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# The impact of electronic gadgets on the mental capacity, emotional abilities and social behaviour of addicted adolescents

# Asha Kumari Roy

Assistant Professor,
Department of Education

Kanti Devi Teacher Training College, Dariyapur, Shivala, Nora, Patna (Bihar)-801113

### Dr. Nisha Chandel

associate professor

Department of Education,

School of Education, University of Culture, (Mathura)

# **Abstract:**

In this paper, we study the problem of electronic gadget overuse in adolescents, as electronic gadget overuse has a profound impact on adolescent mental health. This age of adolescents is susceptible to various deviations in behaviour. The relevance of studies to the mental health consequences of electronic gadget overuse in adolescents is determined, with electronic gadgets being a fundamental need layer of social reality. With the steady increase in the number of adolescents - electronic gadget users (about 40% at present), excessive use of electronic gadgets has a devastating mental impact on adolescents and has a negative impact on mental health. Extreme Utility of Electronic Gadgets Teenagers don't need to go to the cinema, go to the cinema, be in the library, bother shopping, you can get all the information you need without leaving your monitor screen. A new type of psychological disorder has emerged. Due to the corona pandemic, online classes have started for teenagers, due to which teenagers are now spending more of their time in the form of electronic gadgets such as computers, laptops, mobiles and the World Wide Web. This is affecting their mental health. Gadgets make them attractive and therefore many users face problems in psychosocial adaptation. This isolation, anxiety, depression, difficulty concentrating, pain in shoulders, back, eyes and general agitation, overactivity, low self-esteem are the most anticipated mental effects of excessive use of electronic gadgets.

Keywords: electronic gadgets, mental abilities, emotional abilities and social behaviour, addicted adolescents.

# 1.INTRODUCTION

Society has always been concerned about the term 'addiction' of our youth, but in the present age 'gadget addiction' is a more significant area of concern and it may observe in today's scenario where the young generation's inclination towards the latest gadgets such as Smart Phones, Tablets, Laptops and other electronic gadgets is posing a threat to the social infrastructure in the future.[1]

The business of electronic gadget companies depends on teenagers spending more time with their gadgets than they do with their gadgets every day, we need to recognize that the most important consequence of this motivated psychotic behaviour is the growing addiction to gadgets destructive mental effect. Shape teen uses the gadget as per the wish of his favourite by using phone or any other gadget for boredom or entertainment. [2] The activity of adolescents using electronic-based media and gadgets such as smartphones and tablets for extended periods of time every day for long periods of time is a sign of addiction.

Excessive use of electronic gadgets can disrupt the brain of adolescents to an excessive degree. [3] Overuse of the smartphone which is commoner in females and young adults, is associated with anxiety, depression, stress, and low self-esteem [4,5]. The average screening time of television in 49 % children was more than 2 hours per day and more than 4 hours during weekend days or on holidays,[6] an average spending time with mobile phone was an hour and a half a day [7] and the minimum us of computer was 2-4 hours per day. [8] A study on use of electronic media by secondary school students showed that minimum use of television was 3 hours, mobile phone 3 hours and 3 hours computer. [9] The studies showed that any one or all together electronic gadgets screening more than 2 hours leads to many health problems.

# 1.1 Research Purpose and Scope

There is a difference between Internet addiction and Internet addiction [10]. when someone uses the internet to play poker on his smartphone for prolonged periods, it is more appropriately an addiction to internet because of his addiction to playing poker rather

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than a smartphone addiction. In addictiveness of smartphone games by game players, the addiction is to the gaming behaviour and not to the device as a whole. Hence, to use smartphone for gambling or to engage in other addictive behaviours should not be confused with a smartphone addiction [11].

