

# **RESEARCH ARTICLE**

# INCREASING SCREEN TIME IN CHILDREN:- A CAUSE OF CONCERN

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## Manuscript Info

# Abstract

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..... Increasing screen time in children is "a cause of concern" which means amount of time that spend by using a device with screen such as a smart phone, video games, computers, television. The concept is under significant research with related belief in digital media use and mental health. With fast technological evolution, the prevalence and unacceptable effects of excess screen time on kids have become a mounting issue worldwide. Children are more affected with this huge problem because too much screen time can make it hard for children to sleep at night, have attention problems, anxiety, and depression also, so it is a concern. Excessive exposure to screen cause myopia or squint, because lack of outdoor activity and excess screen time results myopia in children. Today's diet or physical activity of children's are affected by sedentary screen time, Because children sit for long hours and eat unhealthy food while playing video games, watching television, which cause long or short term health issues, special obesity, and heart disease. This impair brain structure and function, it can cause nausea, vomiting, irritability, mood swings. So, now this paper will discusses about its physical, mental, social, and environmental effects in children.

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## Introduction:-

The prevalence of excess screen time for children is the matter of great concern. Because of this many changes that are visible in children, some are acceptable and some are unacceptable. Children with full of imagination when they spend most of their time in front of screen some negative or positive effects on children. Previous study in 2004 from the United States, examined the accurate time and its affects according to per day for children aged one and three. In 2007, the same researchers study at the effects of the content children watched. They found a connection between watching aggressive or entertaining television such as cartoon movies and super hero movies before the age of three and an increased risk of attention problems five years later. Study in 2014 found that children aged 3 to 5 years, has not much difference between the traditional book and the electronic book with the understanding of the story book and parent's interaction with the children. However, as compare to conventional toys, the modern toys reduces the quality of play and parent-child relation. Now we will discusses about its physical, mental, social, and environmental effects in children.

## **Physical Health Effects:**

Excessive use of screen by children has led to an increase in sitting or torpid activity because most screen uses occurs while sitting. TV and video games, were once greatest contributors to screen time, but the previous decade

has seen a shift towards smart phones, tablets and other electronic devices. Children find problems with their body like physical pain due to their posture while having a long screen time. It harms there both physical activity and eating habits. Increase use of screen in children has also been shown to have a negative impact on the sleep of children. This correlation is because much of the time spent on screen for children is at night, which can cause them to go to sleep later in addition to the blue light from the screens making it more difficult to sleep. A data analysis in 2016 found that "bad time access and use of screen or electronic devices was significantly associated with inadequate sleep quantity; poor sleep quantity and excessive day time sleepiness ".So as a safeguard a parent or guardian should recommend a restricted screen time for their children

## Mental Health Effects:

Mentally, screen time distracts children from other activities like studying, extracurricular activities which leads to a decline in their developmental graph. Children also became aggressive if devices are taken of them which leads to a huge behavioral impact. Previous data from National institutes of Health (NIH) in Landmark study that started in 2018 indicates that children who spend more than two hours per day on front of screen activities achieved lower on thinking and language test. And other children who spend more than seven hours per day on screen activities having thinning of the brain cortex, which is related to thinking and reasoning act. What we can hypothesize is that screens could inhibit certain aspects of a child's development by narrowing their focus of interest and limiting their other means of exploration and learning.

## **Enviornmental Effects**:

More screen time gradually leads to spend less time with people around us and prevent us to enjoy the mesmerizing nature. This can make us less connected with people and surrounding and get us more connected with screen.

#### Language effects:

Regarding language development, it is known that a child learns language while interacting with adults during talking or playing. Unlike one-way relationship with screens, a mutual conversation with adults, which also involves emotional input and facial expressions, is much more beneficial for a child's language and mental development. According to previous studies, children who are excessive engaged on screen activities usually show lower attention or concentration in reading tasks.

#### **Emotional Impacts**:

Maximally screen time can harmonize a child's emotional behaviors in many ways. Too much trust on digital media can control their imagination power and motivational thoughts. Because of the increased screen addiction, children cannot often be cheered by nearby people, which at some point can cause irritation, anxiety, frustration, and impulsive behaviors. Which can effects the child's overall empathy level. The continuous involvement with fast moving videos or images on screen can hamper the concentration and attention level of a children as compare to reading book wherein child gets enough time to process the meaning of words or images.<sup>1</sup>

#### **Sleep Effects:**

Importantly, excessive exposure to the blue light on screen can cause sleep disturbance by inhibiting the secretion of the sleep hormone, melatonin. This can also hamper the cognitive development of a child. According to previous studies, infants can experience sleep disturbance at exposed to screens highly in the evening.<sup>ii</sup>

## Eye Effects Due To Long Time Screen:

Too much screen time can affect kids' eyes, too much time indoors can leads to myopia. It is the first problem cause by long time screen exposure. "Exposure to natural daylight is necessary to developing eyes, children's need time playing outside for their health and also their eyes." Studies have found that children who spend more time on screen are develop nearsightedness (myopia). According to researchers that UV light (providing the eyes are protected from immediate sunlight) play an important role in healthy eyes development. This eyes problem (myopia) is the common problem in children increasing day to day. Eye fatigue is second problem in children comes from spend long time on screen and other effects associated with eye strain are watering and drying of eyes, swelling around the eyes, vomiting, nausea, and headache. Squint is the also is huge condition which can be occur in future generation.<sup>iii</sup>

## **Ristriction On Screen Time:**

No screen time under the age of two.

