



Excessive Use Of Gadgets In Indian Homes

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Abstract

The proliferation of mobile devices, online communities, and instant messaging services has altered our perspectives. More than 6.9 billion individuals use mobile phones worldwide. Musculoskeletal problems are common among those who use electronic devices for long periods of time. Damage to the muscles, tendons, and nerves in the neck, shoulder, forearm, and hand can lead to chronic pain, weakness, numbness, or a loss of motor control; this condition is known as repetitive strain injury (RSI). Long-term usage of electronic devices is bad for your eyes, neck, shoulders, and hands. Anxious and depressed feelings about one's social interactions and one's ability to have a positive impact on the lives of others are common among heavy smartphone users because of the decreased amount of face-to-face engagement they experience.

The purpose of this article is to examine the research and compile a list of issues related to 'screen time,' as well as potential solutions to these issues. Constant thumb discomfort when using a smartphone may be the consequence of a repetitive stress injury or overuse syndrome. The human body may be negatively impacted by prolonged exposure to electronic devices. To improve people's mental health, we must spread awareness about the benefits of smartphone usage in moderation and the value of social relationships. Doctors should refresh their knowledge of these emerging illnesses, and the next generation has to be taught proper ergonomics and the risks associated with excessive device use.

Keywords: electronic gadgets, repetitive strain injury, smartphone.

Introduction

The proliferation of mobile devices, online communities, and instant messaging services has altered our perspectives. Smartphones have brought the globe closer together. Relationships and habits have changed as a result. Even though phones were originally designed for making phone calls, their functionality has expanded to include other activities such as texting, gaming, social networking, and music playback. Yoram Wumser predicts that in 2018, individuals in the United States would spend an average of 3 hours and 35 minutes per day using mobile devices, up by more than 11 minutes every year. Mobile will overtake television as the most popular media in the United States in 2019.

The global use of technology devices is accelerating at a rate never seen before. Concerns have been raised concerning the long-term implications of children's excessive use of electronic devices on their cognitive and physical growth, a trend that affects not just adults but also younger generations. While technology has helped dismantle physical boundaries and increase access to information, it also has a track record of abuse and misuse. The modern, technologically-dependent global population is increasingly embracing a sedentary, unhealthy lifestyle that increases their chance of getting serious physical and mental illnesses.⁵ When looking at the Asian scenario, a prior survey performed on six Asian nations found that 62% of the teenage cohort (those between the ages of 12 and 18) had cellphones. This generation's fascination with, and eventual addiction to, internet usage is a direct result of the widespread availability of digital devices and the web in recent years.

Excessive use of electronic devices, such as cellphones and laptops, has been linked to mental comorbidity, according to a worldwide review research. Young children were hit harder than older groups.⁷ The US Centres for Disease Control and Prevention report that the typical American kid watches television or video games for eight hours a day. Kids who don't get enough sleep or who spend too much time in front of screens are less likely to be productive. Adverse circumstances may push teenagers over the edge, leading them to engage in antisocial behaviour.⁹ Too much time spent staring at a screen has

been linked to a variety of health problems, including but not limited to: obesity, myopia, dry eyes, blurred vision, headaches, and irritability in young children and teenagers.

There are now more than 1.2 billion adolescents (10-19) in the world. Roughly 22% of Bangladesh's total population is made up of teenagers. The vast majority of them seem totally engrossed on their electronic gadgets. Due to the widespread availability of the internet in modern Bangladesh, digital gadgets are now an integral part of the daily lives of the country's youth. According to a recent survey conducted by UNICEF, teenage internet usage in Bangladesh has increased by 800 percent from the year 2000. Like in other nations, youths in Bangladesh spend numerous hours each day using various electronic devices. A recent survey found that 90% of Bangladeshi teenagers own and regularly use cellphones. It's important to note that this demographic doesn't always use their phones, computers, and other electronic devices for educational or social reasons.

The purpose of this article is to examine the research and compile a list of issues related to 'screen time,' as well as potential solutions to these issues. Tissue damage from overuse Musculoskeletal problems are common among those who use electronic devices for long periods of time.

This research shows that there is a substantial correlation between the demographics of secondary school pupils and their tech usage. The survey found that among secondary school students, male participants accounted for the vast majority of electronic device users. According to recent reports, both sexes have equal access to and usage of today's electronic devices. According to the existing research, there is no agreement amongst studies on whether or not mobile/internet addiction is more common among males or girls. But new research shows that male students are three times more likely to get addicted to technology than female students, and that men also prefer to use their devices for longer periods of time. It has also been noted that the vulnerability of Vietnamese youth to excessive gadget/internet usage is strongly correlated with demographic variables.

