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PROJECT TITLE: ANALYSIS OF "NOMOPHOBIA" IN STUDENTS OF

SIR PARSHURAMBHAU COLLEGE

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ANALYSIS OF "NOMOPHOBIA" IN STUDENTS OF
SIR PARSHURAMBHAU COLLEGE

Abstract:

In the era of science and technology as far as communication is concern it is very important and trending field of research. Since the period of telegram to Long Term Evolution and IP based Smart phone, the pattern of growth is very interesting and it implicates the amazing transformation in human life. Even though the innovation in

communication made human life very easy, fast and productive but on the other hand it's excessive mining can be reason of deteriorating the human health. Although numerous studies have examined factors that influence smartphone addiction, few have analysed the potential protective factors inherent in individual that may benefit future intervention programs for smart phone addiction. In this paper our concern is usability of smartphone and its future consequences. In this project we are going to analyse the presence or absence of Nomophobia in individuals/ Science students of S.P.College, Pune. We did questionnaire based survey of 308 students, which include sexes, education and usage of mobile phone. Questionnaire set contains 19 different mobile phone usability related questions. Based on the responses from questionnaires we assigned each answer a specific points according to Likert Scale (1 = less concerned and 5 = very much concerned). After processing data by using many methods such as Slovin's Method to get adequate Sample, Logistic regression model, Chi square test for dependency, psychologically we decided the threshold point which shows the addiction point. One who crosses this point is Nomophobic. Nomophobia is considered a modern age phobia introduced to our lives as a by-product of the interaction between people and mobile information and communication technologies, especially smartphones.

Keywords:

Nomophobia, Nomophobia questionnaire, Smartphone, Addiction, Phobia, Fear.

INTRODUCTION:

Mobile phones are invented and introduced to make human life easier, but if the same mobile phone becomes the reason of deterioration of human health then definitely it is not a good signal.A study by the Boston Medical College on some families during having a meal in restaurants in 2004, it was found that one third of family members were busy on a mobile phone during having a meal.Accessing information using mobile phone gives pleasant feeling as having good food or earning good money, this is found in the research of the Harward University. Scientists found that if a child uses a mobile phone in excess, then his Insula or insular lobe, a part of the brain can be affected badly. *Mobile phone and there are various apps which make our life easier, but it creates digital pollution if it is used in excess.* We should use technology,

but not be <u>slave of technology</u> so to reduce such pollution we should think of Mobile free day just like car free day.*There are many people who start their day by checking mobile phone and end the day also by mobile phone it implies that they are either addicted to a mobile phone or tends to addict.*

NOMOPHOBIA

The fear of not having access to their mobile phone is called Nomophobia, this term was first used by YouGov.The reasons for not being able to access may be the mobile is not having signal or another reason may be mobile is not having battery. A survey done in previous years in UK has shown that around half of the persons don't have ever switched off the phone.There were similar observations for around half of the persons feel uneasy without accessing smartphone. This percentage is gradually increasing. There are various questionnaire used for identifying nomophobia we are going to use the following set of questions that we will use in our study for detection of mobile phone addiction in S.P. College

Table 1. 19 items of Questionnaire

SR.NO.	QUESTIONS
1	How long do you use smartphone in 24 hours?
2	How long can you stay away from your smartphone?
3	Do you feel alone, helpless without mobile phone?
4	Do you feel angry/anxious when you are not able/not allowed to use mobile phone?
5	Do you feel disoriented/ lost while using smartphone?
6	Do you get angry when someone takes your phone away?
7	Do you constantly check range, wifi signal while using smartphone?
8	Does running down of battery scare you?
9	Do you panic when your data hits the maximum limit?
10	Do you get nervous when you don't get calls, messages, updates or information on your phone?
11	Do you feel uncomfortable when you cannot stay updated with social media?
12	Do you feel undone, incomplete when you cannot check your smartphone in morning/entire day?
13	Do you neglect any work, studies if you are using mobile phone?
14	Do you feel stressed after using smartphone for long hours?
15	Do you use your smartphone while in washroom, bed, classroom?
16	Do you suffer from pain in eyes, neck after using smartphone for long?
17	Do you ever use mobile phone till/after midnight?
18	Do you use smartphone while eating meal?
19	Do you use smartphone while driving?

SYMPTOMS OF NOMOPHOBIA:

Nomophobia occurs in situations when an individual experiences anxiety due to the fear of not having access to a mobile phone. The "over-connection syndrome" occurs when mobile phone use reduces the amount of face-to-face interactions thereby interfering significantly with an individual's social and family interactions.

The term "techno-stress" is another way to describe an individual who avoids face-to-face interactions by engaging in isolation including psychological mood disorders such as depression.

Anxiety is provoked by several factors, such as the loss of a mobile phone, loss of reception, and a dead mobile phone battery.

In Few Words:

Anxiety, Respiratory Alterations, Getting Angry, Hostile, Agitation, Disorientation, Stress, Lonely Feeling.

OUR OBJECTIVES:

1. To detect Nomophobia in a individual through her/his responses.
2. To find out a common data link between all Nomophobic individuals and prepare a detailed report of factors causing Nomophobia.
3. To find the effect of Nomophobia on health of Individuals.
4. To spread awareness about this phobia.

