

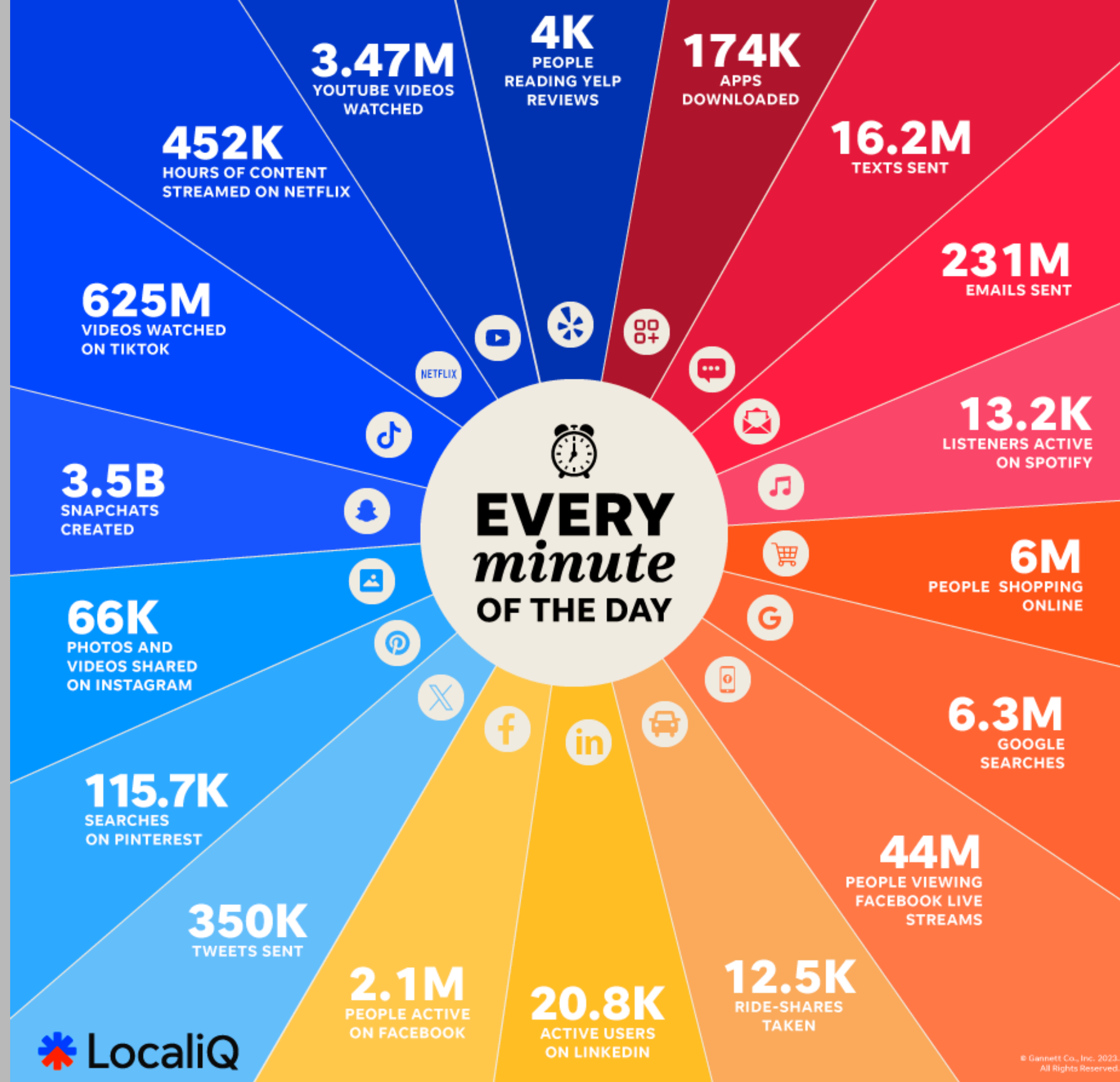
The Silent Epidemic: How Screen Time Affects Health and Social Skills in Youth

