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Smartphone addiction and its impact on life style of 18 to 45 years of age group

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Abstract
The dependence of smartphone is increasing day by day and creating alarming situation especially for the young adults. Nowadays, it is a kind of device which has almost every advanced feature as it can be used for education, gaming, music, photos and chatting etc. The sample consisted 100 smartphone users between age group of 18 to 45 years. The study was conducted in different areas of Kanpur city. By using Self-structured questionnaire data was collected by purposive random sampling from Kanpur city. Results of the study reveals that majority of respondents had normal weight, height, and BMI. 69.0% respondents were using smartphone before sleep. Significant changes were noticed in the life style of smartphone users such as 40.0% users were having sleep disturbance while using smartphone, 65% of users were having hearing problem, 77% of users were having eyesight problem, 22.7% of users were having alarming situation.

Keywords: Smartphone addiction, smartphone overuse, impact on life style, social media, sleep disorder, dietary behavior

Introduction
Now days, Smartphones are increasingly becoming an integral part of our lives because of many features such as phone, call, text messaging, camera, internet and many more. As India is a second most populous country in the world having 340 million smartphone users in 2018 that is more than the smartphone users of U.S (According to statista.com, 2017), with the greater availability and many exclusive feature of smartphone, its use is excessively increased among adolescent and young adults leading to many psychological problems and postural problem. Smartphone addiction has been described as the excessive use of smartphones to such a degree/level, that it interrupts the routine life of a user. Furthermore, an excessive use of mobile phone may bring about mental or behavioral issues. Due to higher smartphone usage, higher consumption of fizzy drinks, sugary beverages, junk food, noodles, & snacks, was found among adolescent's age groups. Social media also has an impact on student mental health, which refers to their emotional, psychological, and social well-being. University students spend a lot of their time on social media both during the day and night, and it can be contended that such technologies play an important role in their Daily lives (Chin, 2016) [3].

Objectives
1. To study the smartphone addiction among 18 to 45 years of age
2. To study the impact of smartphone uses on life style among the age group 18 to 45 years age.

Methodology
In conducting the present study entitled "smartphone addiction and its impact on life style of 18 to 45 years of age group" the various research procedures and research method was applied and statistical tools were used. The sample consisted 100 smartphone users between age group of 18 to 45 years. Data was collected by purposive random sampling from Kanpur city and visits at home. Self-structured questionnaire was developed for collecting required data from respondents. Subjective statistics i.e. Frequency, percentage, mean, standard deviation, weighted mean, and descriptive statistics i.e. Rank, X^2 (chai-square) test, correlation Coefficient were used for analysis of data.

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Result and Discussion

Table 1: Distribution of smartphone users on the basis of addiction

S. N	Smartphone Addiction	Yes	No	Mean Score	Rank
1	Spending lot of time on smartphone becomes a habit	64.0	36.0	1.64	III
2	Spending more time on smartphone rather than outdoor activities	54.0	46.0	1.54	VIII
3	Feeling liberal while using smartphone	31.0	69.0	1.31	XI
4	Feel missing after stopping smartphone use certain period of time	56.0	44.0	1.56	VI
5	Spending time on social media and game playing	55.0	45.0	1.55	VII
6	feeling obsessed to use smartphone	63.0	37.0	1.63	IV
7	feeling wrist, back of neck pain while using smartphone	41.0	59.0	1.41	IX
8	feeling tired while using smartphone	65.0	35.0	1.65	II
9	Use smartphone before sleep	69.0	31.0	1.69	I
10	Smartphone use affected reputation among family, friends, school and business	33.0	67.0	1.33	X
11	Insomnia	58.0	42.0	1.58	V

Table-1 Shows the distribution of smartphone users on the basis of addiction. It was concluded that smartphone user's gave I rank to the statement "Using smartphone before sleep." Whereas the statement "feeling tired due to excessive usage smartphone." Was ranked II whereas III rank to "spending a lot of time on your smartphone has become a habit." Whereas the statement "feeling obsessed while using smartphone." Was ranked IV respectively, followed by V rank to statement "loss sleeping time late night smartphone use". The smartphone users gave VI rank to the statement "feel messing after stopping smartphone use certain period of time." Whereas the statement "spending more time on social media and game playing." Was ranked VII respectively followed by VIII rank to statement "feeling liberal while using a smartphone." The smartphone users gave IX rank to the statement "feeling wrist and back of neck pain while using smartphone." Whereas the statement "smartphone use affected reputation among family, friends, school and business." Was ranked X followed by XI rank to the statement "feeling liberal while using smartphone. Hence, it clearly shows that respondents were using their smartphone like the part of daily life. When we spend too much time in our phone, we neglect other element of our life. Staring the mobile screen for too long can also make us feel anxious and stressed. Cheever, *et al.* (2014) [4], also revealed that most participants would feel disconnected from other rather than feeling distressed when their mobile phone is absent. Tao, *et al*. (2010) [5] excessive use of the smartphone by the respondents including both excessive frequency and excessive duration, are both part of smartphone addiction. The Cutoff point more than 4.62 hour daily excessive smartphone use involves a lower level of usages than internet addiction.