The same reasoning distinguishes between an internet addiction and addictions to specific activities carried out on the network, with one of the most prevalent behaviours' online being social networking [12]. Present society is becoming a slave to physical devices due to modern inventions. By the use of various physical means, the person is becoming labels. Somewhere these devices are affecting our health. The impact on the health of electronic gadgets will be seen in the presented chapter. Electronic gadgets are a simple, simple and versatile tool. While it has innumerable benefits, it also has innumerable losses.[13]

The biggest damage is caused to our health by electronic gadgets. Waste of time and money can be repaid once, but it can be considered very difficult or impossible to compensate for the adverse effect on health. Electronic gadgets are a small device but absorb microorganisms that can penetrate human bone, called radiation, to function. Behaviours associated with mobile phone addiction differ between genders. Older people are less likely to become addicted to electronic gadgets because of various social uses, stress and greater self-regulation. Also, a study by media regulator Ofcom showed that 50% of 13-year-olds in the India had a electronic gadgets in 2019. These adolescents who grow up with gadgets in their hands are more at risk. electronic gadgets addiction, as their online and offline worlds merge into one.

# 1.2 Objective

The most important step in electronic gadgets research is objective determination. On the basis of which electronic gadgets have to provide a direction to the social learners by making them aware about their ability, ability. So the objectives of the present research are as follows

- (1) To study the effects of what percentage of adolescents become addicted to the use of electronic gadgets.
- (2) To study the importance of difference in the effects of mental abilities of addicted adolescents.
- (3) To study the importance of differences in mental ability, emotional ability and social behaviour of addicted adolescents using electronic gadgets.
- (4) To study the effect of difference in problems arising out of emotional ability of addicted adolescents.
- (5) To study the importance of the effects of differences in mental ability, emotional ability and social behaviour of adolescents.
- (6) To study the effects of differences in social behaviour of addicted adolescents.
- (7) To study the difference in the effects of different levels of mental ability and emotional ability of addicted adolescents.
- (8) To study the difference in the effects of different aspects of social behaviour of addicted adolescents.
- (9) To study the difference in the effects (mild, moderate and extreme) of variation in mental ability, emotional ability and social behaviour of addicted adolescents.
- (10) Socio-demographic factors, age, sex, order of birth, number of siblings, class, academic performance, school, elementary education, religion, parent's education, parent's occupation, families to study the differences in the effects of size, mental ability, emotional ability and social behaviour of adolescents using electronic gadgets through three different levels (mild, moderate and excessive).

# 1.3 Aim of the Research

In this age of technological information explosion, new ways are being discovered every day to solve the well-known problems of tomorrow. Existing knowledge is being added to every new research. The research done on electrical equipment has crossed the limits of current subjects. Electronic Gadgets have brought their usefulness as well as negative effects in subjects like home, health, psychology, education, agriculture, bank, business, today this race of gadgets celebrates scientific problems like depression, anxiety, stress. And its addictive effect can be seen on different aspects of personality. Due to which different types of problems affect the adolescents.

The literature review suggests that addiction does not help to cope with life's challenges, but that multiple uses have become a life's addiction. Thereby how much time is required with the gadgets to get the desired result. What should be the practice frequency of this de-addiction program? Can de-addiction programs be used as a form of social behaviour effectiveness for adolescents? What are the effects of de-addiction program on different dimensions of mental ability, emotional ability?

What are the implications of the de-addiction program for students with different demographic variables? Does it help problem-solving teens with low levels of stress? Does it help to improve the problem of adolescents with high levels of stress? These are some such questions, which have not been known yet, so the researcher is eager to do this research. This may prove not to bring about a drastic and necessary change in the addiction problem of adolescents.

However, not much work has been done on the impact of de-addiction on the mental ability, emotional competence and social behaviour of adolescents currently addicted to the best of the investigator's knowledge. The present study is an attempt to examine the effect of electronic gadgets on the mental abilities, emotional abilities and social behaviour of adolescent adolescents.

