Introduction

The Internet is very useful for a variety of purposes, such as convenient electronic commerce,

rapid sharing of information, contact with other cultures, emotional support, and entertainment

(K, 1997)A smartphone combines the services of the Internet and a mobile phone. Smartphones

offer qualitatively different services in addition to the benefits that the Internet offers. Young

people watch videos, express themselves, communicate with friends, and search for information

using smartphones, while older people use their smartphone for having video calls with their

children living far away and for playing games. The portability and accessibility of a smartphone

make it possible to use it anywhere, for any duration.

Worldwide, smartphones were used by 1.85 billion people in 2014. This number is expected to

be 2.32 billion in 2017 and 2.87 billion in 2020 (Tsitsika A, Critselis E, Kormas G, 2009)

In 2015, a median of 54 percent across 21 emerging and developing countries such as Malaysia,

Brazil, and China reported using the Internet at least occasionally or owning a smartphone. In

comparison, a median of 87 percent reported the same across 11 advanced economies, including

the United States and Canada, major Western European nations, developed Pacific nations

(Australia, Japan, and South Korea), and Israel (Pew Research Center, 2016). In the findings of a

survey conducted in 40 nations, South Korea showed the highest rate of smartphone ownership

(88%) followed by Australia (77%), and the United States (72%). In a survey on Korean

smartphone use in 2016, 83.6 percent of Koreans aged over 3 years were found to use a

smartphone. Among them, 86.7 percent of males and 80.6 percent of females reported using a

smartphone, and 95.9 percent of teenagers were found to use a smartphone (Korea Internet and

Security Agency, 2017). Indeed, smartphone users are increasing across the world.

Smartphones offer several conveniences in our life, but we also need to be aware of the negative

effects of smartphone use, the most concerning aspect being smartphone addiction. Smartphone

addiction is a phenomenon that pertains to uncontrollability of smartphone use. People with this

problem encounter social, psychological, and health problems (Heron and Shapira, 2004; Young, 1999).

Specifically, adolescents are a high risk group for smartphone addiction. Adolescents are

strongly attached to their smartphone, and they regard a smartphone as their second self. Many

smartphone users have reported that they would not be able to live without a smartphone

(Wajcman et al., 2007). Developmentally, adolescents experience several physical and

psychological changes. While, on one hand, they are dependent on their parents with reference to

their life and identity, on the other hand, they are trying to be independent of their parents, to

establish their identity and to create an independent space for themselves. During these changes,

a smartphone becomes indispensable for adolescents. They are interested in new technology and

get used to the operation of such devices more easily than adults do. Adolescents, as digital

natives, express their thought in an online space, try to keep up with fashion, use many kinds of

applications (apps), and search for emotional relationships and support. They are good in

multitasking, and they pursue instant reactions and feedback (Tapscott, 2009). When these

characteristics, including novelty seeking in adolescents, are combined with their immature

control competence, they are placed at a high risk of smartphone addiction (Chambers et al.,

2003).

Literature reviews

•A study was conducted by (Seo, 2017)M.D., professor of neuroradiology at Korea University in

Seoul south Korea, and colleagues used magnetic resonance spectroscopy (MRS) to gain unique

insight into the brains of smartphone- and internet-addicted teenagers. MRS is a type of MRI that

measures the brain's chemical composition. The Researchers have found an imbalance in the

brain chemistry of young people addicted to smartphones and the internet. Researchers used

standardized internet and smartphone addiction tests to measure the severity of internet

addiction. Questions focused on the extent to which internet and smartphone use affects daily

routines, social life, productivity, sleeping patterns and feelings. The higher the score, the more

severe the addiction

•A study was conducted by Professor (Ameringen, 2016) September 18 he did a new survey of

internet users suggests that people who use the internet excessively may have more mental health

problems. Using two scales to evaluate internet use, researchers have found high rates of

problematic internet use in a group of primarily college-aged students. The researchers evaluated

internet addiction using the Internet Addiction Test, as well as newer scale of their own design,

based on updated addiction criteria. This work, which is presented at the ECNP conference in

Vienna. Professor Van Ameringen's group, from McMaster University in Canada, surveyed 254

students and correlated internet use with general mental health and wellbeing. Thirty-three of

students met screening criteria for internet addition according to the Internet Addiction Test.

