



Psycho-Physiological Changes In Teenagers Using Smart Phone In Karad, Maharashtra, India.

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ABSTRACT

In present time human are so much addicted to smartphones that they spend more than half a day with smart phone. The teenager plays an important role in building up of nation and they are mostly seen using the smart phones for entertainment, communicating, playing games and study purpose. However there are many negative effects of smart phone on health. Smart phone usage is so strongly penetrated in teenager's life that it affects their psychological and physiological health. The data was collected from a sample of 50 participants using smart phone frequently from Vidyanagar, Karad through cross sectional descriptive study. The study showed that psychological and physiological health of the selected candidate was affected when compared with the control participants having no mobile phones. The academic record of the participants was also seen to be declining. Thus, from the study it can be concluded that the excess use of smart phone has negative effect also on their academics.

Keyword- Teenagers, Smart phone, academics, psycho-physiological effect.

Introduction:

Smartphone are one of the extra ordinary and facilitating machine developed in 1992, in India the people started to use smartphones from last decade. Among the children and teenagers in India smartphone is mainly used for playing games, surfing on social media and so on ^[6], due to which the person continuously using smartphone may suffer from imbalanced physiology as well as psychology^[8,11]. Though the smartphones have many advantages on one side, on other side it also affects our body in different ways^[2]. Some of the users excessively use their smartphone and it may turn into the addiction^[4,7]. This kind of addiction has negative impact on our daily life and may progressively harm our physiology as well as psychology ^[1, 5, 10].

Vidyanagar, Karad is a hub of different educational institution and students from different regions come to study here. Large number of teenagers can be seen with smartphones in their hands while doing many tasks. Smartphones has become inseparable part of teenager life that pursues education. Thus it was decided to study the physiological and psychological profile of teenagers in Vidyanagar.

Methodology

Survey of many study area was done and 50 participant (≥ 18 years) were selected randomly for the cross sectional descriptive study [3]. A written consent was also obtained from the participants. Research work was performed according to ICMR rules (2006) and Human Ethical Committee guidelines. Self-administered standard questionnaire were used to collect physiological and psychological data.

Result:

Out of 50 participant selected in this study 72% participant were male and 28% were females. Our study revealed that 88% of the teenagers especially in students were using smart phones and only 12% of the students were away from smartphones. This indicates the popularity of the smart phones among teenagers. Among non-users, reasons for not having mobile phone were economic problem and few of them were not allowed by parents to use smartphone.

Study revealed that majority of users use smartphone only for entertainment (Chart no 1).

