

Screen time and kids: What's happening in our homes?



Detailed report

Poll 7, June 2017

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Report highlights

- The majority of Australian children, across all age groups, are exceeding the current national recommended guidelines for screen time
- Parents who report high levels of screen use themselves are more likely to report having children with high levels of screen use
- Almost all (94%) Australian teenagers and two-thirds (67%) of primary school-aged children and over a third (36%) of preschoolers have their own mobile screen-based device
- Three in four teenagers and one in six primary school-aged children have their own social media accounts
- Half (50%) of toddlers and preschoolers use screen-based devices on their own without supervision and the majority of parents of young children report using screens to occupy their kids so they can get things done
- Almost two-thirds (62%) of parents report family conflict due to the use of screen-based devices
- According to parents, one in five (19%) teenagers have experienced online bullying
- Almost half (43%) of all children regularly use screen-based devices at bedtime and one in four (26%) of these children are reported to have sleep problems related to screen use
- Over half of parents of teenagers and a third of parents of children aged less than six years do not place any limits on the amount of time spent or type of content accessed by their children on screen-based devices

In a survey fielded from late March to early May 2017, Australian parents were asked a series of questions about their behaviour, experience and opinions in relation to the use of screen-based media in their households over the preceding month. In this survey, the term 'screen-based device' was defined as including television, computers, laptops, gaming consoles, iPhones, smartphones, iPads and other tablet devices.

Across a sample population of 1,977 parents, data were collected on a total of 3,797 of their children aged between one month and 18 years, including 331 infants and toddlers (zero to three years), 648 preschoolers (three to six years), 1,725 primary school-aged children (six to 13 years) and 1,093 teenagers (13 to 18 years). The median number of children per parent was two with a range from one to nine.

How much time are kids and parents spending on screen-based devices at home?

Parents were asked to estimate the average amount of time spent using screen-based devices at home on a typical week day and weekend day for themselves and each of their children in the past month. The majority of Australian parents (78%) reported spending at least three hours per weekday using a screen-based device themselves at home, with almost one in five (18%) reporting more than 12 hours of use per day. For parents, the average reported daily use on a weekday was 5.8 hours and 5.3 hours on a weekend day, with an average total weekly use of 39.4 hours (see Figure 1).

Parents of lower income (less than \$500 per week) reported an average of ten hours per week more screen time than parents of higher income (over \$2,500 per week). Those with lower levels of education (year 12 equivalent or less) reported an average of seven hours per week more than those parents with further education.

According to parents, the majority of Australian children are spending at least three hours using screen-based devices at home on a typical day, with an average of 4.6 hours on a weekday and 4.5 hours on a weekend day. This includes time spent on screens for entertainment, communication and educational purposes. More than one in five (21%) teenagers are spending 12 hours or more on screens on a typical weekday and half of all teenagers (49%) reportedly spend six or more hours using screen-based devices on a typical weekend day. Children's screen time use increases with age, with those under two years of age spending an average of 14.2 hours per week, compared with 25.9 hours in two to five year olds, 31.5 hours in primary school-aged children and 43.6 hours per week in teenagers (see Figure 1).

A strong relationship was seen between parent screen time and that of their children, with parents who reported high levels of screen-based use themselves being more likely to report having children with high levels of screen-based use. Children with parents of lower income were reported to have more screen time than those of higher income. This effect was strongest in young children, where children under two years of age with parents earning less than \$1,000 per week were reported to have almost double the weekly screen time use of those children with parents reporting an income of more than \$2,000 per week (19.1 hours, compared to 10.2 hours respectively).