However, 107 students met criteria for problematic internet use using Professor Van Ameringen

and colleagues' new screening tool. The research team also administered a further series of self-

reported tests to see how the internet addicts compared to the others in the survey on areas such

as symptoms of depression and anxiety, impulsiveness, inattention and executive functioning, as

well as tests for ADHD.

•A study was conducted by ( James A. Roberts, Luc Honore petnji yaya & Chris Manolis , 2014)Cell phone activities and addiction among male and female college students .The study

findsthat college student spent nearly nine hours daily on their cell-phones Study results suggest

that certain activities performed on one’s cell-phone are more likely to lead to dependence than

others and that these addictive activities vary across gender. Additionally, time spent on a

particular activity does not necessarily signal the activity’s addictive potential.

•A study was conducted by (Lusekelo Kibona and Gervas Mgaya , 2015)did a research on

Smartphones’ Effects on Academic Performance of Higher Learning Students. A Case of Ruaha

Catholic University – Iringa, Tanzania. The study proves that impact of smartphone on academic

performance of higher learning students, in which the results has revealed that the smartphone

bring negative results or progression on students’ performance academically. So there is negative

impact of smartphone usage on higher learning students in Tanzania A study was conducted by

(Kolb, Liz, 2011) Teachers are finding creative ways to turn the basic cell phone from a digital

distraction into a versatile learning tool. In the article, the author explained why cell phones are

important in learning and suggests rather than banning them that they be integrated into learning.

She presented activities that can be done on a basic cellphone

A study was conducted by (Pedrero PÃ©rez, Eduardo J; RodrÃ­guez Monje, MarÃ­a Teresa; Ruiz SÃ¡nchez De LeÃ³n, JosÃ© MarÃ­a, 2012) Asa result, the estimated prevalence ranges from 0-

38%, depending on the scale used and the characteristics of the population studied. Surprisingly,

self-attribution of cell phone addiction exceeds the prevalence estimated in the studies

themselves. The personality trait most consistently associated with addiction is low self-esteem,

though extraversion is associated with more intense use. Women with low self-esteem are the

most vulnerable group, and the most commonly associated psychopathological symptom was

depression. In short, while the evidence suggests a problem in relation to mobile phone use, the

vagueness of the cell phone addiction concept and the poor quality of the studies make it difficult

to generalize the results. It is necessary to define and unify criteria with a view to carrying out

quality studies that permit appropriate comparisons.

Need for study : The need for the study is to create awareness among young adults , the future

generation who are going to conquer the world. The research can be used by school teachers,

counselors, parents, and common people to know more about mobile phone addiction. If we’re

addicted to mobile phone then that will lead to major psychological and physical stress which

will affect a person’s mind and body. That will also affect their daily lifestyle. Hence a person

should have a good balance. I want my respondents to be aware about their mobile phone usage

and also they can reduce the usage of mobile phone if they are aware that they are addicted to it.

**Methodology**

Aim:

To study the gender difference in mobile phone addiction among young adults

Objective:

To understand the gender difference in mobile phone usage.

**Hypothesis** :

There is no significant gender difference in mobile phone addiction

**Constitutional definition**

* Smartphone addiction is a disorder involving compulsive overuse of the mobile devices,

usually quantified as the number of times users access their devices and/or the total

amount of time they are online over a specified period.

* Mobile Phone Addiction: Mobile phone addiction is a great dependency on ones mobile

phone, thereby escaping from reality, compensating and engaging in ritual like SMSing all the time

* The use and the definition of mobile phone is undergoing reinterpretation as the mobile

phone blurs the distinction between personal communicator and mass media. The mobile

phone has become one of the most omnipresent communication devices within the past

decade.

* According to (Cohen and Lemish, 2002), mobile phones used to be an esoteric device.

Today, the mobile phone is certainly the most pervasive communicative

device that people carry. The mobile phone can connect people “anytime”,“anywhere”

and with “any body”, with the added benefit of mobility and portability.

**Operational definition :**

(Ram and Jung, 1990)Noted that measure of mobile phone usage results in three independent

axes a) usage intensity b) usage breadth c) usage variety.

