# Screens, Mental Health and Sleep

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### What are we talking about today?

- Screens phones, tablets, computers (TVs?)
- The impact on child and adolescent mental health, child development, and sleep
  - Not a digital expert
  - Not the ways and means of controlling the content
  - Not internet safey eg stranger danger

## What are we talking about? It's a whole new world

Some of it is great and wonderful



Screens can bring out the worst in us – bullying, abuse, addiction

Screens can bring out the best in us eg creativity, social connections

Some of it is dangerous or damaging

Like in the real world – kids need our supervision, guidance and boundaries

They need these things... They don't want them....

#### What are we talking about?

- There are no simple answers
- Need to think about the complex interaction between
  - Screens in general
  - What they are being used for
  - For how long
  - The individual child
  - The tasks of childhood and adolescence
  - The context the family; the school

#### A time of uncertainty....

- There has been an exponential growth in screens and phones over the last 40 years (especially last 20 years)
- We are only beginning to know what effect this will have on us and CYP
- Few restrictions on content; contradictory advice
- May look back on this time as the wild west of technology
- Law makers/ parents/ clinicians are playing catch up with the "digital natives" CYP

### A time of uncertainty???

Two sides to the story....

- The BMJ Aug 2015 The debate over digital technology and young people
- The Guardian Dec 2016 Toxic childhood
- Reports by RCPCH and CMO Inconclusive evidence (Jan/ Feb 2019)

Screens and social media could be damaging to CYP's mental health and development (self esteem; addiction; attention; body image). We need to act

VS

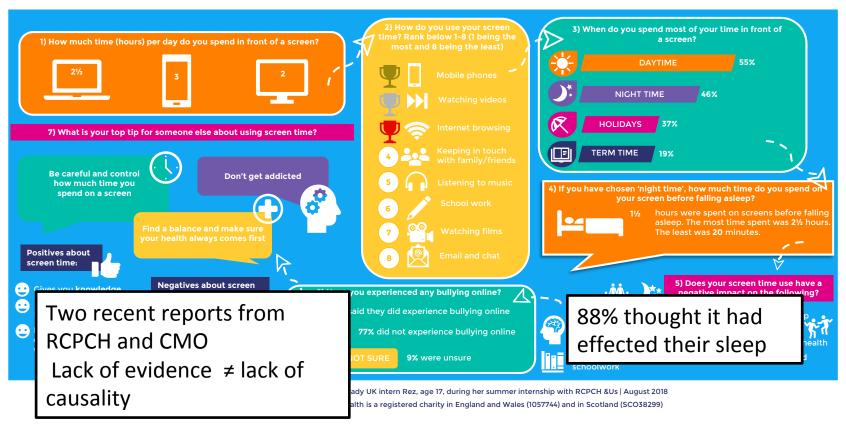
There is no definitive evidence that screens and social media are causal.

We need more research

### A time of uncertainty???

What do children and young people think about screen time?





#### Chief Medical Officer

- Not using phones and mobile devices at the dinner table talking as a family is very important for development
- Keeping screens out of the bedroom at bedtime
- Talking as a family about keeping safe online and about cyber-bulling and what children should do if they are worried
- Not using phones when crossing a road or doing any other activity that requires a person's full attention
- Making sure children take a break from screens every two hours by getting up and being active
- Policing their own use too parents proper attention and quality family ti they are happy for pictures to be sh

## A time of uncertainty??? Or a tipping



# A time of uncertainty? Or tipping point?

- Mental health crisis amongst children and Young People (CYP)
  - Presentations at A&E almost doubled between 2009-2014
  - 20-25% of 14 year olds are self harming
- My observations: internet and screen based difficulties seem to impact on the mental health of the young people in clinic
- What is the nature of that relationship
  - Causal?
  - Triggering?
  - Intensifying and amplifying?

# A time of uncertainty? Or tipping point?

"Really intensive social media (4-5 hours a day) is linked to lower well being and mental ill health amplifies those and makes them into an echo chamber"

- Richard Crellin (29/8/2018) Children's Society

#### Screens and Mental Health

What are the main issues?

