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Study of the Mobile Phone Effects upon the students of Nangarhar University

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ABSTRACT

New a day, usage of mobile phone is extra ordinary in the world, which is used for communication here, we conceder the users whose age is between 21 and 18 years. World came closed by mobile phone it makes text and oral relation of people easily. Today's mobile phones have lots of characteristics like internet, email, games, social media like Facebook, music, radio, book, dictionary and etc. Feeling of solitude is last by usage of mobile phone people can easily contact and solves their problems with mobile phone which was impossible in the past. As mobile phone has lots of benefits, it also causes many problems. Many people use mobile phone as much as it becomes their habit. Usage of mobile phone reduces face to face talks.

It is also observed that during a meeting, a user of mobile phone writes a message or talks on mobile and the members of the meeting stop the meeting or delay the meeting.

Students use mobile phone for playing games or sending messages and talk on mobile phone during classes.

Usage of mobile phone should be prohibited at hospitals, court and petrol pumps.

It is also observed that usage of mobile phone increases the chance of accident during driving usage of mobile phone during driving driver's sight, body and understanding of people.

Previous studies show that user of mobile phone gets characteristics as tension and depression.

Keywords: *Mobile phone; Human health effects; Diseases*

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1. Introduction

New a day, usage of mobile phone is extra ordinary in the world, which is used for communication here, we conceder the users whose age is between 21 and 18 years. World came closed by mobile phone it makes text and oral relation of people easily. Today's mobile phones have lots of characteristics like internet, email, games, social media like Facebook, music, radio, book, dictionary and etc. Feeling of solitude is last by usage of mobile phone people can easily contact and solves their problems with mobile phone which was impossible in the past. As mobile phone has lots of benefits, it also causes many problems. Many people use mobile phone as much as it becomes their habit. Usage of mobile phone reduces face to face talks.

It is also observed that during a meeting, a user of mobile phone writes a message or talks on mobile and the members of the meeting stop the meeting or delay the meeting.

Students use mobile phone for playing games or sending messages and talk on mobile phone during classes.

Usage of mobile phone should be prohibited at hospitals, court and petrol pumps.

It is also observed that usage of mobile phone increases the chance of accident during driving usage of mobile phone during driving driver's sight, body and understanding of people.

Previous studies show that user of mobile phone gets characteristics as tension and depression.

2. Objectives

- Awareness of Nangarhar university students about the bad effects of mobile phones.
- Determining the percentage of the disease due to the use of mobile phone.

3. Methodology

It is a cross sectional study which is about mobile phone users performed from 3/3/2020 to 3/10/2020 over 37 male and female students of Nangarhar university who use mobile phones. Questioners are used for collecting the accurate data about the research and also, we referred the students, who had ear related disease because of mobile phone usage, to the doctors for checking up and we collected the data from them and later on the collected data was analyzed by SPSS.

- Sample size: research is performed over mobile phone user
- Inclusion Criteria: this research is performed over the students whose age is between 21 and 18 years and use smart phones
- Exclusion Criteria: the research is not performed over the student who do not use smart phone

4. Literature review

The wireless technology was invented in the year 1880 by Alexander Graham Bell and Summer Tainted when first time the photo phone was invented [22]. In the recent era, there are dissimilar types of mobile phone devices which are utilized for communicating with each other. The mobile telephone sets are also a part and parcel of everyday life all over the globe. The Wi-Fi devices are connected to the exchange of information and data by using the mobile telephones.

The survey indicates that these behavioral predictors did not control the cost of cell phone usage: gender, and neurosis. The level urbanized was planned to help out through implement any intervention for possible addictive behavior [2].