Students in both Vernacular and English medium schools were more likely to use electronic devices than those in Madrashas. It's possible that this higher prevalence is due to the fact that every pupil in English-medium schools in Bangladesh, and a sizable percentage of students in Bangla-medium educational institutions, come from families with a solid financial status and have easy access to the web on their mobile phones or personal computers. This lines up with the study's findings that pupils from higher-income schools are more likely to utilise technology and have access to personal mobile phones than those from lower-income schools. Furthermore, many parents believe that their children's usage of such gadgets is helpful. Parents' interest in and worry for their children's development and education are likely contributing factors to their children's heavy reliance on electronic devices. Our data shows a strong correlation between having electronic devices in the home and higher monthly salaries and parental education levels, lending credence to this theory.

The current research shows that there is a large gap in technology use between students in urban, rural, and suburban settings. This is because many rural areas in Bangladesh still lack access to many basic necessities, including the internet and modern technology beyond mobile phones. Another research confirms this by finding that there are substantial variations between those living in the city and those living in the country when it comes to the usage of electronic devices, especially among children.

As could be predicted, mobile (smart) phones are the most popular electronic device in this survey, followed by a variety of tablet computers. The proportion of non-users who took part in the study was close to 13%.

Participants were seen using their devices mostly for viewing media (movies/cartoons) and interacting with others online (social media), which is consistent with previous research on Malaysian primary school pupils. Due to the current pandemic of coronavirus disease 2019 (COVID-19), the educational system has been modified to allow for online participation from around one-fourth of the students.

An Asian study corroborated these findings by showing how participation in a variety of online activities (e.g., gaming, online classes, social media) can lead to strong interpersonal influences, which in turn can lead to an increased propensity for spending time indoors and a decreased interest in spending time outdoors.

Concerns about the effects of technology on children and teenagers' social, physical, and emotional development have been raised in a number of earlier research. According to our research, by 2020, middle and high school students will have spent much more time using electronic devices than they did in 2019. Liu et al.'s suggestion that more than two hours of daily electronic device usage is harmful to a person's physical and mental health makes this an issue of great concern. A late bedtime is strongly linked to a number of psychological and physiological problems, according to a recent research on the prevalence and risk factors of excessive internet usage among students.

Liu et al. and Wahyuni et al. found that such behaviour was associated with a variety of negative physical and psychological outcomes. The Centres for Disease Control and Prevention (CDC) found in another research that a lack of physical exercise might increase the risk of energy imbalance and subsequent obesity or overweight. These arguments are supported by our findings, which show an increasing incidence of physical and mental health issues among secondary school students. Participants who used electronic devices for more than two hours per day on average were more likely to report health problems such as headaches, sleep problems, back pain, limb pain, vision problems, and mental health issues.

Previous research revealed similar results, with heavy smartphone users experiencing pain in the neck, shoulders, and eyes. Exercising regularly has been shown to greatly lower the probability of developing myopia in children and adults. This might explain why 45.51 percent of our subjects who regularly spent more than two hours staring at a screen had some kind of visual impairment. In addition, research conducted in Indonesia found that

prolonged exposure to electronic devices might have negative effects on vision. We identified a strong correlation between vision impairment and technology use, and this study lends credence to our conclusions.

Those who rely heavily on electronic devices had more trouble sleeping and more frequent outbursts of anger and melancholy than those who used them less often. Numerous research on the topic have shown that teenage device usage, particularly mobile phone use, is to blame for a variety of sleep problems. Another research corroborated ours by demonstrating that those who used electronic devices for more than 2 hours per day were also less rested than those who used them less than 2 hours per day. Previous research has shown that those who are too reliant on the internet report either sleeping less (85%) or experiencing sleep troubles (26.7%). Late-night activities include, but are not limited to, texting, binge-watching shows or films on the internet, and playing video games. Many studies have shown a correlation between time spent in front of screens and a variety of mental health issues. Few studies have shown that patients who spend more time in front of screens are more likely to develop internet addiction and experience mental discomfort.

