Screen use by children aged under five: independent report

Early Years Screen Time Advisory Group

March 2026

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Introduction

Digital technology is now used in nearly every part of daily lives for families in England. They use it for many different purposes, utilising many different devices. Screen use for the under-fives should always be understood within the wider context of their overall learning and development experience, complementing, rather than replacing, the vital role of face-to-face interaction, play, and exploration. Whilst high-quality digital content can support early learning, it cannot substitute for the social, emotional, and physical experiences that come from real-world engagement. For young children especially, responsive adult-child interaction remains central to healthy development, and screen use should be designed to enhance, not diminish, these foundational experiences.

The UK Government has commissioned this review because it recognises the need to balance the embracing of technology with promoting the health and development of younger children, so that they can thrive.

The Early Years Screen Time Advisory Group (EYSTAG) was established by the Department for Education (DfE) and the Department of Health and Social Care (DHSC) to review the currently available evidence on early years screen time and provide its own expert advice to inform new government guidance on screen time for children aged under five. The panel included eminent experts in early childhood development and screen use within the UK. It was chaired by Professor Russell Viner and Dame Rachel de Souza. Russell Viner is a paediatrician and expert in children's health, and Dame Rachel de Souza is the Children's Commissioner for England. A list of panel members and the panel's Terms of Reference can be found at https://www.gov.uk/government/groups/early-years-screen-time-advisory-group. The panel was supported by a secretariat from DfE and DHSC.

This report comprises the panel's expert opinion and a summary of the evidence it collected and reviewed. It includes the panel's recommendations to government for guidance to parents but is not guidance in and of itself. Advice to parents on screen time has been published by the government on the Best Start in Life website https://beststartinlife.gov.uk/screen-time-under-5s.

EYSTAG has not sought to provide advice for early years educational settings, where the use of screens for educational purposes requires different considerations. This was beyond the scope of our terms of reference.

Where this report references 'we' from here on in, this should be read as meaning the EYSTAG expert panel.

Between January and March 2026, we considered evidence of both positive and negative impacts of screen use in children under five years of age from a rapid review of the scientific literature and consultation with stakeholders, parents and children themselves. We explain our methodology later in this report and in detail in a document on the same

webpage as this report: https://www.gov.uk/government/publications/screen-use-by-children-aged-under-5.

This report provides recommendations for guidance to parents on positive steps they can take regarding screen use to support their children's wellbeing and development. We have sought to present a balanced view, being clear where there is insufficient evidence to reach a definitive conclusion but taking account of the panel's expertise in child development. We took a precautionary approach where evidence was particularly lacking, emphasising caution and avoiding potential harm.

The Precautionary Principle

The precautionary principle is an approach to policy-making when there is scientific uncertainty about the nature and extent of a risk of harm to health but good reason to expect, and some evidence for, reduction in the risk of harm from reasonable action compared to taking no action (Ricci & Zhang, 2011; RPC Guidance Note on 'Using the Precautionary Principle'', 2025).

There is currently scientific uncertainty about the nature and extent of the risk of harm to children's health and development from screen use. However, where there is good reason for concern about potential harms in particular circumstances, we have advised measures to take, where those measures are proportionate, likely to reduce the risk of harm and themselves unlikely to be harmful. Should the evidence become more certain, this advice would need to be reviewed.

For the purpose of this report, 'screens' include but are not limited to tablets, laptops, mobile phones and television (TV). In children under five, the majority of their screen usage at the time of publication is on TV and tablets, although smartphones are becoming more common in this age group (Children and Parents: Media Use and Attitudes Report, 2025). We focus on the evidence around young children's use of digital screens, rather than the full range of digital technology use. We report on the impacts of how young children interact with screens, the content they are viewing and the time they spend viewing and interacting with screens.

We prefer the term 'screen use' to cover the broader contexts of how screens are used, who they are watched with and when, as well as including time watched. We use 'screen time' only to refer specifically to the measure of time children spend on screens, regardless of how screens are used or who with.

We have focused this review broadly on screen use by children under five years old but note that this short age-range covers a broad developmental range, from newborns unable to visually fix on screens, to older infants and toddlers up to four-year-olds who may be starting school. We have examined evidence on screen use in children with disabilities and special education needs and evidence on the impacts of deprivation on screen use. We have provided recommendations broadly for the whole age-group and have been

more specific only where we feel this is important. We have been more precautionary about children under 2 years of age as little evidence was found about this age group.