CHOOSING POPULATION:

The first and the most important step in any Statistics Project, related to survey, is choosing population. Therefore we decided to choose a proper and well defined population for our project. To get the population concise we decided to take a easily approachable data. So, ultimately being from science background, we decided to take in consideration all the science students, i.e. F.Y.B.Sc. , S.Y.B.Sc. & T.Y.B.Sc , of Sir Parshurambhau College, Pune.

To get this student data, we took permission of our vice principle Mr. Diwate Sir. Accodingly we came to know about the strength of students in F.Y.B.Sc. , S.Y.B.Sc. & T.Y.B.Sc which was 445, 436 & 444 respectively, which contributed to a total of 1335 students.

SAMPLING : BY SLOVIN'S METHOD:

The data collection of all the 1335 science students is a tedious job, Therefore we decided to take sample of total strength. For this we are using Slovin's Method for sampling suggested by our project guide . The process is as below:

Here, we considered

N_1= Students of F.Y.B.Sc.= 455

N_2= Students of S.Y.B.Sc.= 436

N_3= Students of T.Y.B.Sc.= 444

So, Total Population = N= $N_1+N_2+N_3$=1335

To use Stratified Sampling, $n=N/(1+N\varepsilon^2)$

Therefore, n=308

Now consider, Sample of F.Y.B.Sc. = n_1=(n/N)N_1=104.97$\approx$105

Sample of S.Y.B.Sc. = n_2=(n/N)N_2=100.59$\approx$101

Sample of T.Y.B.Sc. = n_3=(n/N)N_3=102.43$\approx$102

Therefore we got the sample of F.Y.B.Sc., S.Y.B.Sc. & T.Y.B.Sc. as 105,101& 102 respectively.

DATA COLLECTION PROCESS:

The collection of our data was based on a valid questioner which was issued by Internal Journal of Applied Engineering Research ISSN 0973-4562 & also validated by All India Institute of Medical Science(AIIMS), Delhi. The questioner issued by above organizations had 30 questions however we took only 19 questions into considerations which were answerable and understandable to students.

We collected the data by using Google forms. This was purely a online process, however we personally went to the individuals and asked them to answer the questions honestly to avoid non-required errors. The individuals filled the questionnaire properly and 100% data was recovered. A total of 308 students were under consideration.

Problems faced while data collection:

The process of data collection was a tough job. Our questionnaire also included the questions which demanded information like Name, Age, Sex, etc. Many a times female students felt anxious while filling the questionnaire. Also, in our first survey(failed) few of them filled the responses improperly, therefore we personally went on collecting data.

DATA ANALYSIS & METHODOLOGY:

After the process of data collection, the next step was to present the raw data in a concise and simple manner, so the data analysis would be easy and more efficient. Exploratory data analysis is the key of the link between raw data and further statistical process.

Once the data was sorted and concise data was available we assigned a 5 point Likert Scale (as shown below) such that the highest score was 19*5=95 and the lowest score was 19*1=19. This gave us a general psychological idea about nomophobic and non-nomophobic individuals. Based on this score, the data was converted into dicotomic scale of 0 & 1 (NO & YES) where the response of scores above 56 were taken as a YES(1) & those scores below 56 were taken as NO(0).

Table 2. Assigning 5-point Likert scale

NEVER	1
RARELY	2
SOMETIMES	3
OFTEN	4
ALWAYS	5

For conversion of dichotomic data:

For conversion of likert scale to dichotomic scale, we considered the following formula,

$(95-19)/2^{th}$ observation = 56

This gave us a proper number to separate and decide which of the individuals are nomophobic and which of them are not.

PROCESS FOLLOWED:

After the conversion of data in dichotomic scale we will use logistic regression model to find out the most significant factors affecting the presence of Nomophobia in the individuals under survey, using R-Software

of version 3.3.0 . The next step will be measuring the dependency of significant factors (found by logistic regression model) by chi-square test of independency. The Proportion Test between nomophobic individuals of F.Y.BSc., S.Y.BSc. & T.Y.B.Sc will also be carried out . Each & every factor affecting presence of Nomophobia in the population will be displayed graphically.

CHECKING CONSISTENCY OF DATA:

No. Of Questions	19
Sum of Individual Var.	28.6125
Var. of Total	205.958
Chronbach Alpha	0.90891

The value of Chronbach Alpha is 0.90891 which is considered good score for a consistent data.

LOGISTIC REGRESSION MODEL:

In Satistics, the logistic model is used to model the probability of a certain class or event existing such as pass/fail, win/lose, alive/dead or healthy/sick. This can be extended to model several classes of events such as determining whether an image contains a cat, dog, lion, etc. Each object being detected in the image would be assigned a probability between 0 and 1 and the sum adding to one.Logistic regression is a statistical model that in its basic form uses a logistic function to model a binary dependent variable.

Formula:

$$\Pi(X) = (e^{(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots \beta n X n)}) \ / \ (1 + e^{(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots \beta n X n)})$$

$\Pi(X)=1$=Probability of success & $\Pi(X)=0$=Probability of failure

Where, when the value of $\Pi(X)$ is greater than 0.5 is considered as success i.e In this case whenever the value of $\Pi(X)$ of individual is greater than 0.5.She/he will be considered as nomophobic and vice versa.