Getting old was the key reason in predicting the challenges of the cell phone use. That is why further psychologists have executed the study focus on youth. Koo et al. in 2010 studied the same things on youth, in which 548 students were asked to, fill up a questionnaire concerning their cell phone use. The results of the questionnaires were as follows: 89% believed they were usual cell phone users, while 8.4% thought they were serious users and just 2.9% percent believed they were enthusiastic to use the cell phones [9]. Few contradictory results were made by Koo et al. study while compared to Bianchi et al. study. The biggest challenge was that Bianchi et al. research shows that gender was not an interpreter for problematic cell phone use, while research by Koo et al. [16]. The cell phone usage is usually addictive and especially in young ages. Sanchez-Carbon ell et al. declared in 2008 that the cell phones can be used in an easy-going fashion. Outcomes of these studies declared that the Internet does not because the possible compassionate the cell phone usage does not encourage fast affecting change [6]. Once again we observed a different point of outlook where Bianchi teal. research show that the cell phones were considered to be employed in an offensive behavior, and not seen as addictive [16]. Over again, the question is, are the cell phones addictive? Clearly a new study has to be completed to answer this query. Other things should be regarded as of the existing research condition, such as age and gender are. If cell phones are not addictive, can they bring any violent disorder? Dismiss it or does it morphs as by compulsion to a violent disorder by era? If youth and adults are more liable to cell phone compulsion, what is the longest tenure repercussion? What intervention should be meted out in alignment with the achievable compulsion? What preventive steps should be in use against it? Optimistically in the not too far-away future these pending questions will be answered [7].

Data collection was started from November 2015 to February 2016 from different hospitals of Karachi. Firstly, Civil Hospital Karachi was visited with the permission of respective civil surgeon of the concern hospital and survey task was completed. The questionnaires were distributed to all doctors and also interviewed for data collection around the effects on Mobile phone on the human health. Then Jinnah Medical Hospital and Dow Medical University Hospital, Karachi were visited for similar purpose of data collection. In the final 150 medical doctors were interviewed about the effects of mobile phone devices on the human health. From the source of patients in their treatment, 97% medical doctors reported positive effects of mobile phone on human health and 3% medical doctors were reported negative effects of mobile phone devices on the human Health. Agreeing to this survey of Medical Doctor's the disease cause by mobile phone devices are Brain Tumor 74%, Male Infertility 37%, Heart Disease 45%, and Effect on Fetus 21%, Ear Hearing Function 80%, Alzheimer's disease 11% and Parkinson's disease 3%. According the survey from different doctors of hospitals, the using of mobile phone leaving chronic disease like: Brain Tumor (76%), Male Infertility (38%) and Ear impairment (91%). Mobile Phone Usage among Youth (1).

Females placed great importance on texting function (18-19). conducted the study on internet and mobile phone text messaging dependency in which 92 men and 54 women participated. Ages ranged between 22 to 59 years. The study suggested that psychological dependency on internet and mobile phone text messaging in Japan was not limited to students but also affects adults.

The study showed that 34% of men and 25% of women showed mild internet addiction and 6.1% of men and 1.8% of women showed pathological use of internet. The study found no gender difference in internet use and mobile phone text messaging. The depression was associated with both internet dependency and mobile phone text messaging dependency whereas anxiety was associated negatively with text message dependency (22).

in their study of the mobile phone usage among teens and young adults- impact of invading technology, found that the cell phone usage is so strongly integrated into young people's behavior that it was showing the symptoms of behavioral addiction. In another study on severity of mobile phone and internet use among B.Sc. nursing students, it was revealed that 84.2% of the young persons in the age group of 19-20 years owned mobile phone. There was no severe or moderate addiction to mobile phone. The mild addiction was observed in 1.84% people (15-20). studied the mobile phone use habits of students coming from rural area to the town and found that the most used feature of mobile phone use was SMS because it was cheaper and the students with limited financial resources could communicate effectively. The study also showed that the male students sent more SMS than female students. In a study conducted by MACRO (2004), the market analysis and consumer research organization revealed that the choice of pre-paid or post-paid was related to the actual consumption, whether it is low or high. The 56% people in the age group of 15-19 years used prepaid services whereas majority of the people in the 25-29-year age group used post-paid services. The females had inclination to use pre-paid services.

