### SCREENS AND LITTLE ONES

ANSWERS TO PARENTS' BIGGEST DIGITAL DILEMMAS FOR 0-2 YEAR OLDS

BY DR KRISTY GOODWIN





\*

# About Dr Kristy

Dr Kristy Goodwin is a digital parenting expert (and mum who's endured her own kids' technotantrums!). She's a speaker, researcher and the author of Raising Your Child in a Digital World. Kristy takes the guesswork and guilt out of parenting 'screenagers' and is a media commentator with a gift for translating research into practical and digestible information for parents, educators and health professionals. She arms parents with facts, not fears, about the impact of 'digitalised childhoods' on young children (without telling parents to digitally amputate their kids by banning the iPad, or unplugging the TV). Kristy's on a mission to bust the myths and misinformation about young kids and screens by giving parents and professionals simple information and practical tips for raising balanced and healthy kids in the digital world.

**Dr Kristy's book Raising Your Child in a Digital World** helps parents of 0-12 year olds ditch the guilt and guesswork associated with raising young kids in the digital age.



an

**GRAB YOUR COPY HERE** 

# Your baby's brain in the early yearswhat you must know

Typical brain development is determined by the combination of your child's genes and the experiences they encounter. In the first three years of life brain development is predominantly focused on the: (i) sensory and (ii) motor regions of the brain (the posterior brain). This is why babies and toddlers move a lot (and why we shouldn't expect them to sit still in a cafe!), why they touch things and put things in their mouths. The posterior part of the brain is considered a primal part of the brain, because it was responsible for our human evolution and allowed us to survive. (For example, it's where your baby's orienting response originates. This explains why they startle when they hear a loud noise, or turn their head to watch the TV – their attention is alerting them to a change in their environment and their senses are heightened. The orienting response helps to keep them safe.)

Over the next three to four years, with the right types of experiences, typical brain development shifts from the primal region to the prefrontal cortex (this part of the brain is located behind the front of the skull). This is the part of the brain where higher-order thinking skills like impulse control, working memory and mental flexibility are developed. The prefrontal cortex is sometimes referred to as the CEO or airtraffic control system as this is where executive-function skills are recruited. This part of the brain doesn't fully develop until the early twenties for females and late twenties for males (yes, this parenting gig is a long-term contract!).

This progressive and predictable pattern of development of the brain is one reason why some health professionals and educators are concerned about the impact the early introduction of screens might have on a child's development. In particular, there are concerns that our noisy, busy digital world may adversely impact our children's attention and



overstimulate the sensory region of the brain before the prefrontal cortex has adequately developed. There are also mounting concerns that a screen-saturated childhood will also result in an under-developed motor region of the brain, as kids aren't having as many opportunities to explore how their bodies work. In addition, our little ones are often experiencing a sensory overload (flashing, music, animations, videos, graphics) before their brains are ready to process this type of input. There are also possible concerns (not yet substantiated by research), that the premature introduction of screens may overload babies' and infants' nervous systems and cause a hyper-arousal state.

It's important to note, that we're still at the early stages of research that examines how screens and digital technologies are intersecting with children's health, learning and development. What we do have, however, is a consistent body of research that tells us exactly what babies' and infants' developmental priorities are when it comes to the optimal health and development.

DRKRISTYGOODWIN.COM

### How can screens interfere with infants' development and health? What are the risks?

Screens aren't necessarily toxic for little ones, but they have the potential to adversely impact your child's health and development, if:

// they're introduced too early; or // if they're used excessively; or // if they're used in isolation (babies and toddlers should really spend very limited time alone with screens).

Basically, screen use has an opportunity cost- it displaces opportunities for child to engage in other activities that may be more helpful for their development. Given that babies and toddlers have limited waking hours each day (if we're lucky), we need to make sure that screen-time doesn't interfere with or displace their basic developmental needs.

For example, screens can impact on children's relationships and attachments they form with their caregivers, if their care-givers are always digitally-distracted. Screens can also impact on children's sleep quality and quantity and can erode opportunities for physical movement.

At this stage, we're conducting a bit of a living experiemnet in some regards. We don;t yet know what they long-term risks.

#### Is screen time okay when they're under two?

Most global recommendations regarding screen time discourage screen use with children aged under two. And this isn't necessarily because screens are 'bad' and will harm your child's development per se, but it's based more on concerns of what little ones are missing out on when they're using a digital device: it's the opportunity cost.

Given that infants have limited waking hours we have to ensure that the time spent awake is put to good use. We know that approximately 85% of a child's brain development occurs in the first three years of life. So it's imperative that their basic developmental needs (like moving, using and hearing language, playing and forming relationships) are not hampered by the use of screens.



If you elect to use screens with your little one try, where possible, to use screens with them: watch TV and talk to them, flick through photos on your phone and discuss what they're looking at. Minimise the amount of time where technology is used as the 'digital baby-sitter' (Confession: raising my hand here to say that I've certainly been thankful that Play School was available to entertain my little ones from time to time, when I had an important deadline to meet, or a phone call to make. We just need to ensure that we're not always relying on screens to pacify or entertain or distract our little ones, as they'll soon form a digital dependence and always expect to be handed your smartphone, or tablet whenever they're bored, upset, frustrated etc).

DRKRISTYGOODWIN.COM

### How much screen time is okay for under twos?

There's no safe or ideal age at which to introduce technology to little ones. There's absolutely no hurry to do so either, despite what the marketing claims on children's techno-toys, apps and gadgets suggest.

I advise parents to err on the side of caution. The neuroscience confirms that in the early months and years of life, young children really only need simple things: lots of exposure to language (including plenty of serve-and-return interactions with adults), combined with lots of opportunities to physically move, explore their world, build strong attachments (relationships) with parents and primary carers and see what their bodies can do. Screen time can potentially interfere with these basic developmental needs.