Fitting of 80% data in Logistic Regression Model using R Software :

In the process of fitting logistic regression model ,we first imported the 80% data from MS-Excel file(.csv type). After that we viewed the data and assigned variables to all the 19 factors such as A,B,C…..S. Then we used the following command to fit the Logistic Regression Model and the significant factors, affecting the presence of Nomophobia in individuals.

> model=glm(Y~A+B+C+D+E+F+G+H+I+J+K+L+M+N+O+P+Q+R+S)

Where,

A=Usage in 24 hrs

B=Staying Away from smartphone

C=Feeling alone and helpless

D=Feeling anxious and angry

E=Feeling lost and disoriented

F=Getting angry when someone takes smartphone

G=Constantly checking wifi

H=Scare due to low battery

I=Panic due to maximum data limit

J=Getting nervous

K=Feeling uncomfortable

L=Feeling undone

M=Feeling Stressed

N=Pain in eyes and neck

O=Usage till midnight

P=Using smartphone while having meal

Q=Using smartphone while driving

R=Neglecting work and studies

S=Using smartphone while in bed or washroom or classroom

Y=Dichotomic score

Summary of model:

We used the following command to find out the summary of the model and get the significant factors for detection of Nomophobia.

> summary(model)

OUTPUT:

```
Call:
glm(formula = Y ~ A + B + C + D + E + F + G + H + I + J + K +
    L + M + N + O + P + Q + R + S)

Deviance Residuals:
     Min        1Q    Median        3Q       Max
 -0.54098  -0.16401  -0.01066   0.14966   1.13519

Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept) -0.7746933  0.0598311 -12.948  < 2e-16 ***
A            0.0249001  0.0162960   1.528 0.127608
B            0.0267009  0.0149682   1.784 0.075498 .
C           -0.0093554  0.0187582  -0.499 0.618345
D            0.0024618  0.0182879   0.135 0.893012
E            0.0325220  0.0153473   2.119 0.034937 *
F            0.0249040  0.0167854   1.484 0.138987
G            0.0275096  0.0180083   1.528 0.127704
H            0.0393604  0.0143062   2.751 0.006311 **
I            0.0311492  0.0144623   2.154 0.032082 *
J            0.0463804  0.0162273   2.858 0.004571 **
K           -0.0076603  0.0159688  -0.480 0.631798
L            0.0091295  0.0150034   0.608 0.543335
M            0.0112453  0.0142606   0.789 0.431019
N           -0.0006003  0.0149610  -0.040 0.968020
O            0.0357482  0.0149534   2.391 0.017459 *
P            0.0281776  0.0151906   1.855 0.064623 .
Q            0.0550366  0.0167417   3.287 0.001136 **
R            0.0603609  0.0155462   3.883 0.000128 ***
S           -0.0140618  0.0143333  -0.981 0.327385
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for gaussian family taken to be 0.06561675)

    Null deviance: 54.142  on 308  degrees of freedom
Residual deviance: 18.963  on 289  degrees of freedom
AIC: 56.535
```

From this output we got 9 significant factors, which play a prominent role in deciding the presence of this phobia in the individuals under survey. These 9 significant factors are as follows,

B=Staying Away from smartphone

E=Feeling lost and disoriented

H=Scare due to low battery

I=Panic due to maximum data limit

J=Getting nervous

O=Usage till midnight

P=Using smartphone while having meal

Q=Using smartphone while driving

R=Neglecting work and studies

Now, These factors will help us in calculating $\Pi(X)$ of each individual and ultimately help us in process of detection of this phobia. But, before calculating the $\Pi(X)$ of the subjects, we need to check the dependency and independency of the significant factors. For this we will use Chi-square test of independency.

CHI-SQUARE TEST OF INDEPENDENCY:

The chi-sqr. test of independency is specifically used in our project to test the dependency of all the significant factors which are used to detect the presence of Nomophobia in an individual. Using this test we will be able to predict and detect the fear with more accuracy.

Therefore, let us consider these hypothesis,

H_0 = The factor is independent for testing Nomophobia V/s

H_1 = The factor is independent for testing Nomophobia

In all the 9 cases considered below, H0 is rejected at 5% l.o.s. because p-value is less than $\alpha=0.05$ and therefore all the factors are dependable while testing presence of Nomophobia.
Each case of significant factor is presented below with it's p-value.

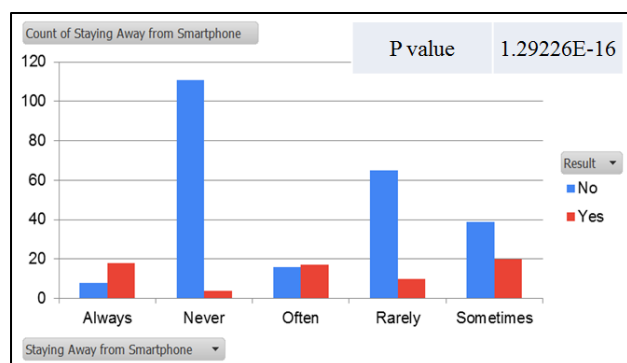**Figure 1. Staying Away from smartphone**
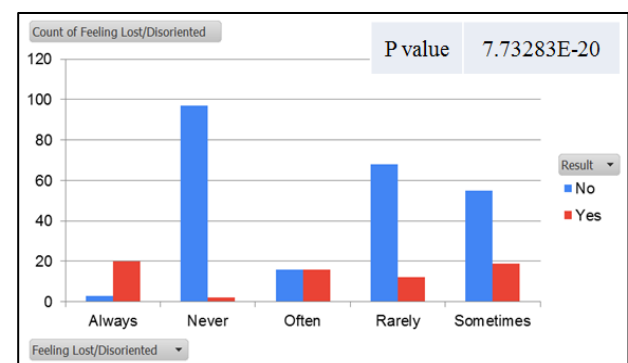