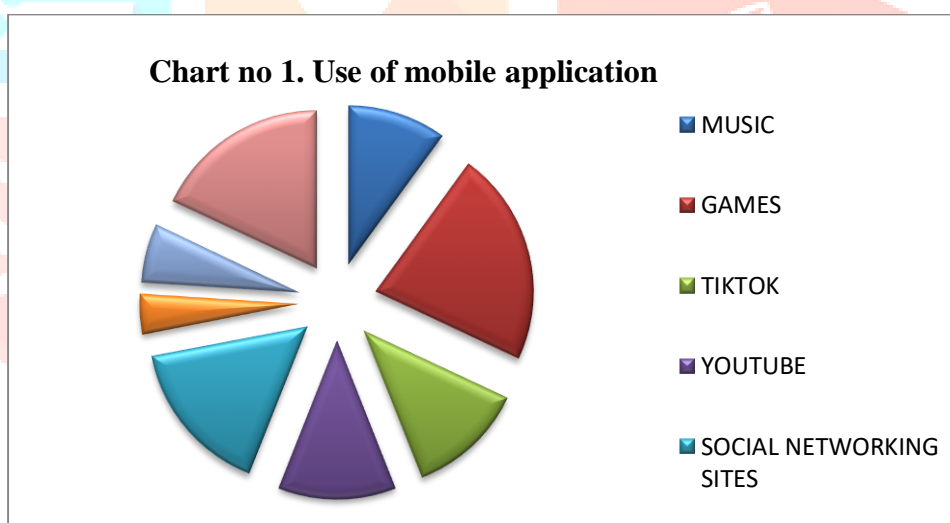


Table 2. Time spend on using smart phone

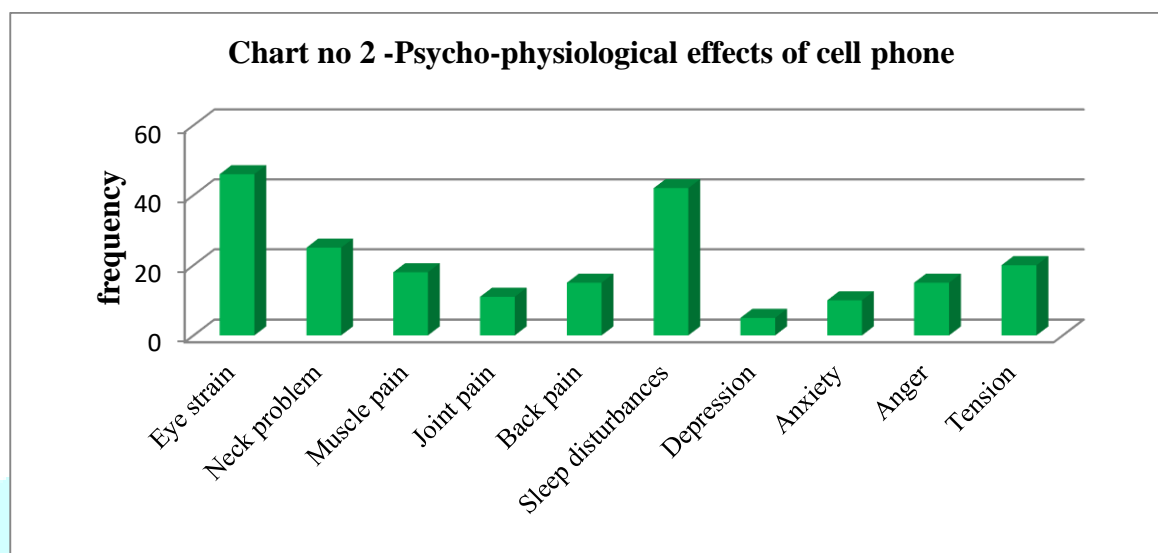
AMOUNT OF TIME SPEND	FREQUENCY
2hr – 4hr	5
4hr – 6hr	15
6hr – 8hr	10
more than 8hr	20

Table 2 shows 20 responded were using smartphone more than 8 hrs in a day which is quite high, 15 spend between four to six hours on mobile. 5 of the students responded with between two to four hours and 10 responded with six and eight hours.

Table 3. Effect on academic year

EFFECT IN ACADEMIC YEAR	ACADEMIC RESULT
INCREASE IN PERCENTAGE	0
DECREASE IN PERCENTAGE	47
NO CHANGE	3

Our study also revealed that overuse of smartphone have negative impact on academic performance of student. 47 participants showed decline in their academic performance while 3 showed no change.



Various kind of physical problems due to excess use of smartphone also studied, the responses of participant depicted in Chart no 2.

Discussion:

Studies showed that the teenagers are very much addicted to smartphones and were using it for more than eight hours every day. On the basis of obtained results it was seen that most of the males prefer to use mobile for social networking and online / offline games like PUBG, Free Fire, Mini Militia etc. and in female use of mobile phone was for listening to music, browsing on internet for online shopping and some feminine games, social sites mostly on TikTok.

Excessive use of smartphones was also seen to affect the academic performance of the participants in the survey done. As smartphones are used for other activities more than the study it distract them from study and attracts towards other things. Study also revealed that constant use of the mobile make the user to sit in a particular position for long period of time causing stress and strain on the body parts. Many participants shared the physiological strain and stress related problems. They shared problems of joint pain, back and neck pain, eye strain raised after they started using smartphones. Study also showed that the heartbeat of most of the participants especially males were increasing while using smartphone. Body temperatures of participants were also found to increase while handling smart phones. Participants shared that they feel the temperature of facial region and ear little raised when using smart phone.

Excessive use of smartphones also affects the psychological health of the person. Many of the selected participants complained about anxiety, nervousness, lack of presence of mind, anger, depression issues

with them. When consulted with the parents they confirmed the change in behaviour after exposed to smart phone. Parents shared that the pupils consider more private life for themselves now-a-days. The frequency of conversation with family members and patience level of the participants were reduced. Excessive use of smartphones, especially at night time, may cause teenagers to develop sleeping problems.

Conclusion

From the study it can be concluded that the teenagers are getting more attracted to virtual world due to easy access to everything and unknowingly in no time gets addicted to it. Addiction of smartphones causes them to its excessive use. Excessive use of smart phone not only affects their physical health but also mental health. Excess of anything is bad. Proper parental control, consultation, strict rules and also self-discipline and control of the user can help to solve this problem.

Recommendations

- Parental control
- Self-control
- By using parental care setting apps not useful for the child can be restricted from being download
- Proper counseling of the child
- Awareness program about hazards of excessive use of smartphones should be carried out by college and government
- Smartphone should be not allowed to use where not necessary.

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