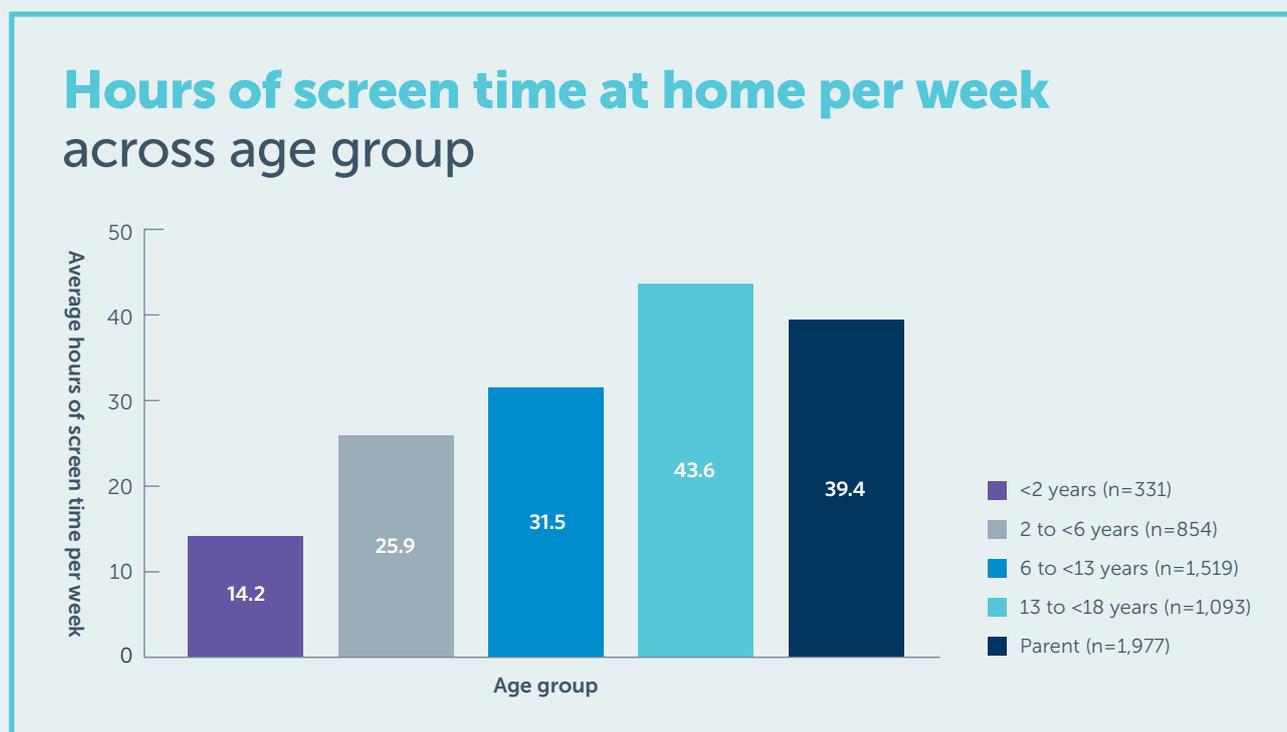


Figure 1.

What are the recommendations for the amount of time kids spend on screens?

The Australian Government, as part of its *Physical Activity and Sedentary Behaviour Guidelines for children* (Department of Health, 2014) recommends that electronic media use for entertainment purposes be limited to a maximum of two hours per day for children aged five to 17 years. The recommendation for children aged two to five years is no more than one hour per day for any purpose, and the guidelines state that children younger than two years of age should not spend any time watching television or using other electronic media.

The American Academy of Pediatrics (AAP) released updated recommendations in October 2016. These new guidelines focus on media habits and how screens are being used, in addition to recommendations about time. With regard to time, they suggest children under 18 months should avoid screen time other than video chatting and two to five year olds should have no more than an hour a day of screen time. Co-viewing and supervision are encouraged as well as avoiding solo media use, particularly in the under two age group. For children over six years the recommendation is for consistent limits on the time they spend on electronic media and the types of media they use.

This poll found that the vast majority of Australian children are engaging in screen time in excess of the current Australian and American guidelines. Almost two in three (63%) children aged two or less are using screen-based device and three in four (72%) of two to five year olds are using screen-based devices for more than the recommended one hour per day. Sixty per cent of primary school-aged children and 85% of teenagers are spending more than two hours using a screen on a

typical week day, with the leading reasons for use being entertainment and communication. Over half of children under 18 months of age are using screens, with seven per cent having their own personal smartphone or tablet device. A third of these children (36%) are engaging in video chat, many are watching television or videos (77%) and playing electronic games (23%).

Which screen-based devices are Australian children using?

The most frequently used type of screen-based device varied by age of child. Among teenagers, smartphones were the most frequently used device, with 71% of teenagers reported to use a smartphone every day. Seventeen per cent of primary school-aged children and 13% of children under six years were reported to use a smartphone every day. Just under a third of teenagers (32%) and primary school-aged children (31%) and 17% of children under six years of age were reported to use a tablet device every day of the week. Across all children aged zero to 17 years collectively, television was the most frequently used screen-based device, with over half (51%) of all children watching television every day of the week. There was no notable variation in patterns of television use across child age or gender. Computers and gaming consoles were less frequently used than other screen-based devices, particularly by younger children.

Screen-based device ownership

The vast majority (94%) of Australian teenagers were reported to have one or more of their own personal mobile screen-based devices (such as smartphone and/or tablet), followed by two-thirds (67%) of primary school-aged children, a third (36%) of preschoolers and 17% of infants and toddlers (see *Figure 2*).