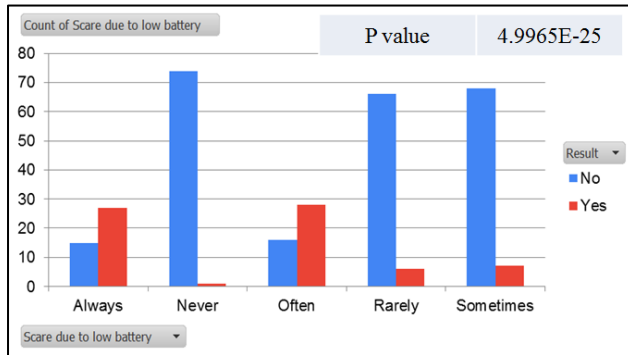**Figure 2. Feeling lost and disoriented**

Figure 3. Scare due to low battery

Count of Scare due to low battery

P value 4.9965E-25

Result: No (blue), Yes (red)

Categories: Always, Never, Often, Rarely, Sometimes

Scare due to low battery

Figure 4. Panic due to maximum data limit

Count of Panic due to max data limit

P value 2.18374E-21

Result: No (blue), Yes (red)

Categories: Always, Never, Often, Rarely, Sometimes

Panic due to max data limit
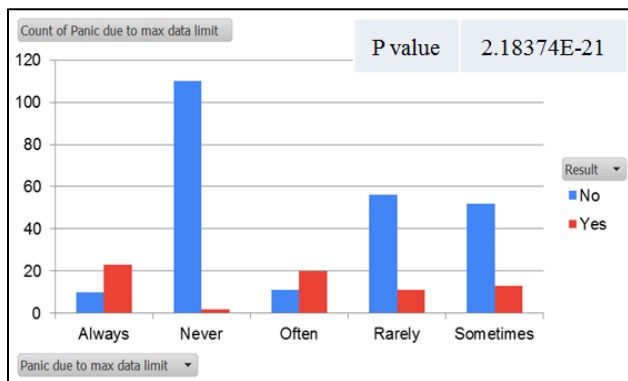
Figure 5. Getting nervous

Count of Nervous when not getting calls and messages

P value 1.79692E-23

Result: No (blue), Yes (red)

Categories: Always, Never, Often, Rarely, Sometimes

Nervous when not getting calls and messages
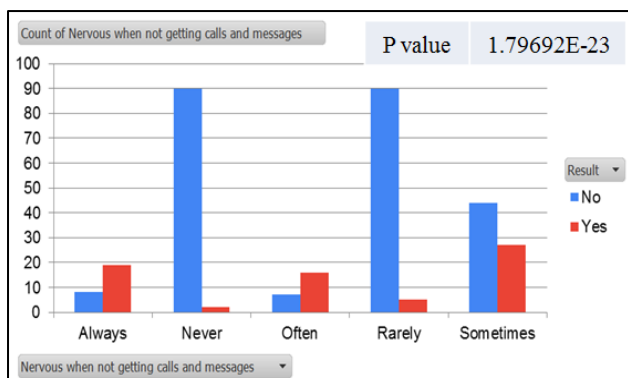
Figure 6. Usage till midnight

Count of Using smartphone after midnight

P value 4.35053E-20

Result: No (blue), Yes (red)

Categories: Always, Never, Often, Rarely, Sometimes

Using smartphone after midnight
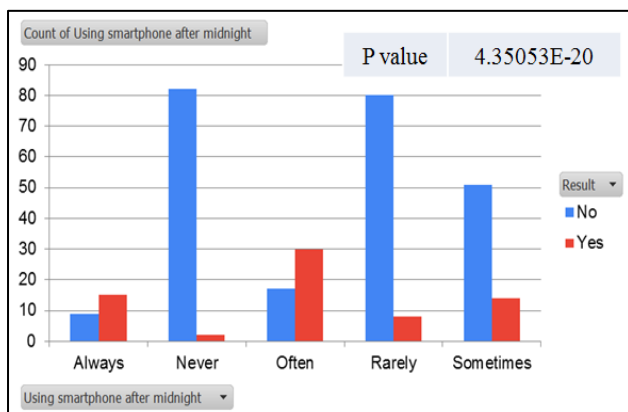
Figure 7. Using smartphone while having meal

Count of Using smartphone while eating

P value 3.54625E-14

Result: No (blue), Yes (red)