With the wide spread and hifh penetration of mobile phone , mobile phones are used at anytime,

anywhere and with anybody – to do their work , help in cases of emergency, network with

friends, have fun, and express themselves

**Participants**

Participants consisted of young adults from 18 to 25 years of age. This age group

was included in the study since individuals have social groups and peers that influence

them in mobile phone usage. 50 participants were involved in the study out of which 25 males

and 25 females

**Procedure**:

The research design used for the study is a descriptive study .The study conducted on primary

data, through survey that is by distributing questionnaires. The sampling method to be used is

convenience sampling method.

**Measures**:

Demographics

The demographic information consisted of the participants name, age, gender.

**Tool:**

Mobile Phone Addiction Scale was designed by A. Velayudhan and S. Srividya

of the Department of Psychology of Bharathiar University in Coimbatore and published

by Prasad Psycho Corporation, 10 A, Veer Savarkar Block, Shakarpur, New Delhi110092 in

2012. The main aim of this scale was to identify mobile phone dependence or

addiction behavior. The conceptual framework of this scale was based on the

dimensions of addiction prescribed by Diagnostic and Statistical Manual IV (DSM IV –TR)

In this scale, there were 37 items and against each item five options were there.

These items were of two kinds, that is, positive and negative and fell under six (6)

subscales

1. Maladaptive Usage

2. Self-expression

3. Peer Relationship

4. Interpersonal relations

5. Impulsivity

Mobile phone addiction scale was used to assess the addiction behavior. There are total of six dimensions in mobile phone addiction scale. The dimensions are Maladaptive usage, Self -expression , Peer relationship , Interpersonal relations , Impulsivity , Usage time . Scoring of mobile phone addiction for first five dimensions which is given as 05 for strongly agree, 04 for agree , 03 for uncertain , 02 for disagree and 01 for strongly disagree . For the last dimension alone reverse scoring is done. The cumulative percentage variance explained by the 37 item scale was thus found to be 46.48%

STATISTICS USED:

Independent sample ttest is used to analyze the gender difference in mobile phone addiction

**RESULTS AND DISCUSSION**

**TABLE 1.1 Dimensions wise scoring for male and female participants**

|  |  |  |
| --- | --- | --- |
| DIMENSIONS | Mean for male participants | Mean for female participants |
| MALADAPTIVE USAGE | 27.9 | 27.8 |
| SELF EXPRESSION | 34.2 | 38.7 |
| PEER RELATIONSHIP | 37.8 | 36.5 |
| INTERPERSONAL RELATIONS | 47.9 | 47.4 |
| IMPULSIVITY | 32.6 | 38.2 |
| USAGE TIME | 28.4 | 28.5 |

Table 1.1 shows the mean scores of male and female participants for the various areas of mobile

phone addiction such as maladaptive usage , self –expression , peer relationship , interpersonal

relations, impulsivity , usage time.

**Table 1.2 consists of total raw score of male and female participants**

|  |  |  |
| --- | --- | --- |
| Variable | Gender | Total raw sore |
| Mobile phone addiction | Male | 2266 |
|  | Female | 2204 |

There is norm interpretation which shows that both male and female are moderate in mobile

phone addiction found that male participants are high in the total raw score than female

participants. There is not much of a difference

**Table 1.3 Interpretation of mean, standard deviation and tvalue of the participants**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Variable | Gender | N | Mean | Standard deviation | Tvalue |
| Mobile phone addiction | Male | 25 | 90.64 | 12.4 | 0.53 |
|  | Female | 25 | 88.16 | 15.6 |  |

nsNot Significant

Independent sample ‗t‘ test was used to compare the differences between females and males.

The study results suggest that a significant number of the participants had addiction to mobile

phone usage, but were not aware on it, as mobile phones have become an integral part of life. No

significant differences were found on addiction behavior between the participants .Mobile phone

abuse is rising as an important issue among the world population including physical problems

such as eye problems, muscular pain, and psychological problem such as tactile and auditory

delusions. Mobile Along with mobile phone, availability of Wi-Fi facility in residence place and

premises also increases mobile phone dependence. The continuous and constant usage of mobile

phone reduces intellectual capabilities and work efficacy. A study conducted in Chinese

population (160 million out of the total 1.3 billion people) showed that people affected by mobile

phone dependence have difficulty in focusing on work and are unsociable, eccentric, and use

phones in spite of facing hazards or having knowledge of harmful effects of this form of

electromagnetic pollution.