### 1.4 Research Questions

- 1) What percentage of adolescents are addicted to electronic gadgets?
- 2) Are there differences in mental abilities, emotional abilities and social behaviour of adolescents who are addicted to electronic gadgets?
- 3) What are the implications of mental ability, emotional ability and social behaviour of addicted adolescents?
- 4) What is the impact of different levels of mental ability and emotional ability of adolescents?
- 5) What is the impact of different aspects of social behaviour of adolescents?
- 6) Socio-demographic factors, age, gender, order of birth, number of siblings, class, academic performance, school, elementary education, religion, parent's education, parent's occupation, family size, what are the effects of adolescent use of electronic gadgets at three different levels (mild, moderate and excessive) on their mental ability, emotional ability and social behaviour on the way they live?

# 1.5 Importance of the Research Study

As the technology progressed, the number of electronic gadgets increased. It is absolutely true that in the changing times of electronic gadgets, the world of gadgets is being created for many necessities of life. Electronic gadgets are a small thing. Which is a small but very effective technical gadgets. Which has a special need, which is modern more available resources in less time.

There will be many machines around you which you also use daily. But many of these machines are quite different and better. We are talking about gadgets here. You must have heard this word many times in your daily life but have you ever tried to know its meaning, what are electronic gadgets. Surely your answer will be no, otherwise in this research we will study about this topic and know what are electronic gadgets addiction?

### 2. Literature Review

The study of related literature helps the researcher to select his problem, formulate the hypothesis, prepare the study plan and carry forward the work. In all the studies and research work done on this subject so far, technical tools have been used in them. More studies have been done on education, health, business, economic and social and agriculture, the impact of electronic gadgets on them leads to construction work in one way or the other. In the context of the presented research problem, the following sources such as e-leaning, research literature, newspapers, magazines, knowledge of books etc.

will be used for the study work by the researcher. The details of the previous literature study done by the researcher for the present research have been classified under various sub-headings: -

# 2.1 Electronic gadgets

Electronic gadgets cover every aspect of our lives and as a result trust in them. Consider the electronic-devices that have revolutionized the way we interact with people and have permeated every aspect of life especially teenagers. They do not come out to play as they interact with everyone from the comfort of their homes and play games through smart phones at home. Teenagers use smart phones to such an extent that if the battery drops to 15 percent or it shuts down, it leads to a sense of anxiety and despair in teenagers. This behaviour cannot be classified as a mere dependency. But it is classified as an addiction. It defines the importance of gadgets as addiction.

Experts say that teenagers who use a lot of electronic gadgets.[14] He is not able to sleep properly, his attention remains in using these electronic gadgets more and more time. Due to which they gradually decrease in mental problem, concentration problem, hearing ability. Addiction to electronic gadgets is giving rise to many types of mental and physical illness among adolescents. It has been revealed in many researches that due to excessive electronic gadget addiction, there is a decrease in the activity of adolescents.



# 2.2 Current stats for electronic gadgets

Some people are replacing face-to-face conversations with cyber. According to clinical psychologist Lisa Merlo, "Some patients pretend to be on the phone or fiddle with an app to avoid eye contact or other interactions at a party."

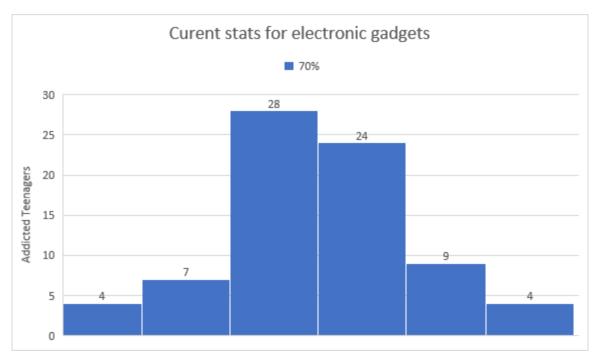
70% check their phone within an hour of waking up in the morning.

56% check their phone before sleeping.

48% check their phones on weekends.

51% check their phones constantly during the holidays.

44% reported that they would feel very anxious and irritable if they did not interact with their phone within a week.