Ownership of a smartphone and/or tablet across child age group

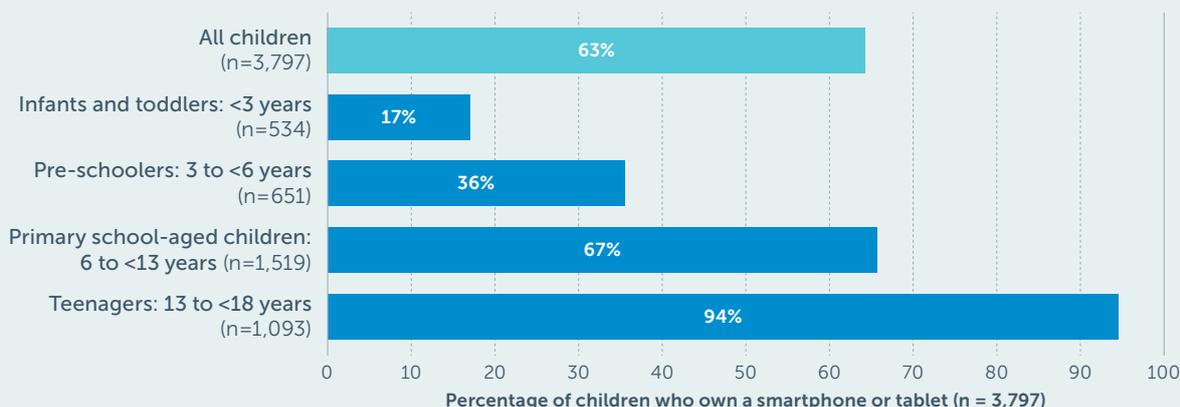


Figure 2.

Smartphones were the most commonly owned device among teenagers, with 87% having their own smartphone, followed by tablet device ownership (60%). Tablet ownership was dominant over smartphones in younger age groups, with 59% of primary school-aged children and a third (33%) of preschoolers reported to own their own tablet device, and 26% of primary schoolers and 12% of preschoolers owning their own smartphone.

What activities are children engaging in on screens at home?

Children and teenagers are primarily using screen-based devices at home for entertainment and communication. The most frequently reported screen-based activity among teenagers was engaging in social media, with 78% having one or more social media accounts and almost half (46%) of all teenagers reportedly using social media every day. Primary school-aged children are also using social media, with one in six (16%) having one or more of their own social media accounts and one in eight (12%) reportedly using social media almost every day (five to seven days) of the week.

Other screen-based activities undertaken by teenagers at home every day of the week included watching television and videos (40%), doing homework (39%), playing electronic games (33%) and video chat (20%). Differences were noted across gender, with teenage boys being twice as likely to engage in electronic gaming as teenage girls, and girls being twice as likely to engage in social media than boys.

The most frequently undertaken screen-based activities among primary school and preschool-aged children were watching television and videos and playing electronic games. Over a third (37%) of primary school-aged children and 21% of preschoolers are playing electronic games on screen-based devices almost every day (five to seven days) of the week.

Parents use screen-based devices to manage kids' behaviour

Over half (61%) of parents of preschoolers report using screen-based devices to manage their children's behaviour when they are out and about. Over half of parents of preschoolers and primary school-aged children (62%) report using time on screen-based devices as a reward for good behaviour in their children. The AAP suggest parents avoid using media as the only way to calm their child as this may lead to problems with limit setting and emotional regulation.

The majority (70%) of parents reported using screen-based devices to occupy their children so they could get things done around the house, such as household activities, preparing meals and working from home.

This behaviour was most frequently reported by parents of infants, toddlers and preschoolers, where 85% of parents reported using screen-based devices to occupy their kids so they could get things done. A quarter of parents reported doing this every day of the week.

Screens a source of concern, conflict and problems for children and families

The evidence is still unclear as to the extent of the effects of screen-based device use on children's physical, social and emotional wellbeing. This poll found that the vast majority of Australian parents (80%) are concerned children in general spend too much time using screen-based devices and over half (56%) reported that their own children spend too much time on screens. Many parents identified concerns about their child's health and wellbeing and family problems in relation to their child's use of screen-based devices.

Family conflict

Almost two-thirds of parents (62%) in this poll reported having experienced family conflict in relation to the use of screen-based devices in the past month, with 17% reporting conflict, tension or disagreement between family members about screen use at least three to four days per week. A third of all children (32%) were reported by parents to display oppositional behaviours such as arguing back in relation to screen-based device use.