WHO estimates that 1.1 billion young people worldwide could be at risk of hearing loss due to unsafe listening practices. Nearly half of all teenagers and young adults (12-35 years old) in middle- and high-income countries are exposed to unsafe levels of sound from the use of personal audio devices and some 40% of them are exposed to potentially damaging sound levels at clubs, discotheques and bars. Analysis of data from the National Health and Nutrition Examination Survey in the United States suggests that, between 1994 and 2006, the prevalence of hearing loss1 among teenagers (12-19 years old) rose from 3.5% to 5.3% (*7*). Another study from the USA indicates that the number of individuals listening to music through headphones and earphones increased by 75% between 1990 and 2005 (*8*). A 2008 European Commission report noted that personal audio devices are being used by an increasing proportion of the population; from 2004 to 2007, unit sales within the European Union are estimated to have been between 184 and 246 million (*18*). In recent years, music players have been increasingly replaced by smartphones. Worldwide sales of smartphones in 2011 amounted to 470 million units, and this figure is rising (1*4*).

According to the International Telecommunications Union, there were about 5 billion cell phones globally and, by October, 2011, there were 6 billion subscribers worldwide and approximately 85 billion text messages sent per month, a 450% increase in text messaging from two years before (7). With the wireless market on the rapid rise and the persistent improvements and enhancements of the cell phone, it only stands to cause those students attending school each day with one of these portable devices in their pockets. Attached with the wireless manufacturing industry offering huge number of capabilities, there is much research and development in creating more powerful and capable cell phones or rather, the latest term, smart phones demonstrated by new models hitting the market almost daily (12). Excessive exposure to noise - both long-term, repeated exposure to noise and a single exposure to an extremely intense sound - causes damage to the auditory system and results in hearing loss, termed noise-induced hearing loss (21).

Once again we observed a different point of outlook where Bianchi et al. research show that the cell phones were considered to be employed in an offensive behavior, and not seen as addictive (20). There is no gender difference in internet use and mobile phone text messaging. The gender difference may be due to different measures used, different age groups, or cultural differences (13).

A 2008 European Commission report noted that personal audio devices are being used by an increasing proportion of the population; from 2004 to 2007, unit sales within the European Union are estimated to have been between 184 and 246 million (17). With the increased availability and use of personal audio devices for listening to music and the risky behavior pattern of their use at high volume over long periods (18,23).

There are two types of sensory cells within the cochlea: inner and outer hair cells. The inner hair cells generate the electrical signals that are sent to the brain, while the outer hair cells act as amplifiers, increasing the stimulus delivered to the inner hair cells (19). Mobile phone use is banned or illegal under certain circumstances and in some jurisdictions (2). The increase in the demand for interpersonal and mass communication technology boosts the powerful evolution of mobile phone devices during the last decade (3). For over two decades, Dalman's classic text on survey design has aided both students and professionals in effectively planning and conducting mail, telephone, and, more recently, Internet surveys (4). In September 1899, at the annual meeting of the British Association for the Advancement of Science (BAAS) in Dover, Guglielmo Marconi's wireless telegraphy system was used to transmit messages across the English Channel (and across a national border) for the first time (5). This study was done to identify factors influencing cell phone addiction in adolescents (9). The development and modernization of technology has made people 's lives easier and contributed positively to social well-being so far while it has also brought about some problems and threats stemming from

irresponsible use of mobile phones among teens young adults. There is a critical and pathetic state prevailing over the sky of our youth (10). This study directly tests the effect of the "Big Five" personality traits on smartphone ownership and use (11)

5. Statistical Analysis

1.gender of the participant

Gender		Frequency	Percent	Valid Percent
Valid	male	17	45.9	45.9
	female	20	54.1	54.1
	Total	37	100.0	100.0

In chart (1) 37 students participated, 45.9% male and 54.1% female.