Impact on life style

Table 2: Distribution of Smartphone users on the basis of psychological discomfort and age group. N=100

Psychological discomfort	Age group			Total
	18 to 25 years	26 to 35 years	36 to 45 years	
Stress	8.0	4.0	5.0	17.0
Fatigue	14.0	6.0	3.0	23.0
Dizziness	10.0	6.0	4.0	20.0
Lack of sleep	18.0	18.0	4.0	40.0
Total	50.0	34.0	16.0	100.0
χ^2	1.546			$p>0.05$

(5% level of significance)

Table-2 shows the distribution of smartphone users on the basis of psychological discomfort according to age group. Maximum 8.0% of respondents were suffering from stress belonged to age group 18 to 25 years followed by 4.0% of respondents were suffering from stress belonged to age group 26 to 35 years and 5.0% of respondents were suffering from stress belonged to age group 36 to 45 years. 14.0% of respondents were experiencing fatigue belonged to age group 18 to 25 years followed by 6.0% of respondents were experiencing fatigue and dizziness belonged to same age group. 10.0% of respondents were experiencing dizziness belonged to age group 18 to 25 years followed by 4.0% of respondents were experiencing dizziness belonged to age group 36 to 45 years. 18.0% of respondents were found lack of sleep belonged to age group 18 to 35 years. Al-Khlaiwi and Meo (2010) [2], in the study showed an association between in use of mobile phone and health risk where overall mean % age for these clinical finding in all groups were headache (21.6), sleep disturbance (4.0%), tension (3.0%), fatigue (3.0%), and dizziness (2.4%). The absorbed value of chi – square (1.546) was non-significant at 5% level of significance.

Table 3: Distribution of Smart phone users on the basis of discomfort on body part and age group. N=100

Discomfort body part	Age group			Total
	18 to 25 years	26 to 35 years	36 to 45 years	
Chatting for long period	15.0	8.0	2.0	25.0
Excessive gaming	10.0	14.0	5.0	29.0
Sitting in one posture for longer period while using smartphone	15.0	10.0	6.0	31.0
Not at all	10.0	2.0	3.0	15.0
Total	50.0	34.0	16.0	100.0
χ^2	5.492			$p>0.05$

(5% level of significance)

Table - 3 depicted the distribution of smartphone users on the basis of discomfort on body part according to age group. Maximum 15.0% of respondents were using smartphone chatting for longer period of time belonged to age group 18 to 25 years followed by 8.0% of respondents were using smartphone chatting for longer period of time belonged to age group 26 to 35 years. 10.0% of respondents were using smartphone for excessive gaming and sitting in one posture for longer period of time belonged to age group 18 to 35 years. 14.0% of respondents were using smartphone for

excessive gaming belonged to age group 26 to 35 years and 6.0% of respondents were using smartphone for excessive gaming belonged to age group 36 to 45 years. 15.0% of respondents were using smartphone for sitting in one posture for longer period of time belonged to age group 18 to 25 years and minimum 6.0% of respondents were using smartphone for sitting in one posture for longer period of time belonged to age group 36 to 45 years The absorbed value of X^2 (5.492) was found at 5.0% level of significance.

Table 4: Distribution of respondents on the basis of impact of smartphone on life style. N – 100

S. No	Impact on life style	Yes	No	Mean Score	Rank
1	Sleep disturbance while using smartphone	40.0	60.0	1.40	VI
2	Hearing problems while using smartphone	65.0	35.0	1.65	V
3	Headache after using smartphone for prolonged time	67.0	33.0	1.67	IV
4	Pain in neck and shoulder while using smartphone	72.0	28.0	1.72	II
5	Smartphone increase the risk of eyesight problem	77.0	23.0	1.77	I
6	Pain and discomfort in hand and arms while using smartphone	69.0	31.0	1.69	III
7	Smartphone is not great for brain activity	20.0	80.0	1.20	VII

The above table-4 Distribution of respondents on the basis of impact of smartphone on life style. Maximum 77.0% of users were having a increase the risk of eyesight problem while using the smartphone 23.0% of users were not having eyesight problem with mean score 1.77 and rank I, followed by 72.0% of users were having a pain in neck and shoulder while using smartphone 28. 0% of users were not having pain in neck and shoulder with mean score 1.72 which was ranked II. Whereas 69.0% of users were having pain and discomfort in hand and arms while using smartphone 31.0% were not have pain and discomfort in hand and arm with mean score 1.69 and ranked III.