We refer to ‘parents’ throughout this report but this should be read as including parents and carers.

Our recommendations for parents are listed in the Summary section of the report, along with a brief explanation of the evidence for each area of guidance. The report will cover the following:

- what we know about how young children in the UK use screens today;
- why understanding child development is important for managing screen use;
- the methods used for the evidence review; and
- the findings from the scientific literature and from research with stakeholders, parents, and children.

Policy decisions for both health and education have been delegated by the UK Parliament to the devolved governments - the Scottish Parliament, the Welsh Parliament, and the Northern Ireland Assembly. This review supports the UK Government in providing guidance to parents and carers in England. Our findings are likely applicable to other nations, and they may wish to take from this report what is most useful to them.

The EYSTAG wishes to express its thanks to all those who took time to provide evidence and information for them to review and consider. We have listed contributors and provided a bibliography of relevant research at the end of this report.

Summary

Parents and carers told us that advice should be clear, evidence-based, non-judgemental, and practical wherever possible. Stakeholder discussions raised similar themes and asks. Specific topics for which information was requested included:

- appropriate screen use and content by age;
- understanding content types and quality;
- setting time limits and other boundaries;
- alternatives to screen use;
- sources, places and professionals which/who can provide more help and advice on screen time-related issues; and
- platforms that are high-quality and safe for children.

We have sought to cover as many of these areas as possible within this report based on the evidence available at this time and our expert opinion. However, this document is a report on the evidence, rather than direct guidance to parents. Separate advice published on the Best Start in Life website offers advice to parents about how they might best manage screen use and screen time. Separate resources published by government provide advice on online safety for children: https://kidsonlinesafety.campaign.gov.uk/

The scope of this report is to distil the existing evidence, both quantitative and qualitative, as well as to reflect the views of diverse stakeholders including parents and children, and to then reach a set of conclusions (in the form of recommendations) based on that evidence. These recommendations will inform government guidance to parents.

Children with special education needs and disabilities (SEND) face the same potential harms and benefits from general screen use as other children. However, some of these children may also use screen-based assistive technology to help them with mobility, communication and learning, thus enhancing their overall quality of life. Parents will need to balance the potential risks and benefits of screen use differently for children with SEND. We therefore discuss their interactions with screens separately in the evidence section of this report.

The evidence available on harms and benefits of screen use in young children is emerging and often of low-quality; findings are mixed and some major gaps remain. Where evidence was particularly lacking, we relied on the panel's expert views and took a precautionary approach to avoid potential harm. Guidance from the government must take this evidence and give parents clarity on how to manage screen use for children aged under five. That guidance should include the following recommendations.

1. Who uses screens with children, and how they use them, matters. Responsive interaction between parents and children when using screens can prevent harms and promote development for young children

The way that screens are used is key to the way in which they influence health and development in early childhood. What young children are viewing (including whether it is suitable for developing brains by being slow-paced, repetitive and predictable) and the quality of interaction between parents and those young children during screen use, is crucial to determining whether it has a positive or negative effect on child health and development. Some evidence has linked large amounts of screen time with negative effects on children's health and development, including on social, emotional, language and brain development, sleep, eyesight and healthy weight.

Screen use becomes particularly problematic when it crowds out sleep, physical activity, parent-child interaction, creative play, household routines, real-world exploration or learning. Lengthy periods of non-interactive, receptive watching are unlikely to benefit young children and are likely to harm development by crowding out these important activities. These harms can be avoided. A child viewing screen content together with an adult (co-viewing) – meaning adults talking, responding to children's interests, asking questions, taking turns, and engaging with the content - improves language and thinking skills, and reduces the risks seen with solo and non-interactive receptive screen use. We discuss the evidence in sections 4B and 4C of this report.