Date: July 23rd, 2024

Prepared by: Jivan Adhikari

DTSC-690





Daily Screen Time on The Rise

- *Globally, people average 6 hours and 40 minutes of screen time per day*
- *Daily screen time has increased by over 30 minutes per day since 2013*
- *The average American spends 7 hours and 3 minutes looking at a screen each day*
- *South Africans spend 9 hours and 24 minutes on screen per day*
- *Almost half (49%) of 0 to 2-year-olds interact with smartphones*
- *Gen Z averages around 9 hours of screen time per day (Howarth,2024).*

What is Screen Time??

Screen time refers to the amount of time spent and the diverse activities performed online using digital devices (Pandaya et al., 2021). These digital devices include your phone, tablets, computers, and even smartwatches.



Types of Screen Time

The screen time type can be divided into five categories:

- Social screen time (e.g., social media)
- Passive screen time (e.g., television)
- Interactive screen time (e.g., video games)
- Educational screen time (e.g., computer use for homework), and
- Other screen time where the activity did not fit into any of the categories(Sander,Tare, et al.,2019).



Screen Time and It's Effects

With the rise of smartphones and social media, we have all found ourselves spending more time on screens in recent years. Children are no exception. The COVID-19 pandemic also resulted in a huge rise in screen time as a result of lockdowns and school closures (Marshall,2024).

The excessive use of digital devices usually relates to passive screen time where users are not using them for a good cause. This affects the physical, mental, and social aspects of the individual (Paulich, Katie N.,et al., 2021)

- Physical health
- Mental health/Social aspect



Marshall, Michael. "The Truth about Social Media and Screen Time's Impact on Young People." New Scientist, 18 June 2024, www.newscientist.com/article/mg26234960-900-the-truth-about-social-media-and-screen-times-impact-on-young-people/.

Paulich, Katie N., et al. "Screen Time and Early Adolescent Mental Health, Academic, and Social Outcomes in 9- and 10- Year Old Children: Utilizing the Adolescent Brain Cognitive Development SM (ABCD) Study." PLOS ONE, vol. 16, no. 9, 8 Sept. 2021, p. e0256591, <https://doi.org/10.1371/journal.pone.0256591>.

