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# Behind the Retina

How does software updates and app features assits with eye strain?

# Screen-Time

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Screen time on our iPhones has been over time further integrated in our day to day life. As people use their iPhones in their everyday life it may cause side effects especially when it comes to the blue light on phones. These lights that come from iPhones as well in other apple products and smart devices can be damaging our eyes permanently if we don't take precautions and use phones in moderation. Digital eye strain is a common issue amongst screen users as it comes with a couple of symptoms such as visual and ocular. Dr. Sanchez-Ramos has problems with her eye-sight due to her spending an extensive amount of time on the screen. Because of this she then decided to conduct an experiment where she got volunteers to be exposed to different LED lights within different time frames and intensities. In this experiment, she discovered that when the eyes are exposed to harsh blue light that causes apoptosis, in other words, cell death in the eyes, and if the exposure continues it may lead to permanent ocular damage. There has been an extensive amount of research on how blue lights which are on iPhones and other Apple products that when not using special filters or glasses that help reflect the light, that it may cause a variety of issues from partial blindness to health concerns when it comes to eating and sleeping.

Since the blue light has been introduced more and it becomes stronger there has been a rise in the prevalence of insomnia. This comes from the eyes becoming overstimulated hence the brain is awake and takes longer for an individual to have a good night rest. Apple has acted upon this by implementing features such as night shift and dark mode. Night shift can be turned on at any time and you can also set a time for it to turn on every day for example around nine pm which will allow the eyes to not overwork and relax whilst winding down before sleep. When the night shift is on it the colours change from blue bright tones to colour relaxing tones. In addition to that, the ios 13 introduced the dark mode where instead of having the white background on

your screen throughout your phone you can choose black. This mode is helpful for overall reducing the brightness on the screen but there isn't much evidence supporting that it reduces eye strain.

As technology constantly develops and almost anything can be done with just using your phone in your pocket, screen time has been at an all-time high. This ranges from different ages using smart devices especially young children. Parents' main concerns online when children use devices and the anxieties that come with their child's safety online affect their health when screen time is increased. Apple has put in screen time controls that parents can set for their children. This means that parents can track and even set timers on apps or lock children out of certain apps. In doing this it allows parents to be in control of their child's safety and access on the screen.

These screentime controls are also useful for adults as well. Apple implemented the screen time feature so that Apple users can make responsible decisions and organize their time on their devices. This setting can

be accessed in settings where it tracks your screen in different categories for the week and shows on a graph where you are using most of your time then it resets for the next week. Screen time on devices will be a continuous problem but with settings such as screen time, dark mode, and night shift can assist with implementing boundaries for apple users.



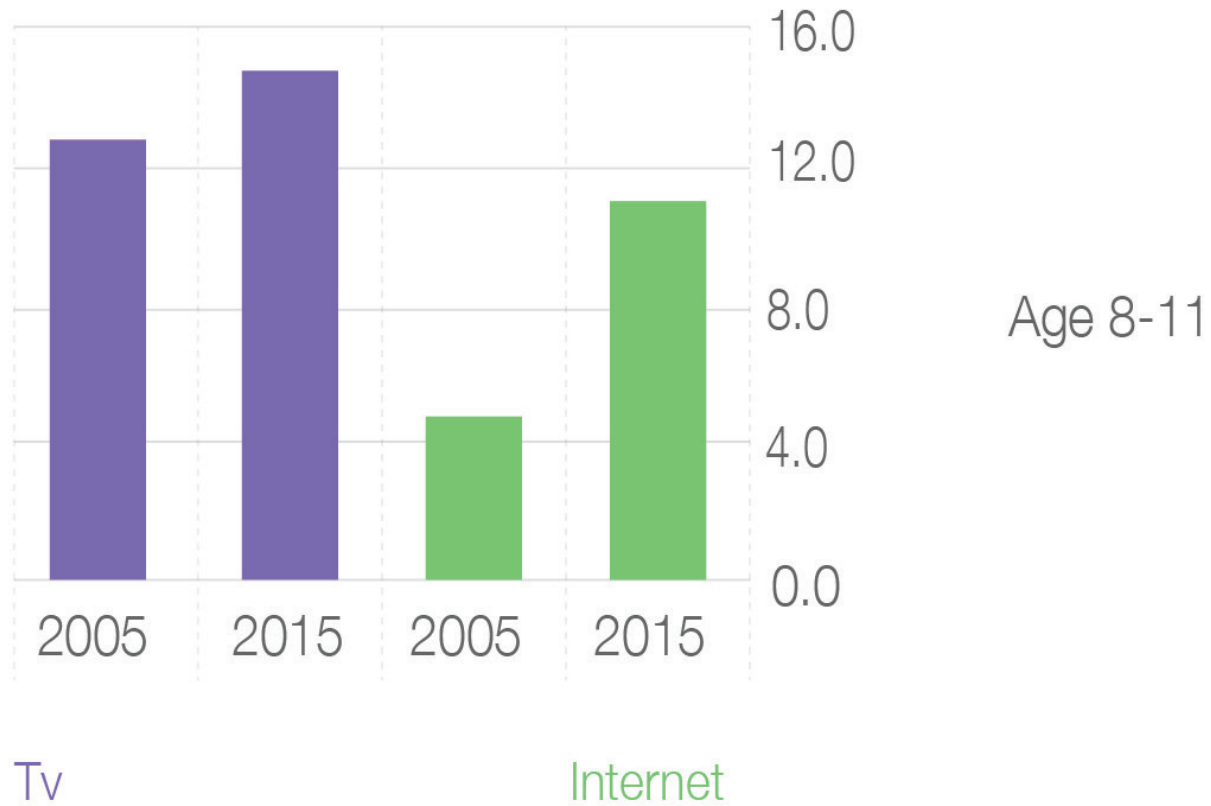Social Networking    Entertainment    Productivity

**References:**

(2015). [Ebook]. Retrieved from http://eprints.lse.ac.uk/66927/1/Policy%20Brief%2017-%20 Families%20%20Screen%20Time.pdf

College of Optometrists - The professional body for optometrists - London, U. (2019). Is iPhone's new 'dark mode' really better for your eyesight?. Retrieved 14 October 2020, from https://www.college-optometrists.org/the-college/blogs/is-iphone-s-new-dark-mode-better-for-your-eyesight.html

Here's why the iPhone's Night Shift mode is such a big deal. (2018). Retrieved 19 October 2020, from https://www.independent.co.uk/life-style/gadgets-and-tech/smartphone-iphone-apple-night-shift-mode-tim-cook-technology-silicon-valley-a8139701.html

Bogost, I. (2019). I Tried to Limit My Screen Time. Retrieved 16 October 2020, from https://www.theatlantic.com/technology/archive/2019/09/why-apple-screen-time-mostly-makes-things-worse/597397/

Prevalence of Children's time on screen

Age 8-11

Tv                    Internet