2.Age

Age		Frequency	Percent	Valid Percent
Valid	18	8	21.6	21.6
	19	6	16.2	16.2
	20	18	48.6	48.6
	21	5	13.5	13.5
	Total	37	100.0	100.0

In chart (2) it is obtained from the observation that the participants were: 21.6%, 18 years old, 16.2%, 19 years old,48.6%, 20 years old and 13.5%, 21 years old, a great percentage of students were 20 years old.

3. Living Aria

Living aria		Frequency	Percent	Valid Percent
Valid	City	35	94.6	94.6
	village	2	5.4	5.4
	Total	37	100.0	100.0

In chart (3) 94.6% were living in the city and 5.4% were living in the village.

4. Do you use mobile phone daily?

Answers		Frequency	Percent	Valid Percent
Valid	No	4	10.8	10.8
	Yes	33	89.2	89.2
	Total	37	100.0	100.0

In chart (4) 10.8%students don not use mobile phone daily and 89.2% students use mobile phone daily. It shows that a great number of student use it daily.

5. Have you ever felt pain in your ear while using mobile phone?

Answers		Frequency	Percent	Valid Percent
Valid	No	25	67.6	67.6
	Yes	12	32.4	32.4
	Total	37	100.0	100.0

In chart (5) 67.6% students do not feel pain in the ear while using mobile phone and 32.4% students feel pain in the ears while using mobile phone. It shows that a small number of students feel pain in the ears.

6. Had you felt pain in your ear before you used mobile phone?

Answers		Frequency	Percent	Valid Percent
Valid	No	34	91.9	91.9
	Yes	3	8.1	8.1
	Total	37	100.0	100.0

In chart (6) 91.9% students do not feel pain in the ears before using mobile phone, and 8.1% students feel pain in the ears before using mobile phone. It shows that a small number of students feel pain in the ears.

7. Have you had headache after using mobile phone?

Answers		Frequency	Percent	Valid Percent
Valid	No	12	32.4	32.4
	Yes	25	67.6	67.6
	Total	37	100.0	100.0

In chart (7) 32.4% students do not feel headache after using mobile phone and 67.6% students feel headache after using mobile phone. A large number of students feel headache.

8. Have you felt stress after using mobile phone?

Answers		Frequency	Percent	Valid Percent
Valid	No	8	21.6	21.6
	Yes	29	78.4	78.4
	Total	37	100.0	100.0

In chart (8), 21.6% students do not feel mental stress after using mobile phone. A great number of student's feel mental stress.

9. Have you felt stress anxiety after using mobile phone?

Answers		Frequency	Percent	Valid Percent
Valid	No	11	29.7	29.7
	Yes	26	70.3	70.3
	Total	37	100.0	100.0

In chart (9), 29.7% students feel depressed mood after using mobile phone and 70.3% students feel depressed mood after using mobile phone. It shows that a great number students feel depressed mood.

10. Have you visited doctor for pain in your ear after using too much mobile phone?

Answers		Frequency	Percent	Valid Percent
Valid	No	34	91.9	91.9
	Yes	3	8.1	8.1
	Total	37	100.0	100.0

In chart (10) 91.9% students do not refer to the doctor for treating the pain in ears because of using mobile phone and 8.1% students refer to the doctor for treating the pain in ears because of using mobile phone. It shows that a small number of students refer to the doctor of ears.

11. You use smart phone

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	19	51.4	51.4
	Agree	15	40.5	40.5
	No idea	1	2.7	2.7
	Disagree	1	2.7	2.7
	Fully disagree	1	2.7	2.7
	Total	37	100.0	100.0

In chart (11), the students are asked about the usage of smart phone. 51.4% fully agree, 40.5% agree, 2.7% no idea, 2.7% disagree and 2.7% fully disagree. It shows that a great number of students use smart phone.