Lack of physical activity

According to parent report in this study, over a quarter of children experience a lack of physical activity due to screen use, with this concern being more frequently reported in relation to teenagers (43%) as compared to preschoolers (18%). Heavy media use is associated with reduced physical activity and may lead to unhealthy weight gain.

Parents reported that almost a third of children (31%) spend excessive time playing games on screen-based devices. This concern was most frequently reported in relation to teenage boys, where 59% were identified by their parents as having a problem with excessive time spent playing electronic games.

Cyberbullying

One in ten children were reported by their parents to have experienced online bullying or harassment, with this problem being most frequently reported in teenagers (19%) but also reported in a minority of primary school-aged children (7%). Teenagers with social media accounts were significantly more likely to experience online bullying (22%) than those not on social media (10%). Children using screens without adult supervision and at bedtime were also more likely to have reportedly experienced problems relating to online bullying.

Sleep

Extensive research has shown that use of screen-based devices at bedtime can negatively impact on sleep in children. Screens at bedtime can reduce the amount of time kids spend sleeping. The content viewed prior to sleep, as well as the blue light emitted by devices can induce alertness and make getting to sleep difficult. The recent AAP guidelines advise children of all ages should have no screen time for one hour before bed and to remove screen-based devices from the bedroom before bed. In this poll, parents reported almost half (43%) of all children are regularly using screen-based devices at bedtime and of those a quarter (26%) are reported to have sleep problems related to screen use. Screen use at bedtime was most frequently reported among teenagers (69%) but also reported in one in three (38%) primary school-aged children and one in four (29%) preschoolers. Use of screen-based devices at bedtime was also associated with increased frequency of other parent reported screen-related problems including bullying, social withdrawal and excessive gaming.

Cost

Ten per cent of parents indicated that the amount of money spent on screen-based entertainment for their children had been a problem for them. On average, parents who identified the cost of screen-based entertainment as a problem reported higher amounts of family screen use, with five more hours of weekly screen time for themselves and 10 more hours of weekly screen time for their children, compared to parents not concerned about cost. There was no meaningful difference in the frequency parents' reported concerns with the cost of family screen-based entertainment across socioeconomic factors including parent income, employment status, and level of education.

What are parents doing to manage screen-based device use by their children?

Setting limits on time and content

Just under two-thirds of all parents across children of all ages reported placing limits on the amount of time spent (64%) and the type of content and activity accessed (62%) on screen-based devices at home. Parents of younger children and teenagers were less likely to place limits on screen use than those of primary school-aged children. Over half of parents of teenagers and a third of parents of children aged less than six years do not place any limits on the amount of time spent or type of content accessed by their children on screen-based devices

Among those parents placing limits on screen use by their children, half (50%) said they found it difficult to place limits on time and 41% said they found it difficult to enforce restrictions on content. Most parents (79%) reported limiting their own use of screen-based devices at least 'some of the time' when with their children. Just under a third (30%) of parents reported using technological tools (such as filters, software, privacy settings or passwords) to manage the content their children can access when using screen-based devices. Slightly fewer (22%) said they had used technological tools to manage the amount of time their children could access screen-based devices. Less than half (37%) of all parents reported using classification information to help them decide whether an electronic game, program or other screen-based activity was suitable for their child.

Most Australian parents reported maintaining some 'screen-free' times of day in their household, but more than a quarter of parents (29%) allow screens during meal time and almost half (44%) allow kids to use screens within half an hour of going to bed.

Cyber safety, supervision and sharing

Many parents (35%) reported being concerned their children may be sharing too much personal information online and a quarter (26%) reported that it is difficult to limit their child's exposure to pornographic or sexually explicit material online. The AAP recommends co-viewing and talking with children and young people about what they see and do online as one way parents can help keep them safe and support their wellbeing and development. They also suggest solo media use should be avoided in young children.

This poll found two-thirds (66%) of Australian children use screen-based devices without adult supervision at least once a week, with one-third engaging in unsupervised use every day of the week. Of concern, parents in this study reported that half (50%) of young children (aged less than six years) use screen-based devices on their own without adult supervision, with one in five (20%) doing this almost every day (five to seven days per week).

A third of parents of primary school-aged children (33%) and teenagers (33%) have not spoken with their kids about what they have accessed or looked at online in the past month. Parents of younger children (aged less than six years) were notably even less likely to engage in discussion with their children about what they were seeing and doing on screens, with only 27% saying they had talked about viewed content with their kids.

Most parents of teenagers, and to a lesser extent primary school-aged children, reported engaging in cyber-safety related conversations with their kids. Eighty-six per cent of parents of teenagers said they have talked with their children about engaging with strangers and about how to protect their identity and personal information online. Just over half of parents of primary school-aged children

have had these conversations, with 61% saying they have discussed engaging with strangers online and 57% reporting having raised the topic of protecting personal information and identity online with their children.

