

## Smartphone Addiction in Urban School Children

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**ABSTRACT:** Background: In past few years, there is significant increase in smartphone use. Modern smartphones currently include all the features of a laptop, including web browsing, Wi-Fi, and 3<sup>rd</sup>-party apps etc., which allows adolescents to access the Internet, communicate, and entertain themselves anywhere and anytime and they use it as their constant companion. This excessive use can lead to various musculoskeletal, psychological and visual problems which can affect the health of an individual. Thus, the study aimed at assessing smartphone addiction in urban school children.

Materials and methods: Asymptomatic school children (N=45) with 19 boys (n=19) and 26 girls (n=26) between the age group of 13-16 years (mean age= 14.5) were assessed for smartphone addiction by the Smartphone Addiction Scale: Short Version for Adolescents and divided into two groups of addicted and non-addicted.

Results: Urban school children becoming more and more addicted to smartphone.

**KEYWORDS:** Smartphone, smartphone addiction, urban school children, smartphone addiction scale, technology

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### I. INTRODUCTION

Smartphone is a cellphone and a handheld computer that shaped the greatest technology revolution since the Internet. A smartphone combines a cell phone with e-mail and Web, music and movie player, camera and camcorder, games, GPS navigation. A lot more personal than a personal computer, a smartphone is generally within reach no matter where you are. These features make it one of the most addictive machines<sup>(1)</sup>. Smartphone addiction can be define as constantly checking the phone for no reason, feeling anxious or restless without the phone, waking up in the middle of night to check the mobile and communication updates, delay in professional performance as a result of prolonged phone activities, and distracted with Smartphone applications<sup>(2)</sup>. Smartphone addiction can be consider as of technological addiction<sup>(3)</sup>. Adolescents are defined as young people between the ages of 10 and 19 years as per WHO (2014) criteria<sup>(5)</sup>. Indian teens are currently driving Smartphone's market in India The age group of 16-18 years using Smartphone's have shown a rapid rise from 5% in 2012-25% in early 2014. Recently in 2013, there were around "51 million" Smartphone users in Urban India and rate of rise from year 2012 was 90%<sup>(5,6)</sup>. In India, the Smartphone addiction magnitude in adolescent range from 39% to 44%<sup>(7)</sup>. Adolescents use their mobile phones for various tasks like alarm, camera, accessing the internet for information, projects, gaming, etc. The rate of texting has also increased exponentially due to rise in social media<sup>(8)</sup>. Using smartphone or being addicted to a smartphone can cause various physiological, psychological, musculoskeletal, visual and social effects which harm the health not only of an individual but also the general well-being of the society. Smartphone is known to cause reduced sleep, increased stress and increased distraction among it's users.

Thus, the aim of the current study was to assess smartphone addiction in urban school children.

### II. MATERIAL AND METHODOLOGY

Departmental review was taken before beginning the study. The research was conducted at the one of the urban school in Mumbai. The subjects in the age group of 13 to 16 years and using a smartphone were included in the study. The participants not willing to participate were excluded from the study. A written informed consent was taken from all the participants. The Smartphone Addiction Scale: Short Version for Adolescents<sup>(9)</sup> was use for classifying them into addicted and non-addicted smartphone user. This scale consists of 10 questions with a six point Likert scale (1: strongly disagree to 6: strongly agree). The scoring of the scale is as follows: For boys, the cut off value was 31, For girls, the cut off value was 33. maximum score of scale was 60.

### III. RESULTS

The data of 45 participants (N=45) with 19 boys (N=19) and 26 girls (N=26) in the age group of 13 to 16 years of age (mean=14.5years) was collected. The percentages of addicted was calculated and graphically represented in Microsoft Excel. From collected data we found that 73.33% of children were addicted and 26.66% were non-addicted. We also noticed that accordingly scale although 20% of children were non-addicted they were going towards addiction and at high risk of addiction.