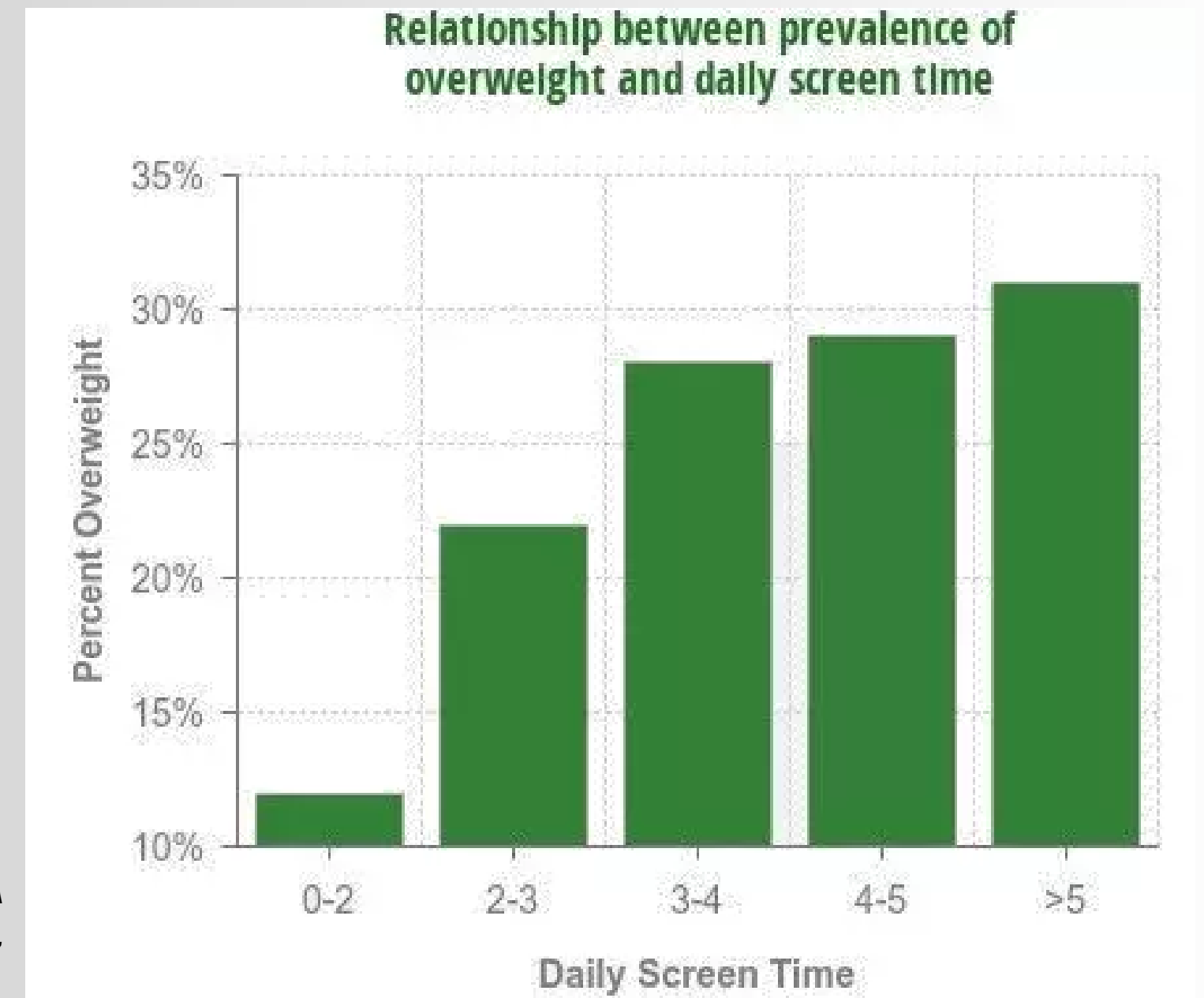
Physical Health

- **Increased inactivity:** Spending more time sitting can lead to a less active lifestyle.
- **Chronic disease risk:** Extended screen time is linked to a higher risk of diabetes, high blood pressure, obesity, and heart problems.
- **Eye & posture strain:** Staring at screens for long periods can cause eye fatigue, discomfort, and posture issues.
- **Sleep disruption:** Blue light exposure from screens can interfere with sleep patterns.
- **Posture problems:** Poor posture from prolonged screen time can lead to musculoskeletal issues.
- **Musculoskeletal discomfort:** Spending too much time sitting can cause pain and stiffness in muscles and joints (Lissak, 2018).



How obesity is linked to screen time?

The obesity-promoting effects of increased screen time can be explained by this fact that increased screen activities are associated with increased food intake; numerous studies have revealed that television watching increases motivated response to food intake and snacking behavior among children and adolescents; this is also true for video games and personal computer use. More important, several food-related advertisements in television can potentially affect children's food behaviors by promoting junk food and fast food consumption and increasing obesity (Ramírez et al.,2023)



Ramírez-Coronel, Andrés Alexis, et al. "Childhood Obesity Risk Increases with Increased Screen Time: A Systematic Review and Dose-Response Meta-Analysis." *Journal of Health, Population, and Nutrition*, vol. 42, no. 1, 23 Jan. 2023, p. 5, pubmed.ncbi.nlm.nih.gov/36691087/, <https://doi.org/10.1186/s41043-022-00344-4>.