#### What are the main issues?

#### - TIME



## What are the main issues? PRIVACY and EXPOSURE



### What are the main issues? AMOUNT and AVAILABILITY



# What are the main issues? Addiction and persuasive design

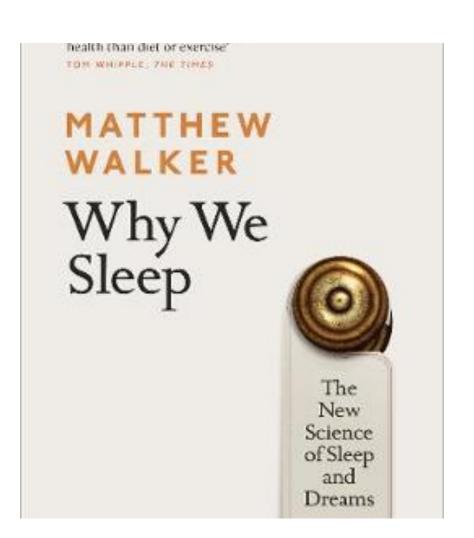


### What does this mean for child and adolescent mental health?

- More screens means less time engaging in sports, physical activity and outside (all of which are associated with good mental health)
- More private screen watching means less sense of family connection (protective for mental health)
- Content not supervised by you or mediated by you (protective for mental health)
- Stimulation and blue light associated with poor sleep
- All of these devices designed for short attention spans, and to be addictive (partial reinforcement schedule; short term gratification)
- More screen time associated with poorer GCSES (extra hour = 2 fewer grades)
- Reducing screen time associated with lowering BMI (reducing energy intake)

### The nature of sleep

- Periods of REM (mind) and non- REM (body) sleep
- Sleep window
- Circadian rhythms algae, plants, animals and all human cells
- Teens typically need 9 hours of sleep



## What are the issues with sleep and screens

- 1. Devices in the bedrooms
- 2. Blue light and Circadian rhythms
- 3. Addiction and persuasive design
- 4. Not going to bed
  - 9pm 15% of 11-15s are still communicating via social media, and 2% are still messaging at midnight. (Ofcom 2016)
- 5. Stimulation

#### **Devices**

- Studies often make a distinction between
  - TV and video (watching)
  - Computer use (browsing internet; gaming)
  - Video games and consoles (playing)
  - Smartphones (social media; communication)
- Pre adolescents and adolescents on average have 4 devices in their room

#### **Devices**

- Number of devices inversely related to delayed bedtimes, shorter sleep duration, increased bedtime resistance, and higher level of sleep disturbance
- Gender differences in use of devices F: social media; M: consoles and gaming
- Often on more than one device

#### Blue light

- Present in TV/ tablets/ laptops
- Issue with modern devices is that they are close to face
- Change the release of melatonin which kick starts sleepiness
- Confuses the circadian rhythms
- Miss your sleep window
- Blue light filters on mobiles

#### Addictive or persuasive design

- Evidence of Dopamine involvement with phone use
- 59% of adults describe themselves hooked on their smartphones
- Sigman argues that because children's brains are malleable screen use changes neural pathways and brain structures to create a future susceptibility to addiction.

### Addictive or persuasive design

- "It would defy common sense to argue that [high levels] of [iPhone] usage, by children whose brains are still developing, is not having at least some impact....It is also no secret that social media sites and applications for which the iPhone and iPad are a primary gateway are usually designed to be as addictive and time-consuming as possible."
- Leading investors in Apple in a letter to the board
- Perhaps to avoid future law suits?

# Minecraft – progressing "up" the gaming tree?

- Entry level: Single player off line "creative" like on screen lego.
- Moderate level: "Survival" mode more scary
- Online: With others in your wifi (eg 2 friends playing together) or via an external server with players all around the world.
- Linked to YouTube videos watching others play minecraft; adult humour
- Likely to have benefits: Hand eye co-ordination; creativity; spatial awareness
- However, most parents find its like crack cocaine for kids...

#### Video- game addiction...

- Something you are unlikely to hear: "Mum I'm just getting off minecraft now to play outside/ read a book/ play with my friend"
- What do we mean by addictive? withdrawing from social or other activities; getting in the way of eating, studying, normal life; experiencing mood disturbance when denied it; lying; using it to escape feelings.

#### Watching alone

- Its very different watching something on our own compared to round a family TV - physical contact; family connection; chance to discuss; share values; reassure anxieties; turn off.
- Isolating event psychologically teenagers are egocentric - get sucked into their solitary drama.
- When other teenagers are the only influence; they feed off each other and can replicate and increase the drama exponentially

# What are the issues with sleep and screens – eg Netflix

- 1. Devices in the bedrooms- watching alone, not with family; multiple devices on the go at once
- 2. Blue light and Circadian rhythms close to face; miss sleep window.
- Addiction and persuasive design one episode follows next
- 4. Stimulation maybe upsetting, exciting, thought provoking
- 5. Not going to bed

#### Watching

- 13 Reasons to Die/ To the bone on Netflix
  - by the time the schools and parents knew about it, all the teenagers had watched it
  - Damaging because it gave method of suicide; scary and upsetting; but also gave a narrative about suicide which is appealing to teenagers