Categories: Always, Never, Often, Rarely, Sometimes

Using smartphone while eating
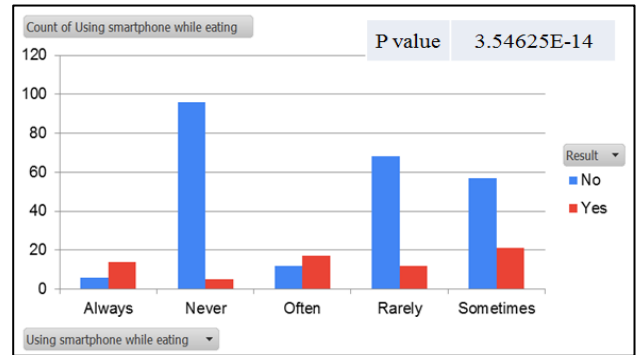
Figure 8. Using smartphone while driving

Count of Using smartphone while driving

P value 2.43029E-19

Result: No (blue), Yes (red)

Categories: Always, Never, Often, Rarely, Sometimes

Using smartphone while driving
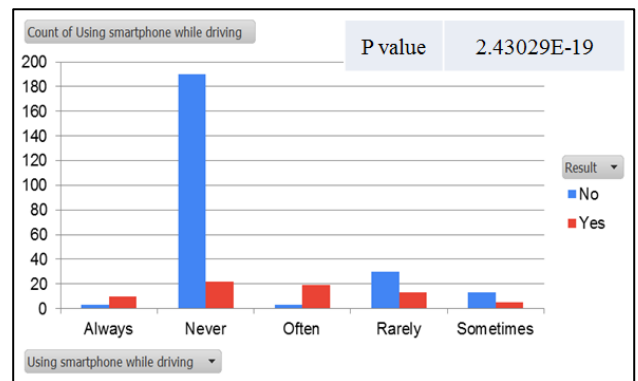
Figure 9. Using smartphone while driving

Count of Neglecting work due to mobile

P value 1.33875E-23

Result: No (blue), Yes (red)

Categories: Always, Never, Often, Rarely, Sometimes

Neglecting work due to mobile

HELLO, SLAVE!
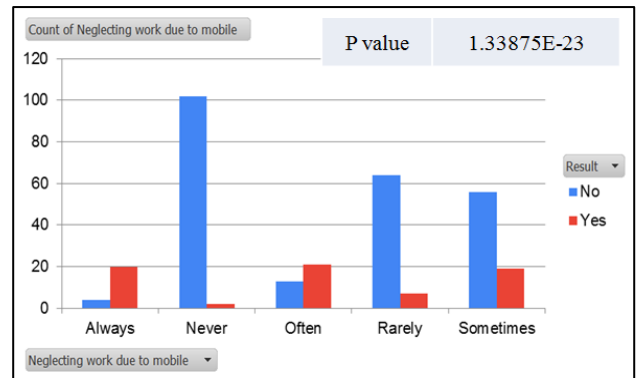
TESTING OF 20% DATA:

In Statistics, we fit the 80% of data and after fitting, the remaining 20% data is considered for testing. Following this standard process the fitting was done successfully, the process of testing on remaining data i.e. 62 obseervations, is explained below.

As of above, after applying the Chi-square test, we got all the factors as dependent for detecting this fear.

Now, we have already done the process of fitting Logistic regression model to our data in R-software and now, we will calculate the value of $\Pi(X)$ for each individual in the remaining 20% of our data and test the working of our model and predict her/his phobia in percentage.

We will calculate the value of $\Pi(X)$ by using the formula below;

$$\Pi(X)= (e^{(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots \beta n X n)}) \ / (1+ e^{(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots \beta n X n)})$$

Where, β_0 is value of intercept and $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8$ & β_9 are the values of slope parameters of all the 9 significant factors.

The values are as follows,

$\beta_0= -0.7746933, \beta_1= 0.075498, \beta_2= 0.034937, \beta_3= 0.006311, \beta_4= 0.032082, \beta_5= 0.004571, \beta_6= 0.017459, \beta_7= 0.064623, \beta_8= 0.001136$ & $\beta_9= 0.000128$

thus the formula now becomes,

$$\Pi(X)= (e^{(-0.7746933+ 0.075498X_1 + 0.034937x_2 +0.006311X_3 +0.032082X_4 +0.004571X_5 +0.017459X_6 +0.064623X_7 +0.001136X_8 +.0.000128X_9)} \ /$$

$$(1+ e^{(-0.7746933+ 0.075498X_1 + 0.034937x_2 +0.006311X_3 +0.032082X_4 +0.004571X_5 +0.017459X_6 +0.064623X_7 +0.001136X_8 +.0.000128X_9)}$$

Based on this formula, i.e. after replacing $X_1, X_2 \dots X_9$ with the likert scale responses to those factors, by individuals, we will be calculating $\Pi(X)$ for each of them. For ease of understanding we have considered 2 general cases randomly, from data set of 308 responses.

OBSERVATIONS:

Case 1. Vaishnavi Pise (F.Y.B.Sc.)

The likert scale responses given by Vaishnavi are as follows,

$X1=$ Staying Away from smartphone=5 $X6=$ Usage till midnight=4

$X2=$ Feeling lost and disoriented=5 $X7=$ Using smartphone while having meal=4

$X3=.$ Scare due to low battery=5 $X8=$ Using smartphone while driving=5

$X4=$ Panic due to maximum data limit=5 $X9=$ Using smartphone while driving=5

$X5=$ Getting nervous=5

Now here after using above values and further calculations we get,

$\Pi(X) = 0.879657$

This value is greater than 0.5 and therefore we may conclude that, Vaishnavi has 88% chances of suffering from Nomophobia. Thus it is suggested to her, as per Psychguides, to stay away from the smartphone and practice meditation to control herself also set the rules to restrict the use of smartphone while eating, driving and also take an individual therapy from a good psychiatrist.

