

Dr Kristy
GOODWIN

*Stop Screens
From Sabotaging Sleep
Summary Sheet*



OVERVIEW

Sleep is critical for our kids' and teens' physical health, mental wellbeing, learning and general mood. Yet, many children and teens aren't getting a sufficient amount of sleep and/or aren't having good quality sleep. This is having major implications on both their health, wellbeing and learning.

The current sleep crisis facing young people



25% OF TEENAGERS REPORTED SUFFICIENT SLEEP ON SCHOOL NIGHTS¹



20% OF TEENAGERS FELL ASLEEP IN CLASS AND 18% WHILST STUDYING²



THE AUSTRALIAN CHILD HEALTH POLL REVEALED THAT ALMOST HALF OF ALL CHILDREN (43%) USE DIGITAL DEVICES BEFORE BEDTIME AND ONE IN FOUR OF THESE CHILDREN (26%) REPORT HAVING SLEEP PROBLEMS



STUDIES HAVE SHOWN THAT 70% OF 14-YEAR-OLD GIRLS GET INSUFFICIENT SLEEP, MOST OF THEM RECORDING FEWER THAN EIGHT HOURS/NIGHT³



ABOUT 15% OF TEENS SLEEP FOR ONLY FIVE HOURS EACH NIGHT (8-10 HOURS/NIGHT IS RECOMMENDED)



45% OF TEENS AGED 14 TO 16 REGULARLY SENT TEXTS AFTER 3AM⁴



54% OF TEENS ADMIT THEIR SLEEP IS BEING INTERRUPTED BECAUSE OF ALERTS/NOTIFICATIONS⁵



51% OF TEENS SAY THEY ARE WAKING UP TO CHECK SOCIAL MEDIA⁶



36% OF TEENS WAKE UP AND CHECKS THEIR MOBILE DEVICE FOR SOMETHING OTHER THAN THE TIME AT LEAST ONCE A NIGHT⁷



75% OF TEENS AGED 14-16 SEND TEXTS AFTER MIDNIGHT⁸



STUDIES HAVE SHOWN THAT EVEN 30 MINUTES OF MISSED SLEEP CAN RESULT IN AN IQ DIFFERENCE OF TEN POINTS.⁹

¹Lushington K, Wilson A, Dollman J, University of South Australia, Declan K, University of Adelaide, Martin J, Women and Children's Hospital, Adelaide.

²Lushington K, Wilson A, Dollman J, University of South Australia, Declan K, University of Adelaide, Martin J, Women and Children's Hospital, Adelaide.

³Wahlstrom, K. L., & Owens, J. A. (2017). School start time effects on adolescent learning and academic performance, emotional health and behaviour. *Current opinion in psychiatry*, 30(6), 485-490.

⁴<https://www.smh.com.au/lifestyle/the-sleepdeprivation-epidemic-affecting-our-teenagers-is-not-all-about-screen-time-20170315-guyldw.html>

⁵Robb, M. B. (2019). *The new normal: Parents, teens, screens, and sleep in the United States*. San Francisco, CA: Common Sense Media.

⁶Robb, M. B. (2019). *The new normal: Parents, teens, screens, and sleep in the United States*. San Francisco, CA: Common Sense Media.

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⁸<https://www.smh.com.au/lifestyle/the-sleepdeprivation-epidemic-affecting-our-teenagers-is-not-all-about-screen-time-20170315-guyldw.html>

⁹Nixon, G. M., Thompson, J. M., Han, D. Y., Becroft, D. M., Clark, P. M., Robinson, E., ... & Mitchell, E. A. (2008). Short sleep duration in middle childhood: risk factors and consequences. *Sleep*, 31(1), 71-78.

OVERVIEW



Why sleep is critical



How much sleep do you kids/teens needs?



How screens can compromise sleep



Healthy sleep habits

WHY SLEEP IS CRITICAL

The brain is very active during sleep. It performs two major tasks in the brain- it prunes neural pathways (redundant information it no longer needs) and it consolidates neural pathways (information that needs to move from short-term to long-term memory). It's akin to a computer- we delete extraneous files/software and conduct regular back-up to ensure important data is preserved.

Sleep is vital before and after learning. Sleep is essential before learning to allow memory circuits to be primed to absorb new information and also acts like a save button after learning).