12. You use mobile phone for five hours a day

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	7	18.9	18.9
	Agree	7	18.9	18.9
	No idea	2	5.4	5.4
	Disagree	16	43.2	43.2
	Fully disagree	5	13.4	13.4
	Total	37	100.0	100.0

In chart (12), student's ideas about the usage of mobile phone 5hours a day are shown. 18.9% fully agree, 18.9% agree, 5.4% no idea, 43.2% disagree and 13.4% fully disagree. It shows that a great number of students followed disagree idea.

13. you are using phone in night

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	16	43.2	43.2
	Agree	11	29.7	29.7
	No idea	1	2.7	2.7
	Disagree	5	13.5	13.5
	Fully disagree	4	10.8	10.8
	Total	37	100.0	100.0

In chart (13), students were asked about the usage of mobile phone during night. 43.2% fully agree, 29.7% agree, 2.7% with no idea, 13.5% disagree and 10.8% fully disagree. A great number of students use it during the night.

14. You know the risk of mobile phone usage

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	7	18.9	18.9
	Agree	6	16.2	16.2
	No idea	6	16.2	16.2
	Disagree	11	29.7	29.7
	Fully disagree	7	18.9	18.9
	Total	37	100.0	100.0

In chart (14), students were asked about the risks of mobile phone. 18.9% fully agree, 16.2% agree, 16.2% with no idea, 29.7% disagree and 18.9% fully disagree. A great number of students do not know the risks of mobile phone.

15. Youth use mobile phone as a style

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	14	37.8	37.8
	Agree	6	16.2	16.2
	No idea	7	18.9	18.9
	Disagree	3	8.1	8.1
	Fully disagree	7	18.9	18.9
	Total	37	100.0	100.0

In chart (15), students were asked about the usage of mobile phone as a style. 37.8% fully agree, 16.2% agree, 18.9% with no idea, 8.1% disagree and 18.9% fully disagree. The idea of A great number of students is that it is used as a style.

16. Youth use mobile phone for learning purposes

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	15	40.5	40.5
	Agree	10	27.0	27.0
	No idea	6	16.2	16.2
	Disagree	5	13.5	13.5
	Fully disagree	1	2.7	2.7
	Total	37	100.0	100.0

In chart (16), students were asked about the usage of mobile phone for learning purposes. 40.5% fully agree, 27% agree, 16.2% with no idea, 13.5% disagree and 2.7% fully disagree. The idea of A great number of students is that is used for learning purposes.

17. You use mobile phone and your learning level gets low

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	8	21.6	21.6
	Agree	5	13.5	13.5
	No idea	5	13.5	13.5
	Disagree	10	27.0	27.0
	Fully disagree	9	24.3	24.3
	Total	37	100.0	100.0

In chart (17), students were asked about the usage of mobile phone to be the cause for making lower the learning level. 21.6% fully agree, 13.5% agree, 13.5% with no idea, 27% disagree and 24.3% fully disagree. A great number of students were disagreeing with this idea.

18. You use mobile phone and your learning level gets high

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	14	37.8	37.8
	Agree	8	21.6	21.6
	No idea	4	10.8	10.8
	Disagree	6	16.2	16.2
	Fully disagree	5	13.5	13.5
	Total	37	100.0	100.0

In chart (18), students were asked about the usage of mobile phone to be the cause for making higher the learning level. 37.8% fully agree, 21.6% agree, 10.8% with no idea, 16.2% disagree and 13.5% fully disagree. A great number of students were fully agreeing.

19. when you used mobile phone your relationship with social people was little

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	9	24.3	24.3
	Agree	10	27.0	27.0
	No idea	2	5.4	5.4
	Disagree	8	21.6	21.6
	Fully disagree	8	21.6	21.6
	Total	37	100.0	100.0

In chart (19), students were asked about the usage of mobile phone to be the cause for making the relationship with the people of the society weaker. 24.3% fully agree, 27% agree, 5.4% with no idea, 21.6% disagree and 21.6% fully disagree. The idea of a great number of students is that it weak the relationship with the people of the society.