We recommend government includes the following messages in its guidance to parents:

- Interact with your child when they are using screens – for example by asking your child questions or responding to what is taking place on the screen – e.g., think about how you read a book with your child.
- Choose activities that involve interactions and family connection as those can support learning and family bonding – for example, video calls with relatives, looking through family photos and videos together, and reading e-books together.
- Ensure screen use in young children is balanced by other healthy activities away from screens, such as time interacting with parents and other adults and time in creative play either alone or with other children.
- Protect your child's sleep:
    - Ensure your child sleeps the World Health Organisation (WHO) recommended amount: at least 11-14 hours for children one to two years of age and 10-13 hours for three to four-year-olds (Guidelines on Physical Activity, Sedentary Behaviour, and Sleep for Children under 5 Years of Age, 2019).
    - Have screen-free bedrooms and do not allow screen use in the hour running up to bedtime.

- Ensure your child gets enough physical activity (Davies S.C., Atherton F., et al., 2019). The UK Chief Medical Officers (CMOs) recommend three hours a day of physical activity including play for children under five years.
- Adopt screen-free periods of the day, such as mealtimes, as these are important opportunities for social interaction.

2. Time matters: parents should remain cautious about screen use in the under-fives

The evidence on time thresholds for screen use in the early years is very limited. However, the precautionary principle suggests parents should limit screen use to guard against potential harms, such as where time spent on screens displaces or crowds out healthy social interactions, sleep and physical activity. We discuss the evidence in sections 4A, 4G and 4H of this report.

We recommend government includes the following messages in its guidance to parents:

- Under two – avoid screentime except for shared activities that support family bonding and learning. These activities could include video calling to relatives, reviewing family photo albums or reading e-books with parents or siblings.
- Two to five-year-olds – keep screen time to no more than an hour a day, ideally through short chunks (30 minutes or less) and not during mealtimes or near to bedtime. Keep solo screen use to a minimum.

Note that these limits do not apply to screen-based assistive technologies for children with SEND. These technologies have particular benefits for some children with SEND in improving their quality of life, for example by helping with mobility and communication.

3. What children are watching is important

What children are viewing also matters in determining whether screen use brings harms or benefits. Well-designed content and interactive activities that are appropriate for the child's age can support young children's language development, problem solving, memory, and early literacy. This is particularly true when activities are shared with a parent or other supportive adult or older sibling. Fast-paced short-form videos raise particular concerns, with suggestions that rapidly changing, highly stimulating content may affect children's attention and excitement.

Evidence is limited, so a precautionary approach suggests avoiding short-form videos and fast-paced content for young children – and limiting screen use to more child-appropriate slow-paced, repetitive and predictable content. We discuss the evidence in section 4C of this report.

We recommend government includes the following messages in its guidance to parents:

- Young children need time to process information, so choose content that is slower-paced than the equivalent for older viewers. Content should focus on faces, have limited movement, simple backgrounds and use repetition.
- Parents should try to avoid children spending lengthy periods of simple receptive watching, flipping or scrolling through content by themselves. This is unlikely to benefit young children and is likely to harm development by displacing play, interaction with parents, sleep and physical activity.
- Parents should seek out suitable slow-paced content and to try to avoid fast-paced screen content, rapid speech or multiple characters talking at once, such as short videos where the sounds and images change constantly. This type of content can have an adverse effect on children's social and emotional development and on their self-regulation.
- Wherever possible, parents should try to avoid having the TV or other screens running in the background as they can distract young children's attention from playful, fun and learning activities.

Fast-paced vs slow-paced content

Content which is fast-paced in terms of its auditory, visual and narrative content can be over-stimulating for under-fives and is associated with behavioural problems.

Fast-paced visual content includes frequent scene cuts, camera pans, vivid/bright colours and characters and objects moving on-screen. Good visual composition should include slow, static shots with limited movement.

Fast-paced auditory content includes rapid speech, multiple characters talking at once, and dense or complex backing tracks. Young brains struggle to separate speech from background noise, so character speech presented against a backdrop of silence is easier for young brains to process.

Fast-paced narrative includes complex, multi-layered stories, short conversations with frequent changes of topic, frequent scene changes and a large number of different characters.

Good quality content may contain repeated sequences and narrative elements that reoccur across episodes – such as a character having an 'entry' song, songs with a repeated chorus, the same sequence of events occurring repeatedly in different contexts or retelling a story to summarise it just after it's happened. Together, slow pacing and repetition help to build understanding in younger viewers.

4. Safety is paramount

Online, as in real life, protecting children from harm is parents' main concern. Safety concerns can arise from the risks of seeing inappropriate content and of engaging with inappropriate adults or because of data privacy and protection issues.