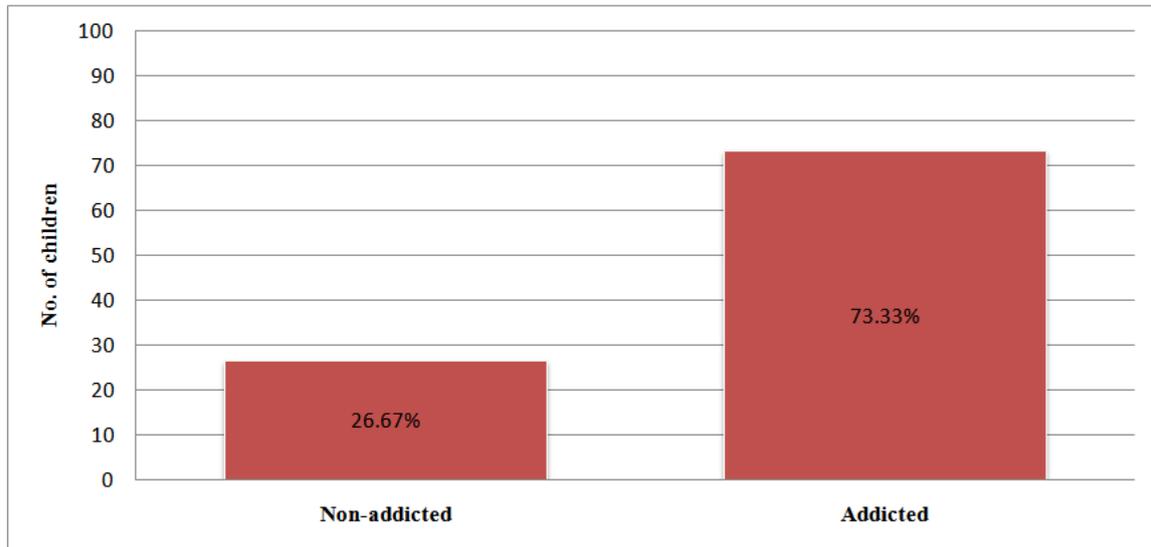


Figure 1: Percentage of addiction

### IV. DISCUSSION

Smartphone technology is advancing rapidly. Smartphone provide many features like messaging, internet, gaming, instant apps. That is why; this device is the most used gadget today. A study by Cartoon Network, India; concluded that 95% of kids are living in homes where there is at least one mobile phone and 73% of Indian kids are mobile phone users. Strikingly, 76% fall in the age group above 11. It has been found that school children use smartphone more than adults. Due to advancing technology most of the metro city families switching from landline to smartphones. Both parents have mobile phones, a child has access to it since a very young age. Owing to developments in IT sector most of the urban schools adopting concept of e-learning and digital class. School children carry their tablets or smartphone to school. They also have problems focusing and maintaining attention<sup>(7)</sup>. They use their tablets or smartphone in between lectures and ultimately it's affects their academic performance<sup>(10)</sup>.

It has also been shown that ,smartphone addiction not only affects their academic performance but also it affects their health and social performance..Holding a smartphone for long time can cause neck<sup>(11)</sup> and thumb pain<sup>(12)</sup> also affects the ocular accommodation and vergence<sup>(13)</sup>. They feel comfortable with sitting and playing games on smartphones rather than going out and playing outdoor games. This affects their physical as well as mental growth. Recent studies has shown that, smartphone use might be related to sleep disturbances and depression<sup>(14)</sup>

Now a days, technology is driving our children's lives. We should control the use technology before it causes any serious health issue.

### V. CONCLUSION

Our children growing in digital age. They have more and more and easy access to the digital technology. Because increasing accessibility and use of smartphone in daily life school children becoming addicted to the smartphone in very young age. We need to create awareness about it before it affects growing children health.

### REFERENCES

- [1]. WHO. Maternal, newborn, child and adolescent health. Adolescent development: A critical-transition. [Last updated on 2014 Mar 26; Last cited on 2014 Mar 26]. Available from: [http://www.who.int/maternal\\_child\\_adolescent/topics/adolescence/dev/en](http://www.who.int/maternal_child_adolescent/topics/adolescence/dev/en)
- [2]. Chen H. Asia's Smartphone Addiction. [Last accessed on 2016 Nov 05]. Available from: <http://www.bbc.com/news/world-asia-33130567>

- [3]. Lin Y. H., Chang L. R., Lee Y. H., Tseng H. W., Kuo T. B., Chen S. H. (2014) development and validation of Smartphone Addiction Inventory (SPAI). *Plos one*, 9(6), e98312
- [4]. Sarwar M, Soomro TR. Impact of Smartphone's on society. *Eur J Sci Res*. 2013; 98:216–26.
- [5]. Katz JE, Akhus M. *Perpetual contact: Mobile communication, private talk, public performance*. United Kingdom: Cambridge University Press; 2002.
- [6]. Smartphone Users around the World – Statistics and Facts [Infographic] [Last updated on 2013 May 23; Last cited on 2014 Jan 21]. Available from: <http://www.go-gulf.com/blog/smartphone>.
- [7]. Sanjeev Davey and Anuradha Davey. Assessment of Smartphone Addiction in Indian Adolescents: A Mixed Method Study by Systemic-review and Metaanalysis Approach. *Int J Prev Med*. 2014 Dec; 5(12): 1500-1511.
- [8]. Sansone RA, Sansone LA. Cell phones: the psychosocial risks. *Innov Clin Neurosci* 2013; 10: 33-7.
- [9]. Kwon M, Kim DJ, Cho H, Yang S. The smartphone addiction scale: development and validation of a short version for adolescents. *PLoS One*. 2013 Dec 31; 8(12): e83558.
- [10]. Yang SY, Chen MD, Huang YC, Lin CY, Chang JH. Association Between Smartphone Use and Musculoskeletal Discomfort in Adolescent Students. *J Community Health*. 2017; 42(3): 423-430
- [11]. Lee S., Kang H., Shin G. (2015). Head flexion angle while using a smartphone. *Ergonomics*, 58(2), 220-226
- [12]. İnal EE, Demirel k, Çetintürk A. Effects of smartphone overuse on hand function, pinch strength, and the median nerve. *Muscle Nerve*. 2015 Aug; 52(2): 183-8.
- [13]. Rossignol AM, Morse EP, Summers VM, Pagnotto LD. Visual display terminal use and reported health symptoms among Massachusetts clerical workers. *J Occup Med* 1987; 29: 112–8.
- [14]. Lemola S., Perkinson-Gloor N., Brand S., Dewald-Kaufmann J.F., Grob A. (2015). Adolescents electronic media use at night, sleep disturbance, depressive symptoms in the smartphone age. *Journal of Youth and Adolescence*, 44(2), 405-418.

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