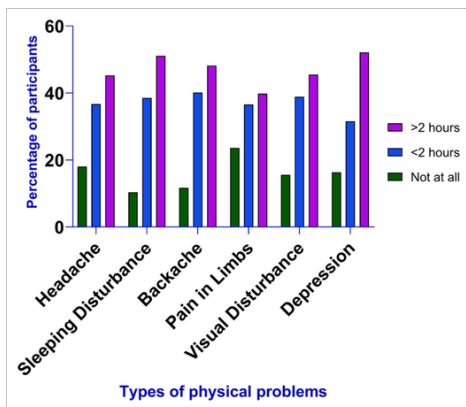
There are a number of caveats to this research. One potential flaw is recollection bias, especially if the subjects were very young. Second, we lacked information that would have been helpful in understanding the causes and consequences of tech addiction, its impact on students' performance in the classroom, and other contextual variables. Because there was no sample frame for tech users, we may have experienced some selection bias because we utilised a convenience sampling method.

In conclusion, our study's findings corroborate those of research conducted in other parts of the world, which report serious negative impacts on teenagers' health due to excessive usage of electronic devices. Furthermore, we discovered that the overuse of technology is often affected by socio-demographic characteristics and determinants.

Ill Health Due to Excessive the Gadgets

Pain, weakness, numbness, or impaired motor control may appear in the muscles, tendons, as well as nerves of the neck, arm, forearm, and hand after prolonged exposure to repetitive, forceful, and awkward hand motions. This condition is known as repetitive strain injury (RSI).

The thumb is the least dexterous finger, hence it shouldn't be used for a task that requires constant precision. In addition to spending less time playing games, walking, and exercising outside, individuals demonstrated a decreased propensity to be distracted with electronic devices. Twenty-three percent of the group spent more than two hours in the great outdoors. Twenty-six percent or more of the sample seldom or never went outside. Only 23.35 percent of people followed the recommended procedure of being outside for at least two hours. Headache, sleeplessness, backache, limb discomfort, vision loss, and sadness were all reported among the participants. Participants who use devices for more than 2 hours per day were more likely to suffer from headaches (45.26 percent), sleep disturbances (51.11 percent), back pain (48.18 percent), limb pain (39.5 percent), vision problems (45.5 percent), and depression (52.1 percent). Health problems were considerably reduced (P .05) among those participants who used electronic devices for less than an hour each day. As can be shown in Figure, there are negative impacts from using electronic devices for more than an hour at a time.



Repetitive motions, like typing on a smartphone, may be harmful to the thumbs. A 34-year-old pregnant lady was the first person ever documented with WhatsAppitis, a novel condition named by Fernandez-Guerrero [3]. The

cause was "constant motions with both thumbs to send messages" while using a mobile device for more than 6 hours straight. Overuse of the popular social messaging software WhatsApp caused the lady to suffer from "WhatsAppitis," or bilateral flexor pollicis longus tendonitis of the thumb.

In 2009, RSI, known as "PlayStation thumb" or "cell phone thumb," was discovered among youths who played video games on PlayStation or texted on mobile phones for extended periods of time [4]. According to a 2007 report, a 24-year-old man with a history of engaging several hours of tennis video game who made recurrent same arm movements affected his infraspinatus muscle [5] suffered from acute Wiiiitis, named after the Nintendo Wii tennis video game.

Upper-body discomfort has become widespread in the modern day due to the use of computers & mobile phones. Patients visit the outpatient departments of general surgery and orthopaedics complaining of unspecific aches and pains in their arms, forearms, wrists, fingers, and thumbs. Long-term exposure to electronic media such as computers, video games, or mobile phones has been linked to an increase in the onset of symptoms first seen in musicians. Since no pathology has ever been identified in the tendon sheaths after surgery, individuals with these symptoms are often diagnosed with tenosynovitis. Because they arise from an overuse phenomena affecting muscles, joints, and ligaments, and improve with rest, the words "repetitive strain injury" or "overuse syndrome" are more appropriate.

De Quervain tenosynovitis: Tendon trapping in the wrist's first dorsal chamber is known as "De Quervain's tenosynovitis," after the Swiss physician who originally characterised it in 1895. Tendon wraps thicken in the distal wrists along the radius styloid fibro-osseous tunnel, where the abductor pollicis longus or extensor pollicis brevis tendons emerge. Thumb movement, as well as radial and ulnar deviations of the wrist, may be particularly painful [6]. De Quervain's tenosynovitis is most often seen in new mothers who regularly hoist their infants when their thumbs are radially abducted and their wrists are deviated from the ulnar to radial position [7]. When the frequency with which they raise the infant decreases, the resulting bilateral involvement

often resolves spontaneously [8]. Treatment options may include nonsteroidal anti-inflammatory drugs (NSAIDs), corticosteroid injections, thumb spica splinting, or a wrist brace.