The 67.0% of users were having headache after using smartphone for prolonged time 33.0% were not have feel headache after using smartphone with mean score 1.67 and rank IV, followed by 65.0% of users were having hearing problems while using smartphone 35.0% were not having headache with mean score 1.65 which was ranked V respectively.

The 40.0% of users were having sleep disturbance while using smartphone 60.0% of were not having sleep disturbance with mean score 1.40% and rank VI, followed by 20.0% of users were having smartphone is not great for brain activity were not having not great for brain activity with mean score 1.20 which was ranked VII respectively in the study area.

The above distribution shows that excessive use smartphone is associated with problem of mental health and impaired psychological function. There is consistent evidence for comorbidity between excessive smartphone use and other psychiatric problems, such as depression, anxiety, headache, pain in neck and shoulder is similar to internet addiction. In addition, excessive smartphone use related to loneliness, stress, and other negative emotion. Excessive smartphone use was associated with reduced sleep time and sleep quality in adolescent than other age group respectively. The respondents feel pain and discomfort in different body part while sitting in one posture for longer period furthermore stress and fatigue were common psychological symptoms expressed by the respondents. Hearing problem were also faced by the some of the respondents due to loud volume and longer time conversions.

Yehuda Wacks and Weinstein, (2021) [6], reported that the excessive use of the smartphone has been associated with impaired cognitive functions and mental health problems. These are unique findings on the association between using smartphones, need of constant stimulation, deficits in everyday cognitive functioning and brain changes which send alarm signals to clinician and educators in the study.

Conclusion
Maximum 69.0% of respondents were use smartphone before sleep and 31.0% of respondents were not using smartphone before sleep. 40.0% of respondents were having lack of sleep followed by 23.0% of respondents were experiencing fatigue followed by dizziness and stress. Smartphone addicted respondents were found to have more disturbed eating patterns, skipped meals and consume unhealthy food choices like consumption of fizzy drinks, sugary beverages, junk food, noodles, fatty and Junk foods were higher. Poor sleep quality and reduced sleeping hours were more prevalent among excessive smartphone usage group. Smartphone addiction/overuse has reduced the extent of physical activity. Reduction in walking can raise the intensity of fat mass and reduction in muscle mass, causing health hazards (e.g. non-communicable diseases like obesity, CVD, cancer etc.). Therefore, effective nutrition education and awareness programs must be initiated to improve the quality of life and bring respondents toward healthy lifestyle.

Reference
1. Ayesha M, Ribia B, Iraj A, Saman Javaid, Maha A, Urooj A, Hafsa K. Smartphone Addiction/ 0veruse and its Effect on Dietary Behavior and Life Style- A systematic review, EAS Journals of Nutrition and Food Sciences. 2020;2(5):289-297.
   DOI: 10.3634/easjnfs.2020 V02i5.007.
2. Al–Khlaiwi, Meo Anise MS, Chenug V, Hung PW. Psychological Risk Factors of Addiction to Social Networking Sites among Smartphone Users Journal of Behavioral Addictions. 2010;2(3):160-166.
3. Chin N. Deloitte Mobile Consumer Survey 2016, Press Releases, 2016. 27 December 2016 New Delhi retrieved from https://www2.delotte. Com/en/pages/about-delotte/ articles/dolotte-india-mobile-consumer-survey-2016-press-release.html (accessed on 13 June 2017).
4. Cheever A, Rosen LD, Carrier LM, Canero MG, Blanco

MR, Carillo O, *et al.* Design and Development of a Nutritional Assessment Application for Smartphone and Tablets with Android, Journal Nutrition Hospital Aria. 2014;3(10):1323-1329. DOI:10.3305|nh.2015.13.8.8111.

5. Tao M, Technorati TM, Ikeda K, Nakamura K. Associated Between Mobile Phone Use And Depressed Mood in Japanese Adolescents: A cross- Sectional Study, Environmental Health and Preventive medicine. 2010;19(20):187-787.

6. Yehuda W, Weinstein, Yam Lin, Cheng YH, Hsien YL, Hsuan PL, et al. Time distortion associated with smartphone addiction; Journal of psychiatric Research. 2021;5(64):139-145.