Technology is evolving very rapidly, and artificial intelligence (AI) is now being included in a number of apps, toys and chatbots recommended for young children, raising safety concerns. We discuss safety and the evidence around safe use of screens in sections 1 and 4C of this report.

We recommend government includes the following messages in its guidance to parents:

- Use parental controls that restrict content on any screen devices used by young children. In many cases these controls enable parents to set them according to the age of their children (e.g. under five). However, parents should be aware that these controls are not infallible, and we recommend parental supervision of screen use in under-fives. See https://kidsonlinesafety.campaign.gov.uk/parental-controls/
- Ensure that young children don't have social media accounts.
- Be aware of the risks of giving an adult's phone to a young child. This risks them seeing content not meant for under-fives. If parents do give young children their phone, watch it with them.
- Parents should not let young children use AI tools, toys or chatbots (even those aimed at young children) until the present state of knowledge improves.

5. Think about your own screen and media use

Parents remain the strongest influence on their young children, and the way parents use their phones and other screen-based devices in the presence of young children strongly influences their children's use. As noted previously, parental interaction with children using screens can promote development but there is growing evidence that parental use in front of young children could negatively impact upon their development or health. However, occasional short periods of use may be necessary for many parents and are very unlikely to be harmful. We discuss the evidence in section 4D of this report.

We recommend government includes the following messages in its guidance to parents:

- Carefully consider how you can limit use of your own devices in front of young children.
- Consider adopting screen-free periods of the day for all family members, such as mealtimes and for an hour before children go to bed.

6. Providing guidance and support for parents

In conducting this review, we noted a number of limitations in the information for parents on what constitutes quality online materials for young children (see section 4B, for example).

We recommend government provides further guidance and support for parents in:

- Identifying good quality online educational materials for young children; and
- Using AI-enabled tools or toys for children.

7. Digital screens are everywhere in modern life and bring new challenges for parents and carers; yet balancing negatives and positives in children's lives is familiar to parents

Parents and carers of children under five years of age are confronted with a new set of challenges about their children using digital technology. These challenges are constantly changing as technology evolves.

Parents know their children better than anyone else and recognise that children need love, security and their guidance and support to thrive. They know children need protection from harms, enriching experiences to learn; and social interaction, play and exercise to become socially and physically skilled. They notice when children become overly fixated on one thing to the exclusion of others, or overly excited or tired, and intervene to restore a sense of equilibrium and balance. They know that children need routines and good habits and how to foster those routines and habits. These skills and instincts that parents have used routinely for generations apply to the digital world just as much as they do to everyday life. Evidence on the positives and negatives of screen use and the challenges for parents is discussed throughout section 4 of this report.

We recommend government includes the following message in its guidance to parents:

- Parents should trust their instincts as they make decisions about what is best for their child and for their particular circumstances. However, we recognise that in an ever-changing technological world, trusted and evidence-based information can help parents make informed choices that reflect both their values and their child's needs.

1. Digital technology and screens in modern family life

Due to the fast-paced evolution and affordability of digital technologies over recent decades, digital devices and systems have become increasingly embedded in daily family life, including in children's lives. UNICEF, the United Nations Children's Fund, suggested that digital technology in its many forms is 'an unstoppable force that is shaping modern life, including children's lives' and that it will continue to contribute to children's lived experiences in as yet unimagined ways.

Our youngest children are no exception to these trends. Ofcom (*Children and Parents: Media Use and Attitudes Report*, 2025) reported that 19% of three to five-year-olds have their own mobile phone, 56% use messaging apps/sites, 37% use social media (excluding YouTube), 77% watch TV or films on a TV set and 76% on other devices, and 91% use video sharing platforms. According to a nationally representative study of babies growing up in England, nine-month-olds spent 29 minutes on screens each day on average, although 28% of them did not use screens daily (Bernardi et al., 2023). The same children spent an average of 127 minutes on screens each day at age two, with only 2% of them not using screens daily (Fish et al., 2026).