Mental Health

Our increasing reliance on social media and digital devices has been linked to a rise in mental health concerns, particularly depression and anxiety. This digital landscape can be especially harmful for young minds, as exposure to cyberbullying and negative content can negatively impact a child's development, both in how they think and how they behave.

Depressive symptoms and suicidal are associated to screen time induced poor sleep, digital device night use, and mobile phone dependency. ADHD-related behavior was linked to sleep problems, overall screen time, and violent and fast-paced content which activates dopamine and the reward pathways (Lissak 2018).



Screen Time and Mood

Increased hours of social media use may lead to a higher percentage of individuals experiencing low well-being, including symptoms of depression, anxiety, or loneliness. This association might be due to factors like social comparison, increased exposure to negativity, or sleep disruption caused by late-night scrolling.

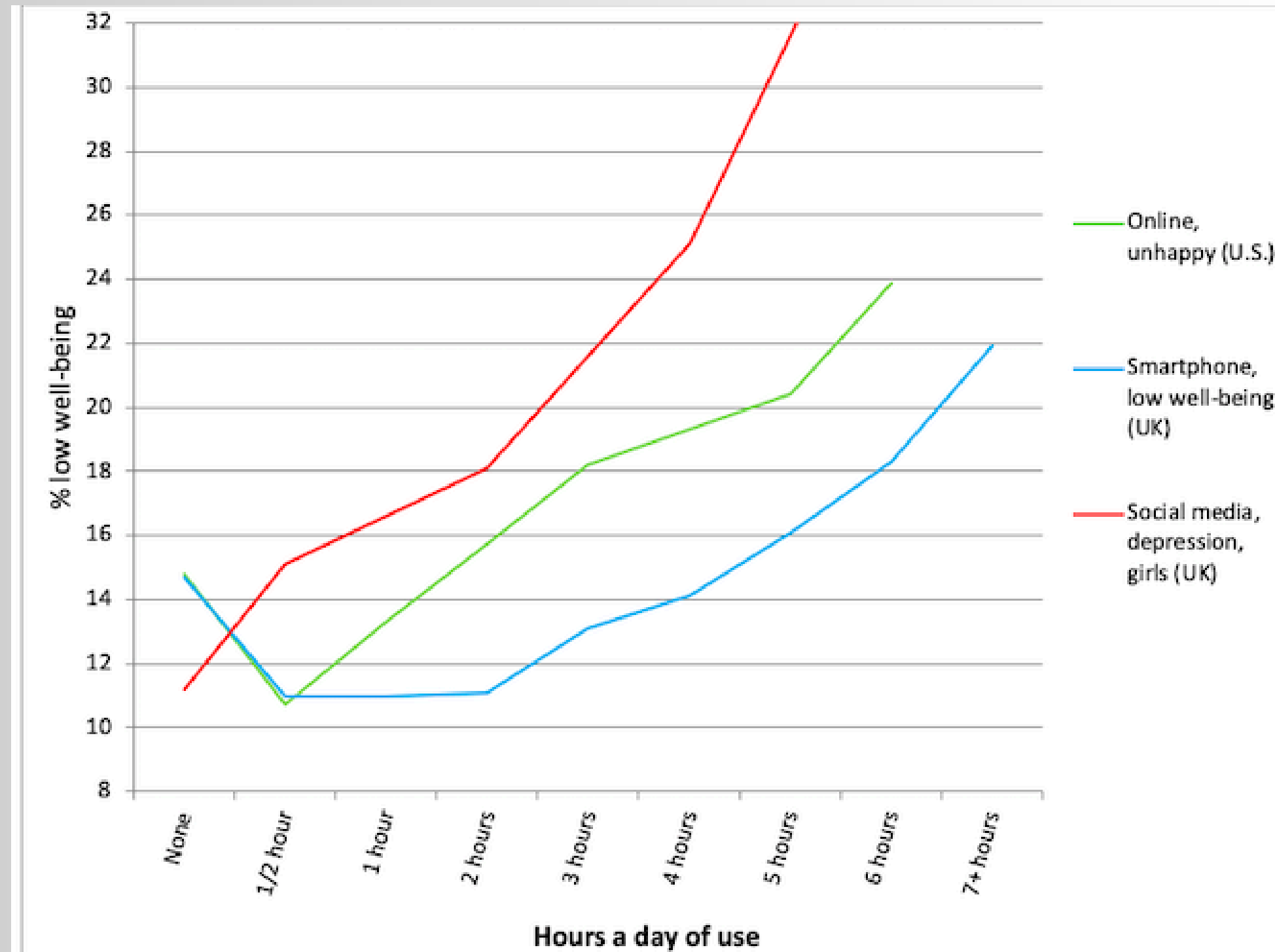
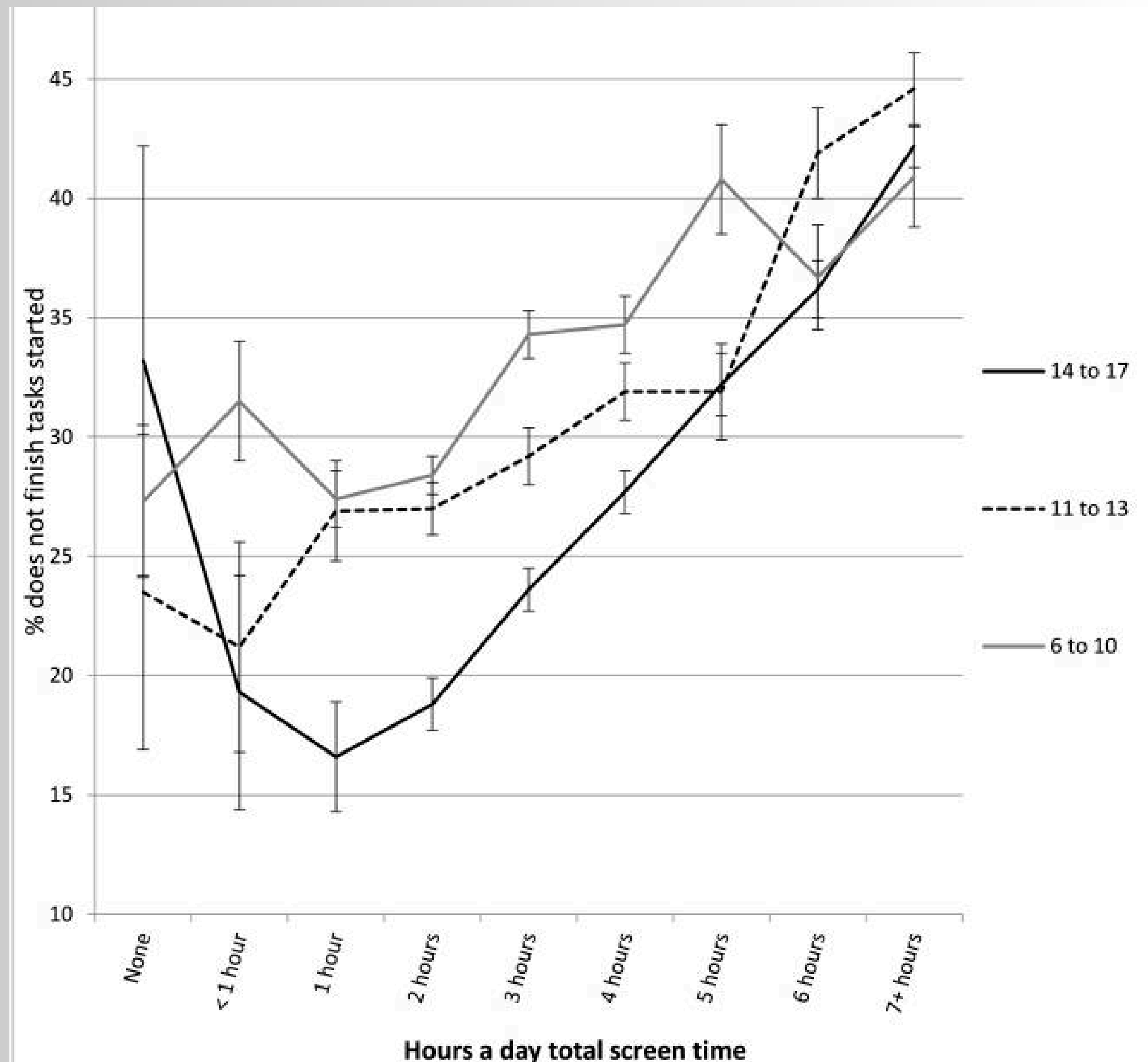


