entertainment New college students locating themselves far from acquainted social connections and wishing to set up new contacts may also spend sizeable cash on tool or carrier enhancements A have a look at of Turkish college students observed a tremendous courting among mobile phones use and loneliness.
Other research has illustrated that maladaptive perfectionism, depression, aggressiveness, impulsiveness, and different mental issues additionally have an effect on the improvement of Nomophobia [31].

Students lead the way in the smartphone. An undergraduate student is a student who is working towards a bachelor’s degree ranging in age from their late teens or early twenties. According to a global study, almost a quarter of young people are so dependent on their smartphones that they feel panicky or upset when the phone is unavailable. Due to extreme usage of mobile phones among undergraduate students are prone to stress, sleep disturbance and depression. Some undergraduate students get angry easily if the mobile is not working or they wouldn’t able to access the network.

Mobile phone addiction and excessive use can also cause more stress, when a person checks their phone, the brain releases a little amount of dopamine this hormone motivates them to take action immediately each time when they hear notification.

Depression also seems to be a major problem for the undergraduate students who use their mobile phones continuously, it is more common mental disorder which affects more than 264 million of people around the world. Addiction to mobile phones can further lead to depression and loneliness. According to a study by Ajiohara A. Alhassan et al. 2018 says that smartphone addiction and depression is alarming. Less educated adults are more risk of depression [31].

Sleep disturbance also plays an important role in addiction to mobile phones, undergraduate students use their mobile phones more in the night than in daytime almost five hours of late night is interrupted by usage of mobile phones. Overuse of mobile phones can be linked to unhealthy sleep habits and insomnia. According to Fran Molloy, 2019 Mobile phones or other electronic device in bed can be a major issue because they stimulate rather than relax the brain function.

According to a study by the UK Post Office, Nomophobia is everywhere in nations. This term is an abbreviation for “no-mobile-phone phobia,” which was coined during the year 2010. Nomophobia is seen as a type of contemporary phobia that emerged in the digital age, which is expanding after the integration of the smartphone into society. The Results of multiple studies suggest this phobia is becoming more widespread. Results of more than one research advise this phobia is turning into extra widespread. According to 2019 research, nearly fifty-three percentage of British individuals who owned a smart phone in 2008 felt demanding after they didn’t have their mobile phones, had a lifeless battery, or had no service. NMP has affected the mental status of smartphone users and it is diagnosed as a mental disorder. A study showed that musculoskeletal problems termed text neck syndrome and text thumb are associated with smartphone users [2].

García-Montes 2012 Cell phone use has affected the lives of adolescents who are likely to be university students between 18 and 24 at least one Mobile phone, 80 percent of 15- to 24-year-olds in European countries regularly used mobile phones. Consumer. Nowadays cell phones are more accessible, especially for students or young people, in all aspects like creativity, safety, entertainment, lifestyle, health, education, productivity and usage like calling and texting (McGregor, 2009). She relied so heavily on her cell phone to connect with the latest trend and her friends and family. Also, they tend to play games that are provided on their phones to keep their boredom away. Smith & Prendergast, 2011, conducted a study at Ball State University.99.8 percent of college students use cell phones for their computing needs in addition to communication [31].

**Aim of the study:** To assess the level of stress, sleep disturbance, depression with Nomophobia among undergraduate students.

**Methods and materials**

A quantitative research approach design was used to conduct the study in Saveetha Institute of Medical and Technical Sciences. 100 samples were selected by using purposive sampling technique. The criteria for sample selection were Students Who all are using the smart phone. Undergraduate students who are familiar with filling Google/online forms. Students who are easy to communicate and willing to participate. The exclusion criteria for the samples are Students who are not willing to participate in the study, students who don’t have internet connection, students who don’t have smartphones. After obtaining approval from ethical clearance with RRB Committee, SIMATS. Informed consent was obtained from the participants before initiating the study. The data collection period was one week. The demographic data were collected using semi structured interview questionnaire, the level of stress was assessed a perceived stress scale (PSS), the level of depression measured using beck’s depression inventory (BDI), the level of sleep disturbance measured using Pittsburgh sleep index (PSI) and level of Nomophobia measured using Nomophobia questionnaire (NMP Q) with Likert scale. The sample characteristics were described using frequency and percentage. Chi square was used to associate the level of Nomophobia with the selected demographic variables. The collected data were analysed and discussed by using descriptive statistics and inferential statistics.