20. When teacher teaches in class you use mobile phone

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	7	18.9	18.9
	Agree	3	8.1	8.1
	No idea	2	5.4	5.4
	Disagree	4	10.8	10.8
	Fully disagree	21	56.8	56.8
	Total	37	100.0	100.0

ln chart (20), students were asked about the usage of mobile phone during the lecture of the lecturers. 18.9% fully agree, 8.1% agree, 5.4% with no idea, 10.8% disagree and 56.8% fully disagree. A great number of students were fully disagreeing with its usage during the lecture of the lecturers.

21. You felt pain in eyes after using mobile phone

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	15	40.5	40.5
	Agree	15	40.5	40.5
	No idea	3	8.1	8.1
	Disagree	3	8.1	8.1
	Fully disagree	1	2.7	2.7
	Total	37	100.0	100.0

In chart (21), students were asked about feeling the pain in the eyes after using mobile phone. 40.5% fully agree, 40.5% agree, 8.1% with no idea, 8.1% disagree and 2.7% fully disagree. A great number of students feel the pain in the eyes.

22. You cannot sleep properly because of using mobile phone

Answers		Frequency	Percent	Valid Percent
Valid	Fully agree	18	48.6	48.6
	Agree	9	24.3	24.3
	No idea	6	16.2	16.2
	Disagree	2	5.4	5.4
	Fully disagree	2	5.4	5.4
	Total	37	100.0	100.0

In chart (22), students were asked about the usage of mobile phone to be the cause for not having good sleeping. 48.6% fully agree, 24.3% agree, 16.2% with no idea, 5.4% disagree and 5.4% fully disagree. A great number of students do not have good sleeping.

6. Discussion:

The difference found as a result of this study are brought in the form of comparison in the bellow chart.

Other studies results		Our study results	
percentage	Statements	percentage	Statements
89%	believed they were usual cell phone users	89.2	Daily you use mobile phone
91%	Ear impairment	8.1%	felt pain in your ear before you used mobile phone
11%	Alzheimer's disease	29.7%	felt stress anxiety after using mobile phone
97%	In the final Obtained results showed that of the students were using smart	91.9%	You use smart phone
38.78% 44.21%	Males use mobile phone at night. Females use mobile phone at night	72.9%	you are using phone in night
38.78%	Students spend time between four to six hours	37.8%	You use mobile phone for five hours a day
91.8%	Have ever used a mobile phone during classes hours with	27%	When teacher teaches in class you use mobile phone
94.2%	Do you think mobile phones are useful to your studies	59.4%	You use mobile phone and your learning level gets high

7. Conclusion

In this research, the impacts of mobile phone usage over the students of Nangarhar university were discussed and their ideas about the benefits and risks of mobile phone usage were asked as a result we find that:

- As mobile phone is one of the important tools of life and many people use it, 89.2% students use smart phone and because of this usage they face the bellow problems:
- 67.6% have got headache, 78.4% have got mental stress, 70.3% have got felt stress anxiety after using mobile phone, 81% students were feeling pain in eyes after mobile phone usage and 72.9% students were having sleeping problems.
- Ideas of the students about the risks of mobile phone usage were asked and the bellow percentage of the students have given their ideas as:
- 48% students do not know the risks of mobile phone usage. 67.5% students use mobile phone for learning purposes. 54% students use it as a style.
- 59.4% students think their learning level increases and 51.3% students think their relationship with the society is decreased.

8. Suggestions

It should be used to a limit and its much usage should be prohibited. For having good health, it should not be used a lot.