This shift from a face-to-face style to text-based conversation has also been seen in Sherry Turkey. His work cites connectivity as an important trigger of social behavioural change with respect to communication; therefore, this adaptation of communication is not solely due to the phone itself. In her book, Alone Together: Why We Expect More from Technology and Lessons from Each Other, Turk argues that people now find themselves in a state of "constant co-presence".[15] This means that digital communication is an Only allows the occurrence of two or more realities in space and time. Subsequently, the individual also lives "in a world of constant partial attention," [16] the process of simultaneously paying attention to multiple sources of incoming information, but on a superficial level. Bombarded with an abundance of emails, texts, messages in doing so, people not only find their human characteristics or personalities dividing people into subjects, but increasingly treat them as digital entities. This is often referred to as impersonation.

# 2.3 Electronic Gadget Stats of Addicted Teenagers

There are concerns that some mobile phone users incur substantial debt, and that mobile phones are being used to violate privacy and harass others. In particular, there is increasing evidence that mobile phones are being used by teenagers as a tool for bullying other children.

There has been a large amount of research on the use of mobile phones and its positive and negative effects on human psychological mind, mental health and social communication. Mobile phone users may face symptoms of stress, sleep disturbances and depression, especially among young adults. Continuous phone use can cause a chain reaction, affecting one aspect of the user's life and spreading to contaminate the rest.[17] It is usually caused by social disorders.

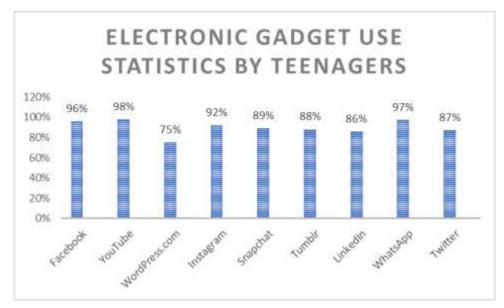
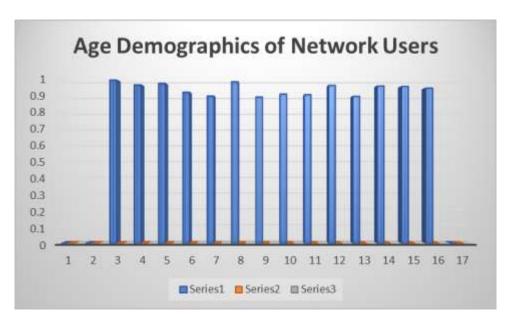


Table: Electronic Gadget Use Statistics by Teenagers

# 2.4 Addicted Teenagers and electronic gadgets Tradition

Teenagers love technology. Their devices serve as a phone, camera, radio, communication equipment, gaming system, calculator, online library and even a television. With all the electronic devices, no wonder teens are spending more and more time on their devices. In fact, they spend roughly the same amount of time online as they do in school during a typical day. According to Common Sense Media, today's teens spend about 9 hours a day on social media and young girls ages 8 to 12 spend about six hours a day. [18]



A decent amount of that time is spent exploring and playing on apps. Social media apps come and go for a while. While many of these applications are fun and harmless, there are some hidden dangers. With 73 percent of youth surveyed ages 13 to 17 having access to smartphones and 87 percent of desktops, laptops and tablets, this becomes more and more important. So that parents can be informed about the trending apps.[19]

Following are some of the popular apps that teens use.. Most of the sites below have a user age requirement of 13. This is due to the Children's Online Privacy Protection Act of 1998 which requires US companies to obtain parental consent to collect data on children under the age of 13.

# Conclusion

To forget or remember something depends on practice rather than on an instrument. Young children are advised to write repeatedly and read aloud so that they can remember the subject matter in their mind for a long time, in the same way when forgetting a task or a thing repeatedly, forgetting it.

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Electronic gadgets may cause memory loss. Researchers in Japan have reported that memory is being affected due to over-reliance on mobile phones. The lack of concentration in the person can also be considered as mobile phone. The reason for staying in touch with someone is that the person cannot concentrate and edit any work.