**Results and discussion**

**Section A: Frequency and percentage distribution of the demographic variables among undergraduate students.**

The demographic variable of age group of 18 is about 4(4%), age group of 19 is about 13 (13%), age group of 20 is about 35 (35%), most of the undergraduate students 48 (48%) were aged above 20. Gender group of males is 27(27%) most undergraduate students 73 (73%) were females. Year of education 62(62%) was studying fourth year, 83(83%) were residing in urban areas. Religion 69 (69%) were Hindus, 26(26%) were Christians and 5% were Muslims. Type of family 81(81%) were from nuclear families, 18% were joint family and 5% were extended family. Income ranges from 1,00,00-50,000 were 38(38%); 50,000-40,000 16(16%) 40,000-30,000 were 18(18%); 30,000-10,000 were 28(28%).

**Section B: Frequency and percentage distribution of the level of stress among undergraduate students:** The results revealed that out of 100 undergraduate students 47(47%) had Low stress, 52(52%) had moderate stress, 1(1%) had high perceived stress among undergraduate students. (Table 1).

The presented study was supported by Sureka V, Abeetha S, Suma S, et al. conducted a cross-sectional study to
determine the Prevalence of Nomophobia and its association with stress, anxiety and depression among students who are studying first year in medical and dental college. A total number of 167 students were recruited for the study by systematic random sampling, Data to assess stress was obtained using Cohen’s stress scale. Association of stress with Nomophobia among 167 study participants, the prevalence of Nomophobia was 1.24 (1.04-1.47) times more likely among people with stress as compared to those who were not stressed with a P-value of 0.04 which was statistically significant [5].

### Table 1: Frequency and percentage distribution of level of stress among undergraduate students, N=100

<table>
<thead>
<tr>
<th>Level of Stress</th>
<th>Frequency (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Stress</td>
<td>47</td>
<td>47%</td>
</tr>
<tr>
<td>Moderate Stress</td>
<td>52</td>
<td>52%</td>
</tr>
<tr>
<td>High Perceived Stress</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>

### Section C: Frequency and percentage distribution of the level of sleep disturbance among undergraduate students:
The majority of Undergraduate students 86(86%) had mild sleep difficulty and 14(14%) had severe sleep difficulty (Table 2).

The presented study was supported by J Peszka, S Michelle, B T Collins et al. conducted a descriptive study on Sleep, Sleepiness, and Sleep Hygiene Related to Nomophobia. A sample of 327 university students the method used for this study to assess the sleep hygiene is the Pittsburgh Sleep Quality Index, questions regarding associated features of inadequate sleep hygiene, and the Sleep Hygiene Index. 89.4% of the participants had moderate or severe Nomophobia. Greater Nomophobia was significantly related to greater daytime sleepiness (ESS) (r (293) =.150, P<.05), associated features of poor sleep (daytime sleepiness: r (297) =.097, P<.05, and avolition: r (297) =.100, P<.05), more maladaptive sleep hygiene behaviors, including active technology use during sleep time (r (298) =.249, P<.05), long daytime naps, inconsistent wake and bed times, using bed for non-sleep purposes, uncomfortable bed, and bedtime cognitive rumination (r’s=0.097 to 0.182) [6].

### Table 2: Frequency and percentage distribution of level of sleep disturbance among undergraduate students, N=100

<table>
<thead>
<tr>
<th>Level of sleep disturbance</th>
<th>Frequency (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild sleep disturbance</td>
<td>86</td>
<td>86%</td>
</tr>
<tr>
<td>Severe sleep disturbance</td>
<td>14</td>
<td>14%</td>
</tr>
</tbody>
</table>

### Section D: Frequency and percentage distribution of the level of depression among undergraduate students

The results revealed that majority of undergraduate students 42 (42%) had mild mood disturbance, 38 (38%) had normal, 16 (16%) had borderline depression,4(4%) had moderate depression, the zero percentile of severe and extreme depression (Table 3).