Seeking help

The leading source of help identified by parents for managing problems related to screen time and internet safety was friends and family (40%) followed by online resources (28%); school teachers (18%); counsellors (16%) and GPs (10%). More than one in ten (11%) of parents said they wouldn't know where to get help for a screen-related problem for their child if they needed it.

Implications

The findings from this poll provide an up-to-date picture of the patterns of use of screen-based technology by Australian children and families. Almost all teenagers, two-thirds of primary school-aged children and a third of preschoolers now own a smartphone and/or tablet. Australian children across all ages are using screen-based devices at home most days of the week. The impact of role modelling is evident, with parents who reported high levels of screen use themselves being more likely to report having children with high levels of screen use.

There are increasing data to suggest negative impacts of screen-based device use on vision and eye health, eating habits and body weight, sleep and mental health and wellbeing in children. In this study, many parents reported experiencing problems with the health and wellbeing of their family in relation to screen use. Almost half of all children are using screen-based devices at bedtime, and this was associated with an increased reporting of sleep problems. Parents reported one in five teenagers have experienced online bullying and almost half experience a lack of physical activity due to screen use. Families reported experiencing frequent conflict, tension and disagreement among family members in relation to screen-based device use in their homes. A minority of families reported financial concerns due to the cost of screen-based entertainment for their children.

The current Australian Department of Health guidelines for screen use in children, were first developed prior to the onset of mobile screen-based device use and widespread internet access. This study supports other previous work in demonstrating that these guidelines are being universally breached and highlights the need for updated guidelines that address the complexities of screen use in Australian homes today. A key concern about screen-based activities is that they may displace time spent on activities more developmentally beneficial to children, and as such the amount of time spent engaging in screen-based entertainment is important. New guidelines also need to consider the difficulty differentiating between children's educational, interactive, and sedentary time with screens, as well as the challenges of widespread internet access for children of all ages.

The 2016 updated American Academy of Pediatrics guidelines go some way to addressing these issues. They focus less on time and put more emphasis on choosing high quality content for children's viewing, supervision and co-viewing by parents. This poll found many parents place no limits on the amount of time or the type of content viewed by their children. Many children, including some very young children, frequently use screens on their own and unsupervised by adults.

Parents are concerned about the impact of technology on their families and many are trying to manage their children's screen use but are finding this difficult. Only a minority of families reported using technological tools and software or official classification systems to help them manage their children's screen use, suggesting an area for potential further education and development.

These findings highlight the importance of educating and supporting parents and communities to develop healthy practices when it comes to screens and technology. Healthcare providers, schools and policy makers have a role to play in helping the community to positively navigate the technological age for our children and young people. Healthcare providers are encouraged to discuss family screen use and technology habits with parents as a first step in providing an avenue for support and education. Teachers, counsellors and GPs are among the sources cited by parents as avenues for help, highlighting the need to ensure these providers are adequately trained, resourced and supported to fulfil this role. Parents are encouraged to be good role models and take an active role in managing their child's media habits, with effective strategies requiring a 'whole of family' approach. Australian families and communities would benefit from up-to-date national guidelines and practical resources to set the foundation for healthy habits around screen use.

Screen-based device

was defined as including television, computers, laptops, gaming consoles, iPhones, smartphones, iPads and other tablet devices.



Data source

This report presents findings from a nationally representative household survey conducted exclusively for The Royal Children's Hospital, Melbourne by the Online Research Unit. The survey was administered from March 23 to May 5, 2017, to a randomly selected, stratified group of adults aged 18 and older (n=1,977). All respondents were parents or caregivers to children aged less than 18 years. The sample was subsequently weighted to reflect Australian population figures from the Australian Bureau of Statistics. Among Online Research Unit panel members contacted to participate the completion rate was 62%.

Report amended 9.45am, June 21, 2017

References

American Academy of Pediatrics, Council on Communications and Media. Media and young minds. *Pediatrics*. 2016;138(5): e20162591

American Academy of Pediatrics, Council on Communications and Media. Media use in school-aged children and adolescents. *Pediatrics*. 2016;138(5): e20162592

Australia's Physical Activity and Sedentary Behaviour Guidelines for Children and Young People: Australian Government, Department of Health (2014) Retrieved 01 June 2017 from www.health.gov.au/internet/main/publishing.nsf/content/health-pubhlth-strateg-phys-act-guidelines#npa05

Further references available from the author on request, contact child.healthpoll@rch.org.au

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