Ensuring Optimal Screen Time in Children (0 to 11 Years): Hacks and Heuristics

MEENAKSHI VERMA*, SUNEET KUMAR VERMA†

ABSTRACT

Excessive screen time has emerged as a significant threat to child health. This communication lists various hacks and heuristics that can be used for children of varying age groups, to optimize their screen time. This information is useful for all health care professionals who manage children and/or counsel their patients.

Keywords: Child health, counseling, digital health, pediatric health, psychology, screen time

Imagine losing your phones for a day! Hasn't even the thought of it created a chaos in your mind already? So, why blame our young generation for feeling the same when they are denied access to their screens? Just think about it.

It's fortunate for us to be living in an era where materializing our thoughts is just a finger click away! The younger generation is not an exception though. They have equal rights to experience this magic wand called mobile phone. This is, in fact, the most inevitable invention of this modern era. Denying the children of this 'new normal' would only make the things worse. Moreover, the forceful digitalization of education during the COVID pandemic has strengthened this normality curve further.[1]

The need of the hour is to devise ways to let these screens turn into a helping tool in their overall development and at the same time to reinforce the incorporation of humanized real world intricacies. With the help of hacks and heuristics (summarized in Table 1), we can raise a child into a real human who has imbibed the technology driven development with that realistic touch we have ever wanted. However, children less than 2 years of age, need to be tackled with a perspective different from others, with regard to the screen use.

*Consultant Pediatrician, Dept. of Pediatrics, Sparsh Clinic, Zirakpur, Punjab, India
†Consultant Physician, Dept. of Medicine, Alchemist, Hospital, Panchkula, Haryana, India; Sparsh Clinic, Zirakpur, Punjab, India
Address for correspondence
Dr Meenakshi Verma
Consultant Pediatrician, Dept. of Pediatrics, Sparsh Clinic, Zirakpur, Punjab, India

AGE GROUP 0 TO 2 YEARS

An infant is a naïve human body who is yet to acquire the basic life skills. Screens are increasingly being used by parents as a breather as they can keep the baby engaged for as long as needed; but the off-screen

Table 1. Hacks and Heuristics to Ensure Optimal Screen Time

Age group 0 to 2 years
- Zero screen time
- Read story books out loud
- Face-to-face interaction

Age group 2 to 7 years
- Timed and disciplined introduction of screen time
- Family screen rules
- Screen-free zones
- Separate screen routine
- Co-view, co-engage, co-play
- Pre-sleep ritual

Age group 7 to 11 years
- Screen time literacy
- Set an example
- Read books
- Partnership
- Parenting controls
- Probing
- Choose interactive content
- End time notifications
- Digital literacy

experiences are definitely the mainstay for attaining basic social and cognitive skills. The world's leading brain scientist Patricia Kuhl had studied the brains of thousands of babies and inferred that the difference in learning from a machine and from a live human being is extraordinarily significant.[2] Perhaps this is why the World Health Organization (WHO) recommends no screen time for babies under 2.[3] At this age, screens hijack their attention span, divesting them of the essential stimuli from the outside world needed by their sensitive brains.

Instead of giving them screens to keep them engaged, we must devote our time in reading aloud stories to them. Their naïve brains would process the spoken words coming live from humans better than that from the on-screen images. Face-to-face interaction should replace the face to screen interaction. That's the only way an infant learns to understand non-verbal gestures. "Until babies develop language skill", says Charles Nelson, a Harvard Neuroscientist, "all communication is non-verbal, so they depend heavily on looking at a face and deriving meaning from that face. Is this person happy with me or is upset with me?"[4] This skill of reading human emotions cannot be acquired by exposure to screens. In spite of this knowledge, there are certain moments when relying on mobile become unavoidable, especially in today's age. Just make sure to control the content and make efforts to engage with them even while they are watching.

AGE GROUP 2 TO 7 YEARS

For children 2 years and above, most of the basic social and cognitive skills have already been attained. Introducing the screen at this time, in a timed and disciplined manner, can actually help them get well versed with the technological advances.[5] A balance however needs to be maintained between screen time and other activities to maintain a healthy lifestyle. Certain strategies need to be followed not only by the child but by the family as a whole.

Family screen rules must be abided by all the members of the family, especially until the child sleeps. Surpassing the set screen time of 1 hour daily must hold a punishable consequence for all. Certain *screen-free zones* at home, like the dining area, the bed, the play area, allow the child to understand the family values and the importance of face-to-face interactions. For that matter, displaying *screen-free zone* stickers at these areas inculcates a sense of compulsive discipline. One must avoid giving the control of gadgets entirely in hands of children because that would let them prematurely master the art of using and manipulating the gadgets, which can turn into a cognitive disaster for them. The screen timings should not be used as a reward for their good academic performance or for eating healthy food. No reward holds a better place in their lives than hugs and kisses for showcasing 'good manners'.