Figure: Hours a day of internet, smartphone, or social media use and well-being. Sources: [Twenge & Campbell \(2019\), Psychiatric Quarterly](#); [Kelly et al \(2019\), Lancet eClinical Medicine](#).

Productivity vs Screen time

Excessive screen time has significantly impacted people's productivity. Many individuals find it challenging to focus on tasks due to constant digital distractions. As a result, productivity levels have notably decreased.

After 1h/day of use, more hours of daily screen time were associated with lower psychological well-being, including less curiosity, lower self-control, more distractibility, more difficulty making friends, less emotional stability, being more difficult to care for, and inability to finish tasks (Twenge et al.,2018)



Is Social Media Linked to Rising Suicide Rates?

The past decade has seen a rapid explosion in social media use. While the exact cause-and-effect relationship remains under investigation, some research suggests a worrying trend: a rise in suicide rates coinciding with this increased exposure. This correlation has sparked concern that social media may be playing a role in this troubling increase.

This study followed 500 adolescents for 10 years to see if screen time was linked to suicide risk. The study found that girls who used a lot of social media or TV in early adolescence and then increased their use over time were more likely to be at risk for suicide in emerging adulthood. The use of entertainment apps was risky for girls while reading apps were risky for boys. Additionally, video game use (for boys) was associated with suicide risk when cyberbullying was also high (Coyne, Sarah M, et al., 2021)

Social Impacts

Excessive screen time has been linked to social issues like decreased face-to-face interaction, shortened attention span, and feelings of loneliness.