Case 2. Rhituja Borade (T.Y.B.Sc.)

The likert scale responses given by Rhituja are as follows,

$X1=$ Staying Away from smartphone=2 $X6=$ Usage till midnight=2

$X2=$ Feeling lost and disoriented=1 $X7=$ Using smartphone while having meal=1

$X3=.$ Scare due to low battery=2 $X8=$ Using smartphone while driving=1

$X4=$ Panic due to maximum data limit=1 $X9=$ Using smartphone while driving=1

$X5=$ Getting nervous=2

Now here after using above values and further calculations we get,

$\Pi(X) = 0.358683$

This value is less than 0.5 and therefore we may conclude that, Rhituja might have 36% chance of tending to Nomophobia. Thus, it is suggested to take preventive measures and avoid being a nomophobic patient. It is also suggested to stay around people and also practice meditation.

Thus, the testing in 20% data was satisfactory. After this we calculated $\Pi(X)$ for all 308 observations and it turned out that a total of XXX individuals were completely nomophobic in nature. Talking about each class there were 32, 24 &14 cases from F.Y.B.Sc., S.Y.B.Sc. & T.Y.B.Sc. respectively.

To count the proportion of patients in each class, we will be doing a proportion test using R-software.

PROPORTION TEST:

The number of nomophobic cases in each class from F.Y.B.Sc., F.Y.B.Sc. & T.Y.B.Sc. is 32, 24 & 14 respectively. It is clear that the students in F.Y.B.Sc. are in greater number, followed by S.Y.B.Sc. & T.Y.B.Sc. But here the sample size and population size are small so it was easy to figure out the proportion,

but if the same survey is to be done on large scale then proportional test comes in use. We have however used it for the sake of better understanding.

The Proportion Test was carried out in R-software successfully, the comparison of all the 3 classes is shown below,

1.Proportion test between F.Y.B.Sc. & S.Y.B.Sc.

```
> #Proportion test between F.Y.B.Sc. and S.Y.B.Sc.
> samples=c(32,24)
> populations=c(105,101)
> prop.test(samples,populations,alternative="greater")

        2-sample test for equality of proportions with continuity correction

data:  samples out of populations
X-squared = 0.85765, df = 1, p-value = 0.1772
alternative hypothesis: greater
95 percent confidence interval:
 -0.04412416  1.00000000
sample estimates:
   prop 1    prop 2
0.3047619 0.2376238
```

2.Proportion test between S.Y.B.Sc. & T.Y.B.Sc.

```
> #Proportion test between S.Y.B.Sc. and T.Y.B.Sc.
> samples=c(24,14)
> populations=c(101,102)
> prop.test(samples,populations,alternative="greater")

        2-sample test for equality of proportions with continuity correction

data:  samples out of populations
X-squared = 2.7328, df = 1, p-value = 0.04915
alternative hypothesis: greater
95 percent confidence interval:
 0.001108484 1.000000000
sample estimates:
   prop 1    prop 2
0.2376238 0.1372549
```

3.Proportion test between F.Y.B.Sc. & T.Y.B.Sc.

```
> #Proportion test between F.Y.B.Sc. and T.Y.B.Sc.
> samples=c(34,14)
> populations=c(105,102)
> prop.test(samples,populations,alternative="greater")

        2-sample test for equality of proportions with continuity correction

data:  samples out of populations
X-squared = 9.0893, df = 1, p-value = 0.001286
alternative hypothesis: greater
95 percent confidence interval:
 0.08317386 1.00000000
sample estimates:
   prop 1    prop 2
0.3238095 0.1372549
```

From these proportion tests we conclude that the proportion of students in F.Y.B.Sc.(0.3047619) is more followed by S.Y.B.Sc.(0.2376238) & T.Y.B.Sc.(0.1372549)

Now, the question arises why only F.Y.B.Sc. students are more in proportion?

So, we again interviewed the students from F.Y.B.Sc. who showed the signs of this fear. In this process we found out that many students used mobile phone just to stay connected with their family from other cities, also many students got mobile phone recently and were keen and eager to use it, many were seen addicted to online games and that they could not resist even for 3 continuous hours also according to them, the amount of studies at their level is not more, so most of them prefer online surfing, playing games and watching web-series. Whereas, on the other hand the students from S.Y.B.Sc. & T.Y.B.Sc. were seen more into watching content related to competitive exams and studies. However there are some cases, where the students are using smartphone unnecessarily.

RESULTS:

From our survey and analysis we came to know about the nature of individuals who have this phobia. After the data analysis we can estimate the percentage of fear in an individual and how is it affecting her/him. The health factors such as using mobile till midnight, while having a meal, while driving are also taken into consideration and have a legit proof for our conclusion based on these points.

The graphical information of all nomophobic individuals is represented below for effective understanding.