#### Porn

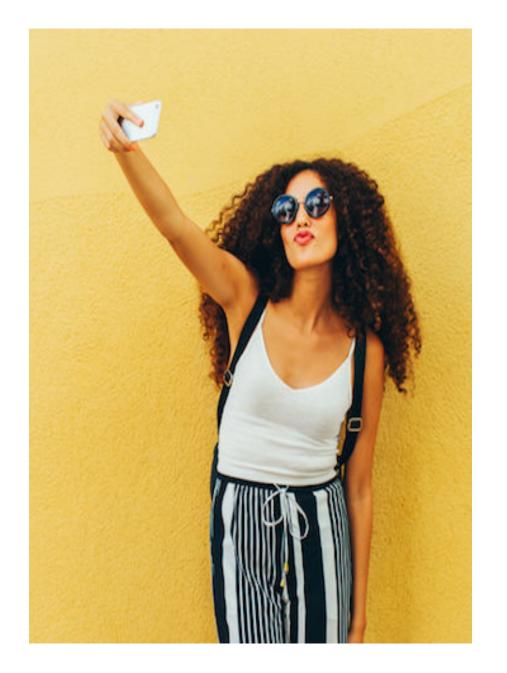
- Range; choice; frequency; appropriateness makes it damaging.
- Boys learning about sex from porn is like them leaning about how to drive a car by watching Top Gear

#### Social media

- Concerned about what impact this is having on young girls
  - Amplifying girl drama escalates as they get tired
  - Sharing self harm
  - Obsession with food, fitness and fashion

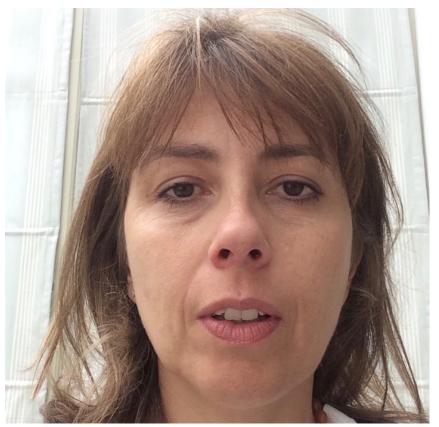
#### Standard selfie image

- Cheeks sucked in
- Lips puckered;
- Taken from above (ok to have a big head)
- Breasts further forward than hips and thighs (learning about perspective)
- Thighs falling down if possible
- Self sexualisation of children and young girls



### Snapchat Beauty filter

#### **Before**



#### **After**



#### Stimulation

- Often emotionally stimulating content
  - Scary
  - Adrenaline
  - Information overload
  - Upsetting
  - Triggering
  - Girl drama
  - Wired
  - FOMO or Hurt at missing out



#### Computers - Homework

- Very difficult to access the right information at a developmentally appropriate level
- In my opinion, teachers should give weblinks
- Some great stuff out there for learning
- But if kids are online or on computers doing homework they will be constantly tempted and/or interrupted by social media/ gaming

"I worry that the level of interrupt, the sort of overwhelming rapidity of information... is in fact affecting cognition. It is affecting deeper thinking. I still believe that sitting down and reading a book is the best way to really learn something. And I worry that we are losing that."

# Eric Schmidt when he was CEO / Chair of Google

## What do digital experts want for their kids?

https://youtu.be/fUxLKik3zNA

#### What can we do?

#### Four things (Ofcom 2016)

- Talking to their children
- Rules
- Supervision
- Technical devices

### What can adults do? Talking

- Talking about it mediates some of the risks
- Helping them to think about it and make smart decisions with porn; friendships; appearance; viewing habits
- Name to tame
- Maintain a framework and structure which encourages OFF screen time eg eating together; time outside; and other activities

#### What can we do? - Rules

Encourage parents to set boundaries and expectations with their kids BEFORE they get a phone/laptop – a contract

- 1. Screens as a gift kids will take it for granted
- 2. Screen as a responsibility no narcissism; bullying; nudity; strangers; unkindness; consumerism; self obsession.
- Screen isn't good for you Not checking or posting constantly; total daily limits; shouldn't interrupt RL

#### What we can do? Rules

- Discussion: Is there a role for schools for helping parents set boundaries around phones and screens?
- As a camden parent invited to SRE talk with teacher, should we have a screen talk in a similar way?

#### What can parents do? - Supervision

- Make it a condition of having the device that they help them use it sensibly (ie monitor their use):
- This is not reading their diary
- This is checking who they are hanging out with and what they are doing
- This is giving them guidance in a wild west world
- But also helping them keep their values and boundaries

## What can parents do? Access and Technical

- Set boundaries about a child having a laptop or phone in their bedroom – 1 in 10 (11-15 yr olds) are on social media at 10pm
- If they have a desktop make sure it is time and content limited. Turn off the wifi at night.
- Use apps (eg Our Pact; screen limit); passcodes; parental controls; extension networks; circle.
- Limit their 3 or 4G on their smartphone.
- Not be scared (of the rows, of being mean) to take it all away if they infringe the rules

#### In summary

- Kids need boundaries and guidance
- Can teachers and schools support parents to do this?
- Think about
  - The amount of time
  - The content
  - The exposure and privacy
  - Addictive