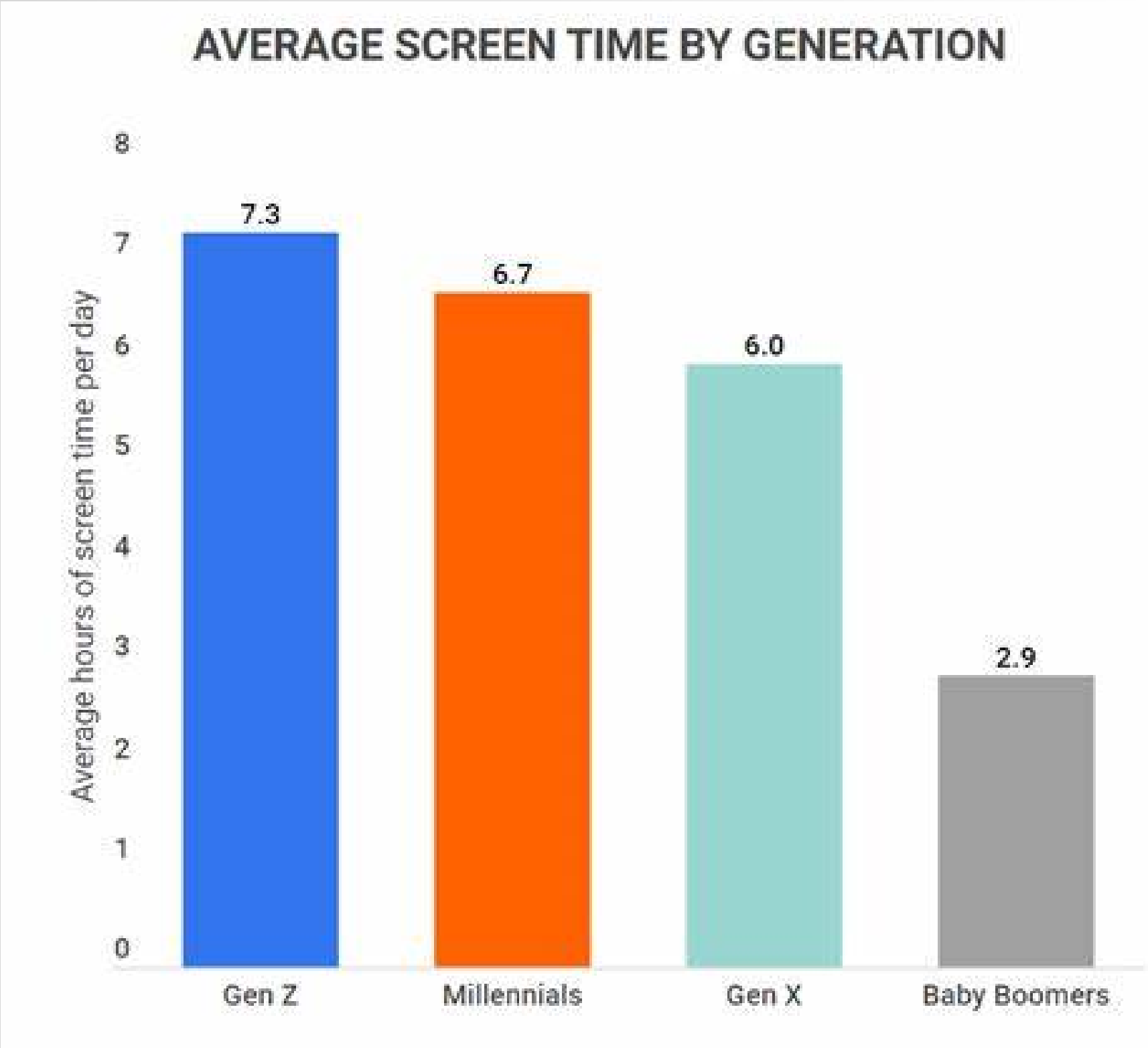
Screen time has also been associated with attention problems; one study utilized a sample of French students to examine the relationship between self-report screen time and self-perceived attention problems, including attention-deficit hyperactivity disorder (ADHD). Researchers found a significant association between screen time and total score of self-perceived attention problems and hyperactivity levels (Paulich et al.,2021)



Generational Screen time and Social Impacts

Social media has become a dominant force for Gen Z, with charts suggesting a surge in screen time. However, this doesn't automatically signal the demise of real-world interaction. Gen Z might be masters of both digital and in-person social spheres. The true worry lies in excessive screen time potentially replacing face-to-face interactions, hindering the development of crucial social skills. This could have a ripple effect on mental well-being

Younger generations spend exceptionally long hours staring at screens when compared to older generations. For example, Baby Boomers have an average daily screen time of only 2 hours and 54 minutes (Flynn,2023).



Ways To Minimize

There are several research done to how to get away from screen of any devices. Several devices has screentime log and screen time limit features which could potentially help to reduce the hours of spending in digital devices.

- Manage your feed: Unfollow accounts that promote negativity or unrealistic beauty standards.*
- Take breaks: Schedule regular digital detoxes to disconnect and recharge.*
- Set boundaries: Limit social media time and silence notifications to be present in real life.*
- Seek real connections: Replace scrolling with activities like spending time with friends or pursuing hobbies (Aubrey,2023).*

Thank you.