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References

1. Arpita, Kumari, D'Souza M., Dhar T., Savita, & Alex S. (2013). Sevirity of Mobile Phone and Internet Use Among B.Sc. Nursing Students. Nitte University Journal of Health Science, Vol. 3, No. 4, December.
2. Bianchi A, Phillips JG. (2005). Psychological predictors of problem mobile phone use. Cyber Psychol Behav 8: 39-51.
3. Casey, B. M. (2012). *Linking Psychological Attributes to Smart Phone Addiction, Face-to Face Communication, Present Absence and Social Capital. School of Journalism & communication*. Unpublished Graduation Project, The Chinese University of Hong Kong.
4. Dillman DA. (2011). Mail and Internet surveys: The tailored design method. (2007). Update with new Internet, visual, and mixed-mode guide. John Wiley & Sons,
5. USA.
6. Ellis H. (2016). Marconi, masculinity and the heroic age of science: wireless telegraphy at the British Association meeting at Dover in 1899. Hist Technol 32: 120-136.
7. Franklin T (2011). Mobile learning: At the tipping point. Turk. Online J. Educ. 10 (4):261-277.
8. Gromik NA (2012). Cell phone video recording feature as a language
9. Henderson E, Testa MA, Hartnick C. (2011). Prevalence of noise-induced hearing-threshold shifts and hearing loss among US youths. Pediatrics.;127(1): e39-46.
10. Koo HY, Park HS. (2010). Factors influencing cell phone addiction in adolescents. J Korean Acad Child Health Nursing 16: 56-65.
11. Kritika M., & Dr. Vasanta S. (2013). The Mobile Phone Usage among Teens and Young Adults Impact of Invading Technology. International Journal of Innovative Research in Science, Engineering and Technology.
12. Lane W. & Manner C. (2011). The Impact of Personality on Smartphone Ownership and Use. International Journal of Business and Social Science, Vol. 2, No.17.
13. learning tool; A case study. Comput. Educ. 58:223-230.
14. receptors in primary breast cancer. Annal Oncol 21: 488-492.
15. Lu, X., Watanabe, J., Liu, Q., Uji, M., Shono, M., Kitamura, T. (2011). Internet and Mobile Phone Text Messaging Dependency: Factor Structure and Correlation with Dysphoric Mood among Japanese Adults. *Journal of Computers in Human Behavior*, 27, 1702-1709.
16. Minges M. (2012). Key trends in the development of the mobile sector. In: Information and communications for development: maximizing mobile. Washington, DC: World Bank;115-34.19
17. Patel A. & Rathod H. (2011). Mobile Phone Usage Habits of Students Commuting from Rural Area to Nearby Town – An Exploratory Study of Visnagar (Gujarat-India).
18. Park S, Koo J, Park HS, Kim JH, Choi SY, et al. (2010). Expression of androgen
19. Potential health risks of exposure to noise from personal music players and mobile phones including a music playing function. (2008) Brussels: European Commission, Scientific Committee on Emerging and Newly Identified Health Risks:
20. Portnuff CD, Fligor BJ, Arehart KH. (2011). Teenage use of portable listening devices: a hazard to hearing? J Am Acad Audiol.;22(10):663-77.

21. Prevention of noise-induced hearing loss. Report of an informal consultation. Geneva: World Health Organization;(1997). (http://www.who.int/pbd/deafness/en/noise.pdf, accessed 10 October 2014).
22. Sánchez-Carbonell X, Beranuy M, Castellana M, Chamarro A, Oberst U. (2008).
23. Shargorodsky J, Curhan SG, Curhan GC,Eavey R.(2010). Change in prevalence of hearing loss in US adolescents. JAMA;304(7): 772-8.
24. .Vogel I, Verschuure H, van der Ploeg CP, Brug J, Raat H. (2010). Estimating adolescent risk for hearing loss based on data from a large school-based survey. Am J Public Health.;100(6):1095-100.
25. Vogel I, van de Looij-Jansen PM, Mieloo CL, Burdorf A, de Waart F. (2012). Risky music-listening behaviors and associated health-risk behaviors. Pediatrics;129(6):1097-103.