The presented study was supported by Manu Sharma, Amandeep et al. conducted a study on Nomophobia and its relationship with depression, anxiety, and quality of life in adolescents. A significant positive correlation was observed NMP-Q score and scores on the BDI (beck’s depression scale), the results were no Nomophobia 1020 (73.6), mild Nomophobia 203 (14.6), moderate Nomophobia 128 (9.2), severe Nomophobia 35 (2.5), this indicates that Nomophobia is widely related to depression among school students (adolescents). Nowadays, mobile phones have become substance that has been overused by the adolescents and the adults in the past years [7].

### Table 3: Frequency and percentage distribution of level of depression among undergraduate students, N=100

<table>
<thead>
<tr>
<th>Level of depression</th>
<th>Frequency (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>38</td>
<td>38%</td>
</tr>
<tr>
<td>Mild Mood Disturbance</td>
<td>42</td>
<td>42%</td>
</tr>
<tr>
<td>Borderline Depression</td>
<td>16</td>
<td>16%</td>
</tr>
<tr>
<td>Moderate Depression</td>
<td>4</td>
<td>4%</td>
</tr>
<tr>
<td>Severe</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Extreme</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Section E: Frequency and percentage distribution of the level of Nomophobia among undergraduate students:
The results revealed that level of Nomophobia among undergraduate students are 22 (22%) have an absence of Nomophobia, 78(78%) have mild level Nomophobia and zero number of moderate and severe level of Nomophobia. (Table 4).

The presented study was supported by Ravi Kumar et al. conducted a study on Nomophobia and its correlation with sleeping difficulty and anxiety among medical students at medical college in Telangana, India in march 2018 a cross sectional study was conducted for duration of 6 months among medical students using semi-structured questionnaire. The results were out of 364 students, 62 (17%) have mild, 234 (64.3%) have moderate and 68 (18.7%) have severe Nomophobia. There was a weak positive correlation between Nomophobia and sleep difficult and anxiety [8].

### Table 4: Frequency and percentage distribution of level of Nomophobia using a Likert scale among undergraduate students, N=100

<table>
<thead>
<tr>
<th>Level of Nomophobia</th>
<th>Frequency (N)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence of Nomophobia</td>
<td>22</td>
<td>22%</td>
</tr>
<tr>
<td>Mid level of Nomophobia</td>
<td>78</td>
<td>78%</td>
</tr>
<tr>
<td>Moderate level of Nomophobia</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Severe Nomophobia</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Section F: Association of level of Nomophobia among undergraduate students with selected demographic variable

The major finding of the study shows that none of the demographic variables had shown a statistically significant association with level of Nomophobia among the undergraduate students, the significant value taken was P<0.001
The presented study was supported by Manu Sharma, Amandeep et al. conducted a study on Nomophobia and its relationship with depression, anxiety, and quality of life in adolescents. Out of 1386 adolescents, 569 (41.0%), 303 (21.9%), and 82 (5.9%) have mild, moderate, and severe Nomophobia, respectively. There were significantly more males with Nomophobia in comparison to females. No significant relationship was observed with other sociodemographic variables. The results of the study indicate that Nomophobia is an emerging mental health condition. Male adolescents are more frequently represented than females. Nomophobia is significantly associated with depression, anxiety, and poor quality of life.

Conclusion
Nomophobia is an emerging horrible effect related to mobile phone use. It is unavoidable in all ages, social affairs and changed metropolitan regions and identified with the long time usage of mobile phones. The present study depicts that Undergraduate students between the age of 18-22 years has moderate sleep disturbance due to prolonged usage of mobile phones during night time. Early mediation for such unconventional unsafe component, as lifestyle changes and propelling the insightful usage of mobile phone, is expected to avoid the dependence and the propensity for cells and its threatening effects on an students prosperity.

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Conflict of Interest: There is no conflict of interest.

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References