The facility of electronic gadgets is capable of curbing extra work and extra thinking. This is the reason that the use of electronic gadgets promotes the tendency to forget. Avantika Srivastava believes that "high usage of mobiles not only affects the concentration power, but also affects the memory." [20]

**Table 1 Summary of Literature Review** 

Author	Aims/Objectives	Findings
Oh, Hyun-Ei, Sim, Mi-Jung, Oh, Hyo-Sook (2010)	This study is to offer basic data to understand the relationships between mental health, level of depression, and internet addiction of high school students in farming communities for developing a mental health management program for adolescents.	First, the level of mental health according to the AMPQ for subjects from this study showed problematic behaviour was lower when compared to other researches. There were statistically significant differences according to the school type for externalization problems and overall problematic behaviour. Secondly, the level of depression was relatively low: 5.1% for potential risk and 0.3% for high risk. Thirdly, a total of 96.9% were considered normal for Internet addition levels. 1.7% for potential risk, 1.4% for high risk; however, there was no statistically significant difference between each variable. Fourthly, there was a strong relationship between subjects AMPQ, level of depression and Internet addiction. As depression worsens, Internet addiction also becomes stronger.
Huang Xiuqin, Zhang Huimin, Li Mengchen, Wang Jinan, Zhang Ying, and Tao Ran (2010)	The objectives of this study were to compare the personality profiles of adolescent males and with Internet Addiction (ID), and also associated with IAD specific parental rearing behaviours.	The results of this study confirm that personality traits such as introversion and psychoticism. IS often occurs concurrently with mental symptoms Adolescents with IAD consistently rated parental rearing behaviours as being over-intrusive, punitive, and lacking in responsiveness.
Lawrence T. L., Zi-Wen P.(2010)	To examine the effect of pathological use of the Internet on the mental health, including anxiety and depression, of adolescents in China. It is hypothesized that pathological use of the Internet is detrimental to adolescents' mental health.	After adjusting for potential confounding factors, the relative risk of depression for those who used the Internet pathologically was about 2½ times (incidence rate ratio, 2.5; 95% confidence? interval, 1.3-4.3) that of those who did not exhibit the targeted pathological internet use behaviours.
Park, Min Hee; Jeon, Hae Ok (2013)	The purpose of this study was to compare the health behaviour, mental health and internet addiction by gender differences among Korean adolescents and to examine relevance's between health behaviour, mental health and internet addiction.	There were significant differences in health behaviour, mental health and internet addiction.  By gender differences. Prevalence of internet addiction was male: 3.9%, female: 1.9% in this study.  As the result of multiple logistic regressions, the risk of internet addiction was increased in the case  Substance experiences, Smoking experiences, Subjective health status, Depression Feelings of stress, experience, suicidal ideation, feeling of happiness, and sufficiency of sleeps in both male and
Lim J. A., Gawk A. R., Park S. M., Kim D. J., Choi J. S. (2014)	Previous studies have reported that aggression and impulsiveness are associated with Internet  Addiction Disorders (IAD). The aim of this study was to evaluate the extent of Internet addiction.and its relationship with clinical factors such as aggression, impulsivity and mood status.	female.  The Y-IAT score was positively related to the BIS-11, AQ and STAXI scores. When pathway analysis was performed to examine whether clinical states had an effect of BIS-11, STAXI, or AQ as predictive IAD, BIS-11 and AQ were mediated by anxiety and ADHD when predicting IAD.

Nay Anika	Every student desire to perform well in schooling	Findings of the present study revealed that there was
Singh, K. C.	whether it is academic performance or others.	a significant effect of internet addiction
Barbola (2015)	Students' performance gets disturbed by many factors like overburden, difficulty of subject etc. Information technology has put another kind of burden on the students. It is interesting on one hand whereas distracting on the other hand. This is mainly use of internet among adolescents due increasing literacy of computer and its uses in day today life.	on academic performance and mental health of students/adolescents.

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