Sleep is vital for optimal health and development. Kids and teens need both good quality sleep and an adequate amount of sleep. Sleep promotes kids' and teens':



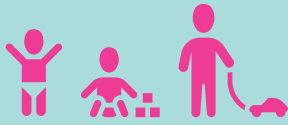
// physical health- poor sleep is associated with lower immunity, increased weight and obesity rates, poorer reaction times and increased clumsiness;



// mental and emotional wellbeing- poor sleep is associated with mental health issues such as depression and anxiety and overall mood;



// academic learning- poor sleep impacts capacity to learn, concentration and memory formation. Memory consolidation occurs in the latter two stages of sleep. Yet many kids aren't getting to these final stages of sleep because of digital interruptions. Sleep is vital before and after learning. When kids and teens sleep they send information from the short-term to long-term memory and prune away neural pathways that are no longer needed.



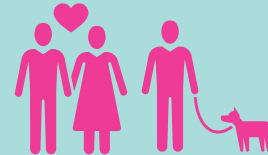
AGE: 3-5 YEARS
AMOUNT OF SLEEP: 10-13 HOURS/NIGHT



AGE: 12-17 YEARS
AMOUNT OF SLEEP: 8-10 HOURS/NIGHT



AGE: 5-12 YEARS
AMOUNT OF SLEEP: 9-11 HOURS/NIGHT



AGE: ADULT
AMOUNT OF SLEEP: 7-9 HOURS/NIGHT

HOW SCREENS CAN COMPROMISE SLEEP

Sleep is determined by (i) your circadian rhythms and (ii) sleep pressure. Digital devices can have a negative impact on kids' circadian rhythms, thereby reducing the quantity of sleep they accumulate each night.

The ways digital devices compromise sleep:

// Blue light impact- The blue light emitted from screens (especially small hand-held devices such as smartphones, tablets and gaming consoles) impact children's and teen's circadian rhythms. The blue light prevents the pineal gland from producing melatonin the sleep hormone the brain needs to secrete to make kids/teens sleepy. Inadequate production of melatonin prevents kids/teens from feeling tired and can delay the onset of sleep. Sleep delays accumulate over time and can result in a sleep deficit. This is a particular concern for children approaching puberty as their circadian rhythms biologically change- they naturally want to fall asleep later. However, this later sleep time can be exacerbated by blue light devices.

// Arousal effect- rapid-fire, fast-paced screen action can hyper-arouse the brain making delaying the onset of sleep. Playing video games, watching fast-paced TV programs, or engaging in group messages, or viewing social media can all hyper-arouse the brain and delay the onset of sleep.

// Scary or upsetting content- can psychologically distress our kids and teens before they fall asleep. Viewing scary or violent content can cause nightmares, particularly amongst younger children under 10 years of age (they're susceptible to experiencing intense fear as a result of viewing disturbing footage or images because they're psychologically unable to distinguish fiction from reality until between 8-10 years, typically). Whilst many parents wisely restrict their kids' exposure to violent movies and/or video games, sometimes we overlook the scary or disturbing images or video that

are featured on TV news programs and distributed via social media. Movie trailers and promotions are another source of content than can be distressing for kids to consume.

// Premature waking – many parents are reporting that their children are waking at earlier and earlier times to get their daily dose of digital (often before their parents wake up). In parent seminars I share a story of a 3-year-old girl who was waking up each day before her parents and using the iPad. After changing the 6-digit password they were shocked to still find their daughter on the iPad when they meandered downstairs each morning. How did she do it? She'd sneak into her parents' bedroom and use dad's thumbprint (he'd sleep with his arms hanging out of the bed) to unlock the device. Scary or genius, I'll let you decide?

// Interrupted sleep cycles- the presence of digital devices in bedrooms can interfere with completed sleep cycles. Each night kids/teens should go through five stages of sleep and repeat that cycle 4-6 times each night. If they have a device in their bedroom the alerts and notifications can interrupt the sleep cycles. Even if the device is switched off or on airplane mode, just seeing the device can be a mental trigger for the child/tee (e.g. 'I wonder how many likes my Instagram pots got?' Or 'I wonder how many Fortnite battles I missed last night?').

HEALTHY SLEEP HABITS

// Keep bedrooms as tech-free zones- the presence of digital devices in bedrooms can increase the likelihood of sleep delays and children and teens using devices (unsupervised) throughout the night.

// Establish a digital bedtime- ideally screens should be switched off 60-90 minutes before kids/teens fall asleep.

// Screen swap before bed- instead of using a smartphone or tablet before bed allow children to watch TV, listen to an audiobook, podcast or meditation app.

// Use tech tools- use Night Shift mode on iOS devices, or Blue Light Filter or Twilight on Android devices and f.lux on laptops and desktop computers. Another simple trick is to dim the brightness on screens.