I need to have a shower/make a phone call/ I just need 15 minutes to myself, is it okay if I use a screen with my baby?

Complete digital abstinence for little ones is almost impossible (and unnecessary) in this screen-saturated world in which we find ourselves. We don't need to blindfold our babies when they're near screens and nor do we need to try and completely avoid screens. If you do want to use a screen with your little one try and co-view, where possible (i.e. use the screen together as opposed to always using it as a digital pacifier).

Sometimes using the iPad whilst you have a shower, or make an important call, is the only option (you've probably already tried to get your little one to play with the saucepans, or blocks). So using screens, for very small amounts of time (I suggest no more than 10-15 minutes at a time) is unlikely to cause long-term developmental concerns. If you want to use a screen for your little one select high quality, educational media (whether it's an app, or TV program look for slow-paced, repetitive, language-rich types of experiences), try to help your little one make meaning from what they've seen on the screen by talking about it afterwards and connecting what they watched to the real, 3D world and only use the screen for very short periods of time (even if your child gets upset when you turn it off).



## How much screen-time is safe for kids aged 0-2 years?

### "Young babies and children need laps, not apps!"

Now before you fret or worry that you've exposed your baby to TV or other screen time in the first two years, rest assured that a little bit of technology is unlikely to be harmful. Small amounts, of around 10-15 minutes/day is likely to be fine. I simply encourage parents to limit the time children under two years spend on screens and resist the pressure to introduce screens early in life to give your child an educational advantage (there's currently no research to substantiate this claim whatsoever at this stage).

If you want to use technology with your little one, try to use it together. Use it as a way to cement your relationship with them and immerse them in language. For example, watch videos and photos from smartphones and discuss what's observed. Chat to Grandma over Skype. Explore new words or ideas, sounds and images online. Try to connect what they're watching on DVDs and TV to their real life and experiences.

We need to make screen time a social and interactive experience with our child and ensure that time spent with screens doesn't replace or substitute time spent with us or another caregiver. We need to minimise the time that we rely on technology as a digital baby-sitter (and yes, it's okay to do this every now and then too).

What sorts of things can I do with my little one and a screen and not worry that it's 'bad' for them?

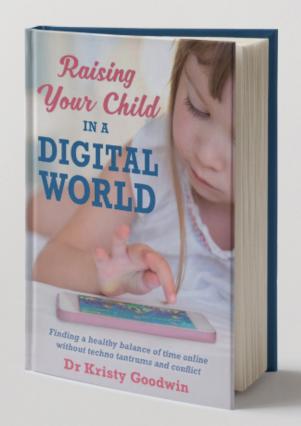
Video-chat technologies like Skype or FaceTime are great as it exposes little ones to language and develops serve-and-return interactions. Also looking at photos and videos, reading book apps are other developmentally-appropriate tasks. Basically, anything that develops play and language is encouraged.

The research tells us that children typically don't make meaning from a screen until at least 18 months of age, because of a phenomenon called the 'video deficit effect'. So they need you to help them make meaning from what they see on a 2D screen and relate it to their 3D world..

DRKRISTYGOODWIN.COM

Let me take the guesswork and guilt out of parenting young children in the digital world...





#### RAISING YOUR CHILD IN A DIGITAL WORLD:

FINDING A HEALTHY BALANCE OF TIME ONLINE WITHOUT TECHNO TANTRUMS AND CONFLICT

By Dr Kristy Goodwin

#### **GRAB YOUR COPY HERE**

# Are there any times I should avoid using screens with my little one?

Yes, there are specific times where parents should try and avoid screens altogether:

*II* **Sleep and naps-** the blue light emitted from smartphones and tablet can suppress your child's production of melatonin and this in turn can cause sleep delays. Avoid using screens at least 60-90 minutes before nap or sleep time. Also keep devices out of bedrooms, to avoid screens interfering with your child's sleep cycles and prevent them from waking up early to get their digital dose.

// Before and during mealtimes- screens can overload your little one's sensory and nervous systems and cause them to be hyper-aroused. As a result, this can adversely impact on their eating. Learning to eat recruits many of your child's senses (sight, taste, touch, smell) so if their sensory system is bombarded from using screens, it makes it difficult to get your little one to eat. TIP- allow your child to empty their sensory cup before mealtime, if they've used a screen. For example, if your little one watches TV whilst you make dinner, allow them five minutes to go outside and use the swing, or play with saucepans before they eat their meal. It allows their nervous and sensory systems time to calm down.

*II* **Digital pacifier-** kids need to learn emotional regulation skills (and this is a BIG task and one of the reasons why our kids have tantrums). If they're always given a digital device to avert a tantrum or to help them cope with feeling bored or frustrated, they'll quickly learn (and expect) to pacify themselves with a screen. Sometimes there are situations, where screens can be a welcomed distraction, but kids can quickly form an unhealthy digital dependence. So be mindful about always relying on the screen to help your child deal with their big emotions!

*II* Avoid rapid-fire, fast-paced screens before daycare- these types of high-action screen activity like fast cartoons, or TV programs can arouse the brain and cause a general hyper-aroused state.

### Will my child fall behind if I don't let them use technology?

There's no research evidence as yet to indicate that there are educational or social advantages of introducing screens to babies or toddlers. Instead, we do have a comprehensive body of research that tells us that babies and infants have unchanging developmental priorities. These basic developmental needs must be met each day to ensure optimal health and development (such as relationships, language, sleep, play, movement, nutrition). If screens are used excessively, or prematurely, they can potentially derail or harm a baby or toddler's development.