Addiction: Being addicted to the internet is different than being addicted when online [10]. Addiction to online poker on a smartphone indicates more of an internet addiction than a smartphone one, given the user's preoccupation with the game itself. Smartphone gamers' addiction stems from their repetitive play rather than the gadget itself. Smartphone addiction should not be confused with the use of smartphones for gambling or other addictive behaviours [11]. One of the most common online behaviours is social networking, although there is a clear distinction between internet addiction and addiction to particular activities carried out on the network [12].

visual impact Eye fatigue, dryness, irritation, burning feeling, redness, blurred vision, and double vision are all symptoms of "computer vision syndrome," a condition brought on by spending too much time in front of a screen [13]. The National Eye Institute advises that after 20 minutes of continuous screen time, users should take a 20 second break to look at an object 20 feet away and blink frequently to alleviate dryness and strain on the eyes [14].

Neck pain: Musculoskeletal problems of the arm, neck, and/or shoulder not due to acute trauma or any systemic illness are common among technology users. Most computer-related aches and pains may be traced back to poor posture or handling techniques. A lack of attention to ergonomics while setting up one's computer and workstation is a leading source of these problems [15]. Ergonomic measures, such as excellent posture, ergonomically fit furniture, a shift towards ergonomically friendly creative device designs, and stretch exercises, may help people who work on computers for extended periods of time minimise strain and pain without negatively impacting productivity. They should also take breaks when they are reasonable in length. Working long hours in front of a computer is linked to an increased risk of developing musculoskeletal diseases [16].

Mental health: Women and young people are more likely to suffer from anxiety, sadness, stress, and poor self-esteem due to excessive smartphone usage [17,18]. Because of their lacklustre interpersonal skills, individuals feel they need to be in continuous communication with people. Irritability, disturbed sleep, insomnia, and gastrointestinal issues have all been linked to cell phone silence [19]. Numerous studies have shown that exposure to mobile phone radiation leads to adverse health effects such as altered gene regulation, hearing and vision impairment, higher levels of acid on the eye lens and cornea tissue, headache, burning feeling in the ears, memory loss, weariness, and so on [20]. Prolonged usage of mobile phones has also been linked to the development of brain tumours [21]. According to Hooper and Zhou's [22] research, behavioural issues caused by mobile phone addiction are stressful. Researchers have shown an association between daily text message volume, feelings of helplessness and social anxiety [23]. Anxious and depressed feelings about one's social interactions and one's ability to have a positive impact on the lives of others are common among heavy smartphone users because of the decreased amount of face-to-face engagement they experience. University students, according to a small but growing body of research [24], suffer from a widespread anxiety and discomfort known as nomophobia (an abbreviated form of "no mobile phone phobia") when they lose or temporarily are without their mobile phones.

This research suggests that the usage of electronic devices is significantly related to both educational attainment and gender. Male pupils are more likely to use electronic devices than their female counterparts. Whether or whether respondents have simple access to the internet and appropriate online services may affect how often they use their devices. Students in metropolitan regions also tend to utilise more technology than their rural counterparts for the same reason. The use of electronic devices has been linked to negative effects on both physical and mental health. Kids nowadays are more likely to spend their spare time glued to their screens than any previous generation. Adolescents are more prone to a variety of physical health concerns (such as headaches and sleeping disorders) due to their increased propensity to use electronic devices. Current and future generations' health depends on parents

being mindful of their children's screen time. There has to be more of an emphasis on getting kids outside and doing sports. Initiating counselling of pupils at home and in the classroom may be accomplished via the promotion of various health-related awareness programmes. School-aged youngsters need to learn effective time management skills. More research on the topic is needed to better understand the issue and develop more effective solutions for the future.

Conclusion

Thumb discomfort might be the consequence of repetitive stress injury (RSI) from using a smartphone too often. The convenience and stimulation of social networking sites may help satisfy a basic human desire for connection, but there are drawbacks to relying on them too much. To improve people's mental health, we must spread awareness about the benefits of smartphone usage in moderation and the value of social relationships. While there is no denying the advantages of contemporary technology, there is also a chance that electronic devices may have detrimental effects on the human body. Doctors need to educate themselves on these emerging illnesses. The next generation needs proper education on the health risks and ergonomic best practises of heavy technology use.

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