One hour per day for the age of two to twelve.

Two hours per day above the age of twelve age.

The American Academy of Pediatrics suggest zero screen time till a child is two years old. Between 2-6 years, they suggest only one hour of interactive screen time.

Give phone, computer to children only for their study.

## Role Of Screen Time During The Covid-19 Pandemic:-

With social distancing restrict our capacity to connect and physically communicate, day by day screen time has seen a jump. And even before the COVID-19 pandemic, there were problem about what screen time is doing to our health. Actually screens are not naturally bad. Now, for many of us, they're our skylight into the world- family, friends, fitness, and even food item. But how we can make sure we have a healthy relationship with them? Here are some things to examine, from screen time strategies to amazing statistics. Both adults and kids are experiencing an increasing time in screen, but according to researchers or experts it is going to be ok. In reality, there is actually very small evidence directly connecting screen time to harm in kids. The huge problem lies in screens replacing positive activities like exercise, gaming, socializing, and sleep. Here are some important things to keep in mind.

#### **Two Screen-Free Hours Before Bed:-**

Easier to fall asleep and wake up on time if screens aside for two hours before bedtime. The "blue light" from screens interrupt the natural sleep. For small kids, it also helps to save the screens for after sleep time. For older children, device alerts can be an issue as well. Not use phone for alarm, try using a real alarm clock.

## One Media-Free Meal Per Day:-

Don't use phone or other screen during meal time, try to have one meal per day without screens. Screen time, and even watching television during meals, have been connected to eating fast food and obesity in children, as food ads for low nutrition options can influence what preschoolers want to eat. Talk or discussion during mealtime can help to shape a child's social and emotional health and relieve stress for the whole family.

Three ways to measure screen use. The amount of using screen time is just one of three ways to measure the health of technology use. The quality of the content affects your child process also the content on the screen plays a major role and in a way it helps the child to built their way of interactions.<sup>iv</sup>

## Contribution Of Ayurveda For Healthy Life And Longativity:-

Ayurveda is an ancient science that guides us, how maintaining a healthy mind and body. There are many secrets are hidden in Ayurveda for the knowledge of happy living. There is separate subject called swastvrita. In this subject, many exercises, yoga and sadvrit (good ethics) are explained which helps in good mental and health conduct. Here I am only explain these yoga and sadvrit who release eye stress, headache, insomnia and other mental and behavioral effects caused by excessive screen time spend by children.

#### For eyes stress:-

Tratak kriya(type of eye exercise) should practice for five minutes daily, Tarpan kriya (lukewarm medicated ghee is poured into the eye frame), Netra dhawan (to improve vision and clarity of the mind), proper sleep can release eyes stress and give strength to eyes, because proper sleep is a basic need of every person. In Ayurveda some medications and exercises are indicated to treat insomnia and give mental relaxation.

Surpgandha, Aswagangha Rasayana, Swarnprashan, brahmi and shankpuspi Rasayana, shirodhara (pouring oil or other liquid over the forehead), padprachalan (foot wash)before bed time, padabhyang(massage of legs) are help in sleep problem.<sup>v</sup>

#### For mental relaxation:-

Meditation, worship, Om chanting, **bhramari** (breathing exercise) sound like humming bee have natural calming effects on mind, **Anulom-vilom** (alternate nostril breathing used in yoga), it helps relaxing the mind and improve sleep.

## For physical health:

Excessive spend on screen time causes physical as well as metabolic problems in children. For improve this, some exercise are indicated in Ayurveda like; Bhujanga asana, Chankrman; Morning and evening walk at every hour

interval for 10 min may be beneficial for digestion problem and helps to improve posture effects. Surya namaskara(sequence of 12 Asanas):- It helps in improve postures, digestive tract problem, promoting flexibility to spine, neck, shoulder, arms and hands. In children, it also helps to reduce anxiety, restlessness, calm their mind and reduce obesity.<sup>vi</sup>

# **Disscussion:-**

Children are more affected as compare to adults. Huge screen time can have a long-lived effect on children whose brains and bodies are still developing and ongoing study reported form the national institute of health concluded that preteens who spent over time on screen a day had significant different development of their cerebral cortex then other children. This part of brain usually thin as people mature but the faster decrease could potentially be linked to amount spend on screen. Long lasting effects like this should be considered when trying to implement limitation for children.

# Conclusion:-

Parents should be involved in monitoring their child's screen usage and try to implement better and healthier practices by encouraging better bedtime routine, educating children about the long-live effects, and limiting the number of available screen in the environment. Utilize too much of children's time; and divert them from physical play, exercise and socialization. Children whose parents let them use screen devices to prize them for good behavior are likely to exceed the recommended screen time. Parents not allowed them from using screen devices to punish them for bad behavior are likely to exceed the recommended screen time. More than 80% children exceeded screen time with television and smartphones making major contributions. This issue has to be dealt with at both individual and social levels. Raising awareness of the high prevalence of inappropriate use of screen time use within the Indian context is essential to motivate attention and interventions for this emerging children health problem.

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