// Use blue-light blocking glasses- I personally use and recommend **Baxter Blue Glasses**. If you use the promo code 'drkristy' you'll receive free express shipping on your order.





// Establish a landing zone- nominate a specific place in your home where all digital devices go at night. For example, it may be the kitchen counter, the sideboard, a laundry bench. This way, you can do a quick digital headcount before bed. But beware, many kids and teens now own a decoy phone, so be curious if your teen hands over their phone without much protest.

// Preserve green time- kids need time in natural sunlight each day to help regulate their circadian rhythms (and ward off myopia, near-sightedness). Ideally, kids should be exposed to natural sunlight between 8am-12pm each day.

// Dim the lights- help your child's or teen's circadian rhythm by keeping the house as dark as possible at night.

// Cognitive offload- help promote healthy sleep habits by allowing your child/teen to journal or write down important information. It helps to alleviate stress and anxiety and can promote good quality sleep (stops the 3am wake up in a panicked state).

// Nap- if done right, a nap can help compensate for poor quality or inadequate sleep (a nap is certainly no substitute for good quality sleep). Naps should only be taken if kids/teens don't have trouble falling or staying asleep. A nap should be no longer than 20 minutes in duration (to contain it to light sleep so it's easier to wake up) and performed around 2-3pm if possible (this is when energy typically dips). A 20 minute nap will have a positive impact on attention and concentration for up to 3 hours afterwards). Engaging in physical activity after a nap can help dissipate the groggy feeling and bolster their energy levels. You can use an online (ironic) [nap tool](#) to calculate ideal nap times.

// Avoid sleep ins- a sleep-in can actually have a detrimental effect of sleep as it compromises 'sleep pressure' at night.

// Start early- if you're lucky enough to implement these habits early in life with your children, it's much easier to sustain than what it is to implement with teens.

What if my child/teen has poor sleep habits?

// Make incremental changes- start with one small tweak and stack in more changes over time. Radical changes are unlikely to be successful.

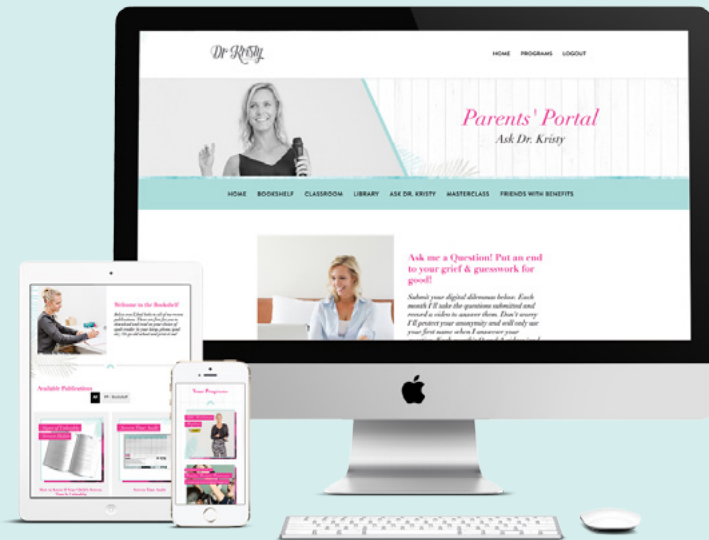
// Provide reasoning for your changes- kids and teens are more likely to accept the changes you want to make if you can provide reasoning for your decisions. In particular they love science and research.

// Crowd out unhealthy habits with healthier choices- instead of 'banning' the smartphone at night, suggest your teen has a bath at night or reads a book.

// Seek medical attention- see our GP, a psychologist, or counsellor for a thorough medical assessment.



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Let me help you find peace of mind in the digital age (without suggesting that you ban the phone, or hide their gaming console).

SWITCHED ON
Parents'
PORTAL

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Website WEBSITE

Dr Kristy Goodwin is a digital wellbeing and performance speaker, researcher, author and media commentator (and mum, who regularly deals with her own kids' techno-tantrums). Kristy translates the science and research about how technology is impacting children, teens' and adults' health, wellbeing and performance into practical advice and realistic tips. Kristy's on a mission to help us tame our tech habits, without suggesting we abstain from using technology. You can find out more about how she helps parents navigate the digital world without the grief, guilt and guesswork at www.drkristygoodwin.com, or you can find answers to your digital dilemmas at <https://drkristygoodwin.com/switched-on-parents-portal/>.



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