A study conducted among university students of Shahrekord, Iran, revealed that 21.49% of the

participants were addicted to mobile phones, 17.30% participants had depressive disorder,

14.20% participants had obsessive-compulsive disorder, and 13.80% had interpersonal

sensitivity. ( Babadi-Akashe Z, Zamani BE, Abedini Y, Akbari H, Hedayati N, 2014) Nearly

72% of South Korean children aged 11–12 years spend 5.4 h a day on

mobile phones, 25% of those children were considered addicts to smartphones.

( Jeong S, Kim H, Yum J, Hwang Y., 2016) Thomee et al

collected data from 4156 adults aged between 20 and 24 years and observed no clear association

between availability demands or being awakened at night and the mental health outcomes.

(Thomée S, Härenstam A, Hagberg M, 2011) Overuse of mobile phone can lead to reduced

quality of interpersonal relationships and lack of productivity in daily life. The study outcome

from different studies showed variable results on addictive behavior on mobile phone usage. The

fact is over-/long-time usage of mobile phone may cause behavioral alteration and induce

addictive behavior. By comparing previous studies we can see that mobile phone usage or

addiction has nothing to do with gender.

**Conclusion**

The purpose of the study was to study if gender differences existed in mobile phone usage. The

results of this study shows that both male and female are moderate in mobile phone usage

and there exists no significant gender difference

**Implications:**

This study gives more insight and awareness on the participants mobile phone usage and how

this varies between genders. Psychologists can create counseling techniques and programs

involving prevention and intervention for mobile phone usage. It can help individuals control

their own behavior instead of blaming on external sources.

Children have the potential to be at greater risk than adults for developing brain cancer from cell

phones. Their nervous systems are still developing and therefore more vulnerable to factors that

may cause cancer.

**Limitations**

This study cannot be generalized to the entire population, as the sample size is not a

representative distribution of the population. The self-reported data cannot be independently

verified and could have potential sources of bias. Not many studies the gender difference in

mobile usage among young adults . hence this provides scope for future studies. .

# References

Babadi-Akashe Z, Zamani BE, Abedini Y, Akbari H, Hedayati N. (2014). The relationship between mental health and addiction to mobile phones among university students of Shahrekord, Iran. . *PMC article* .

James A. Roberts, Luc Honore petnji yaya & Chris Manolis . (2014). Cell phone activities and addiction among male and female college students . *Journal of behavioral addictions*.

Jeong S, Kim H, Yum J, Hwang Y. (2016). What type of content are smartphone users addicted to? SNS vs. games. *Comput Hum Behav*.

Ameringen, V. (2016). Internet usage . *European College of Neuropsychopharmacology (ECNP)*.

Cohen and Lemish. (2002). Mobile phone addiction. *mobile communication* .

K, S. (1997). College life online: Healthy and unhealthy Internet use. *Journal of College Student Development* .

Kolb, Liz. (2011). Adventures with Cell Phones. *ERIC Educational Resources Information Center*.

Lusekelo Kibona and Gervas Mgaya . (2015). Smartphones’ Effects on Academic Performance of Higher Learning Students. *JMEST*.

Pedrero PÃ©rez, Eduardo J; RodrÃ­guez Monje, MarÃ­a Teresa; Ruiz SÃ¡nchez De LeÃ³n, JosÃ© MarÃ­a. (2012). [Mobile phone abuse or addiction. *PubMed*.

Ram and Jung. (1990). Mobile phone usage .

Seo, H. S. (2017). Magnetic resonance spectroscopy . *RSNA*.

Thomée S, Härenstam A, Hagberg M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults – A prospective cohort study. *PMC article* .

Tsitsika A, Critselis E, Kormas G. (2009). Adolescent pornographic internet site use: A multivariate regression analysis of the predictive factors of use and psychosocial implications. CyberPsychology and Behavior . *Pub med*.