Figure 10. Nomophobic score of all 308 individuals
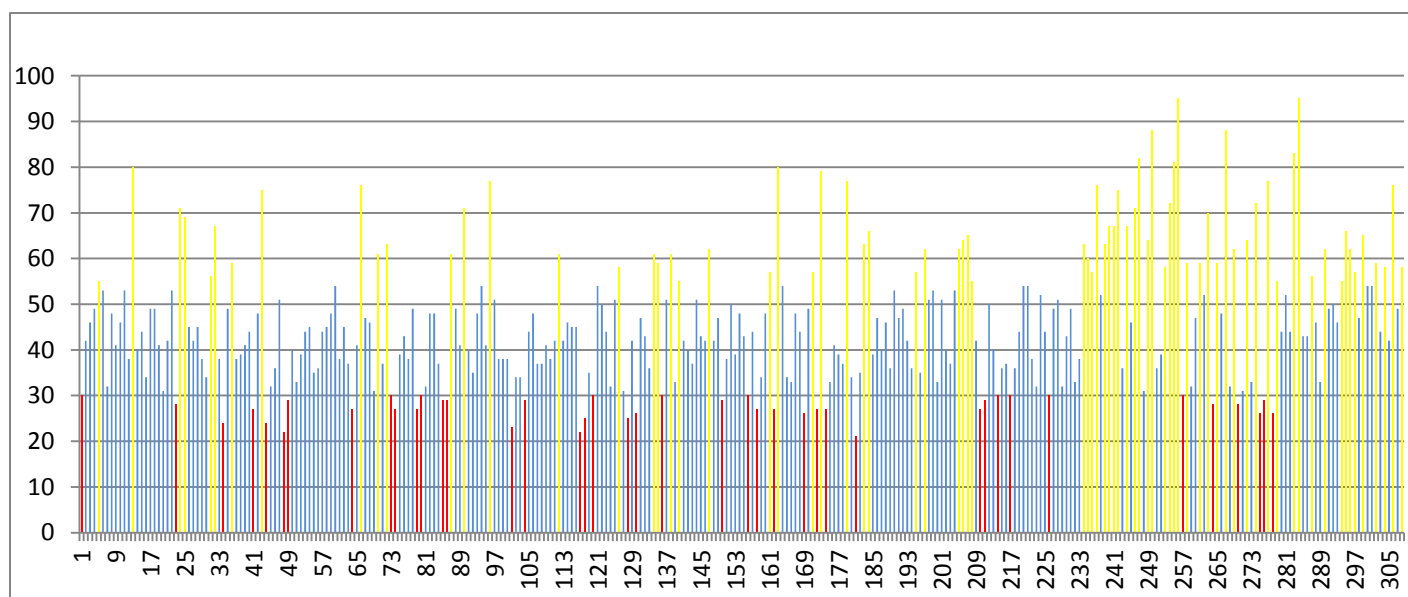
Where, the yellow lines indicate all nomophobic students, and those in red show us the non nomophobic individuals.
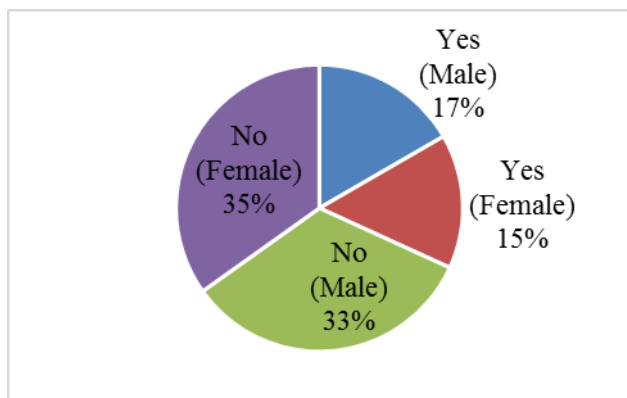
Figure 11. Aware about Nomophobia

Figure 14. Games preference

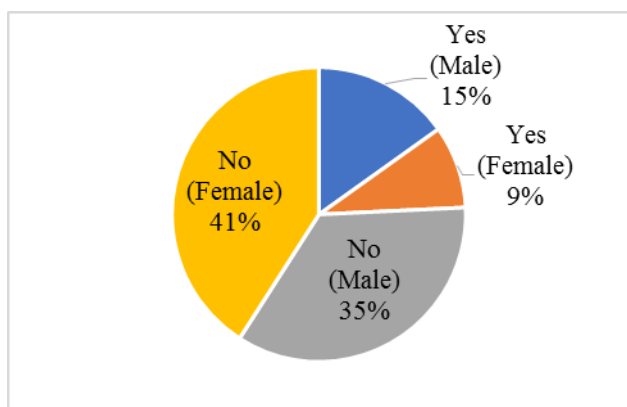
Figure 12. If not given mobile for 3 days