Setting a *separate screen routine* is recommended so as to avoid any cognitive association of screen with meal time or other daily routine activities in the mind of the child. The parents must *co-view, co-engage and co-play* with the child during this screen routine time to ensure their control over the content the child is being exposed to. Lastly, a *pre-sleep ritual* must be followed invariably every day, a time which must be reserved for the family fun together. Keep the hour prior to the designated sleep time reserved as a fun time together with your child, a no-screen time, a time of cuddling, sharing each other's day, performing light yoga, listening to music, playing a musical instrument, packing the school bag together, a time which the child would definitely look forward to daily.[6]

AGE GROUP 7 TO 11 YEARS

Now, this is the most crucial age during which a child is vulnerable to the technology trap. Apart from the above-mentioned strategies, the additional and the most effective way to prevent the same for children above 7 years of age is to *talk to your child*. Explain to your child the dangers of too much of screen time and keep reinforcing the same. He or she deserves to know why he or she is not being allowed to watch television or mobile for long. *Setting an example* yourself will convince them more to follow the suit. Children are great imitators, so give them something great to imitate. Manage your own screen time first. *Reading books* is another good alternative to keep their thoughts departed from the screens. There is nothing better than inculcating a habit of reading books yourself if that is what you want for your child.

Partnering, Parenting and Probing are the three interconnected P's you must apply while your child is watching mobile or television. Partnering with the child while he or she is playing a video game would increase their self-confidence. This would further strengthen your mutual trust. This would let you monitor the content and the type of game, thus, avoiding the existing online game traps. So, staying as a partner you can apply your parenting skills stealthily and can probe into the matter wherever required. It is mandatory to use *parental controls* to block and filter all

the inappropriate internet content. *Preview* each and every program, games and apps before allowing your child to view or play. *Choose interactive content or video games* that keep your child's minds active and engaged rather than those that just require swiping or staring the screen. Start giving *end time notifications* way before the actual end time so that the child gets prepared beforehand and the sudden switching off the screens doesn't create a fuss. Encourage *digital literacy*[7] by explaining to your child about the content you haven't approved or those without filters or about the suddenly popping up inappropriate advertisements. Explain to them with examples, various cyber-crime incidents that have happened.[8]

SUMMARY

Growing into a competent human being, capable enough to lead a successful life at par with the existing technology, has remained a constant goal for children of all times. Today's technology driven world demands an additional constitutional reform in terms of right to use the gadgets by children in an age appropriate manner and in accordance with the required developmental stage of the child.

The hacks and heuristics that we share in this article will go a long way in ensuring that this right is met, in a responsible manner.

REFERENCES

1. Trott M, Driscoll R, Irlado E, Pardhan S. Changes and correlates of screen time in adults and children during the COVID-19 pandemic: a systematic review and meta-analysis. EClinicalMedicine. 2022;48:101452.
2. Kuhl PK. Early language acquisition: cracking the speech code. Nat Rev Neurosci. 2004;5(11):831-43.
3. World Health Organization. Guidelines on physical activity, sedentary behavior and sleep for children under 5 years of age. World Health Organization 2019. Available from: https://apps.who.int/iris/handle/10665/311664. Accessed August 19, 2022.
4. Bick J, Nelson CA. Early experience and brain development. Wiley Interdiscip Rev Cogn Sci. 2017;8(1-2):e1387.
5. Straker L, Zabatiero J, Danby S, Thorpe K, Edwards S. Conflicting guidelines on young children's screen time and use of digital technology create policy and practice dilemmas. J Pediatr. 2018;202:300-3.
6. Gupta P, Shah D, Bedi N, Galagali P, Dalwai S, Agrawal S, et al. Indian Academy of Pediatrics Guidelines on Screen Time and Digital Wellness in Infants, Children and Adolescents. Indian Pediatrics. 2022;59(3):235-44.
7. Farias-Gaytan S, Aguaded I, Ramirez-Montoya MS. Transformation and digital literacy: systematic literature mapping. Education and Information Technologies. 2022;27(2):1417-37.
8. Phillips K, Davidson JC, Farr RR, Burkhardt C, Caneppele S, Aiken MP. Conceptualizing cybercrime: definitions, typologies and taxonomies. Forensic Sci. 2022;2(2):379-98.