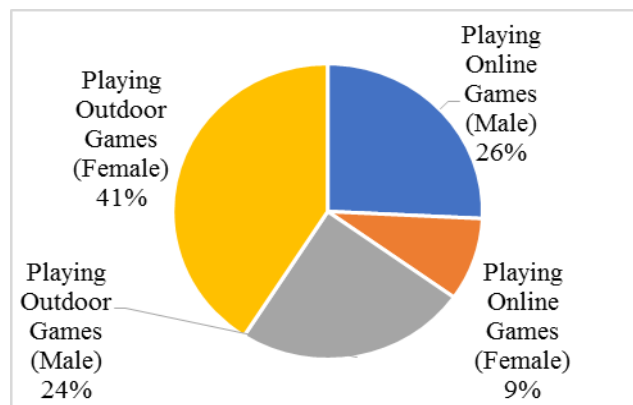**Figure 15. Complaints of parents and friends**
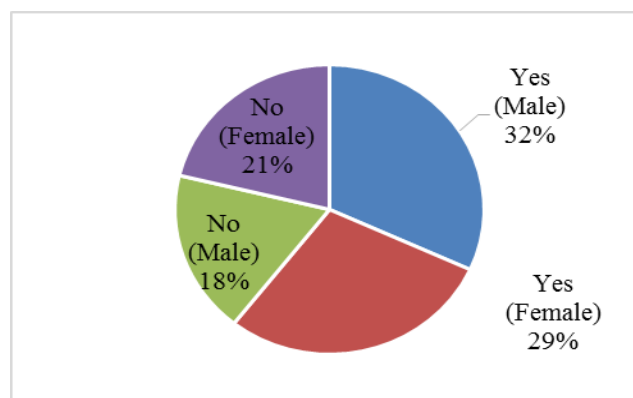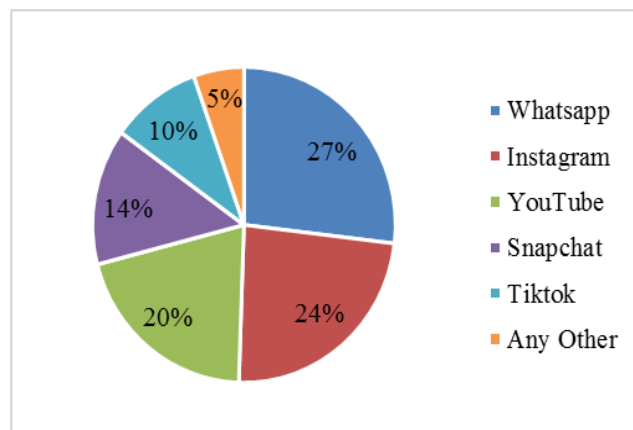

Figure 13. Communication preference

Figure 16. Usage of mobile

Inference:

From the above graphs it is seen and inferred that, 68% of the Students who suffer from Nomophobia are not at all aware about this fear. They are totally new to this and thus are having a casual attitude towards this phobia. Here, 58% students are preferring to communicate through the means of mobile, they seem to avoid face to face conversation and interaction and therefore are on the way to feel lonely an disheartened. According to UK post, people who seem to stay away from public meetings, healthy conversations, are found to be more stressed and can be most possible target of depression. Thus, it can be said that the communication preference of these individuals should be changed at right stage. Also, 76% nomophobic students are strongly against the idea of staying away from mobile for 3 continuous days. This shows their anxiety and anxious nature, if not given mobile. The preferences in games did not reveal any specific things, but it is seen that more number of male students are prone to online games, however female students prefer playing outdoor games. The next graph shows that almost 61% students get complaint from their parents or friends, that they are using their mobile in a excessive way and thus this tells us that despite being told about their maximum use they cannot just give up the habit. About what these students see on their phone, the data tells the maximum use is for social media sites starting with WhatsApp followed by Instagram & YouTube.

Health Related Factors:

In our survey, we asked about usage of smartphone while having meal, while driving and after midnight. The purpose of asking these questions was to study how much students' health is getting affected due to overuse of smartphone. According due world-renowned time magazine "Individuals are more likely to miss subtle cues, facial expressions, and changes in the tone of their conversation partner's voice, and have less eye contact. Moreover they lack attention towards what they eat and thus creates a large impact on their diet, which leads to health problems which may not seem severe at early stage but have a serious role in future" — just because a cell phone is physically present. About using smartphone while driving, it is very much obvious to everyone why should we not use smartphone while doing so. It is highly risky to use smartphone because it can cause serious accidents which may even be fatal. The next factor is using smartphone at night. According to Psychology-Today based on findings from a study by Harvard researchers, "there are 6 reasons why you need to stop using your phone in the hour or two before bed:

1) It will take you longer to fall asleep
2) It will mess with and delay your circadian clock rhythm
3) It will suppress your melatonin secretion when you need it most
4) It will decrease your REM sleep
5) It will make you more alert when you want to wind down
6) You will feel more tired and less alert when you wake up"

Thus we can see how much role a electronic gadget can play in our life, affecting our health, mind and what not!

CONCLUSION & FUTURE SCOPE:

Smartphones addiction and fear of losing it is found to be very common in the society, especially among the students. From our study we come to conclusion that in Sir Parshurambhau College, F.Y.B.Sc.(32.3%) students are more prone to Nomophobia while taking F.Y.B.Sc., S.Y.B.Sc. and T.Y.B.Sc. under consideration.

To reduce the above stated addiction combination of psychotherapy and some pharmacological interventions can play vital role. A "reality approach" is also highly recommended, asking the student to focus on his/her own behaviours, also using motivational interviewing. By keeping persons engage in meditation and outdoor activities their Nomophobic score can be controlled. Nomophobia is very latest and is found all around world so there is lot of scope to research in this field. How to prevent it is really a challenging task, one can think to create a platform which regularly assist user and alarm her/him if one crosses the limit.

ACKNOWLEDGEMENT:

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Thank you!