As well as TV, tablets and smartphones, young children regularly also take part in a wide range of digital activities at home, both alone and with their families, such as watching others use screens, playing with digital toys, reading e-books, interacting with friends and family during video calls, and finding information online (Flewitt & Clark, 2020; Mantilla & Edwards, 2019). Video calling is an increasingly common activity for young children and can help maintain and strengthen family bonds. In multi-lingual families these also often facilitate young children's heritage language and cultural learning. For infants aged under twelve months, these are more likely to involve smiling, waving, vocalisations and behaviour, while language becomes integral to older children's video chat (El Gemayel et al., 2024). This wide range of activities can mean that it is increasingly difficult for parents to track, assess and control their children's interactions with digital technology (with or without screens).

Some children with SEND may have a different relationship with screens, as modern screen-based assistive technologies offer many opportunities, helping to improve communication, learning and quality of life. For example, augmentative and alternative communication (AAC) can assist individuals for whom speech is not sufficient for their communication needs. We examine the evidence on screen use by children with disabilities in section F of this report.

Safeguarding children

Young children are especially vulnerable when using digital devices. They may come across videos, apps or advertisements that aren't meant for children, or features (like chat tools or live video) that expose them to people they don't know and which can put them at risk. Screens are a way for commercial interests to reach into young children's lives through advertisements or branded gamified content. Some apps also collect children's data or have weak security, which can put their personal information at risk. Because

young children can’t clearly discern adverts, manipulative design or upsetting content (Packer et al., 2022), they rely fully on adults to guide and protect them.

In the UK, the Online Safety Act 2023 helps protect children by placing clear responsibilities upon providers of online platforms. Regulated online services that are accessible to children now have a legal duty to provide additional protection for children against harmful online content, including pornography, suicide and self-harm content, and online hate speech, as well as other illegal content. Ofcom, the regulator, has drawn up a code of practice for online services detailing what steps online platforms should take to mitigate the risk of children being exposed to harmful online content. When making choices about screen time activities, parents can use Pan-European Game Information (PEGI) age classifications for video games and British Board of Film Classification (BBFC) ratings for films. Age ratings for apps are commonly provided by the International Age Rating Coalition (IARC), though some storefronts, such as Apple, use their own.

Whatever legal and regulatory protections exist, parents will always play the most vital role in ensuring their young children stay safe online, and simple everyday actions can make a big difference. These are set out in the Summary of this report.

2. Why nurturing healthy minds and bodies matters

To promote healthy screen use in early childhood, it is essential to understand how normal child development occurs, how young children learn, why good development matters and the key family and environmental factors that support good development and health. This can help parents make informed decisions on whether activities related to screens may help or hinder development.

During the first five years, children depend on their caregivers and are highly sensitive to their surroundings. In this very short period, they learn how to move, communicate, think, and relate to others. Good development in the early years, across language, communication, cognition/thinking, and physical and social-emotional development lay the foundations for achievement and wellbeing in later childhood, adolescence, and beyond (Schoon et al., 2021).

Children learn most through and within relationships, particularly with those they trust, like parents or carers. It is when parents share books and simple games with their child that they are in the best position to learn. They can relax and feel confident and so are in an optimal learning mode, whether that is language, maths, or learning how to manage emotions. Children particularly learn through conversations and play with parents. Engaging in back-and-forth ‘conversations’ begins long before language appears; parents and babies coo to one another, with parents beginning a non-verbal chat and the baby responding with pleasure. Soon words fill the conversational turns, and young children learn how to respond to adults and eventually how to initiate their own conversations. These interactions with parents and other adults help children learn and develop across many areas of their lives – learning language, problem-solving, self-control and social behaviour.

The way that information is provided and paced is important for children’s development. Children constantly come across things that are new to them, and processing that takes time, and sometimes a lot of repetition. For learning, information needs to be appropriate to the age of the growing child, not too complex and not too simple, to maintain a child’s interest and to help them pay attention (Kidd et al., 2012). Going at a child’s pace, slower than adults would like, is essential for them to have the chance to keep up and learn. This is important as a lot of screen content, often tailored for adults, sometimes aimed at young children but poorly designed, is rapidly changing and fast-paced and challenging for children to learn from (see section 4G).

Nurturing the growing body and mind also requires adequate nutrition, physical activity and sleep. Sleep is a particular issue, as young children need to have more breaks and rest within learning. Their attention span is developing, and they need time to rest, to sleep and to process. The WHO suggests that young children need large amounts of sleep for healthy development, at least 11-14 hours for children who are one to two years of age and 10-13 hours for three to four-year-olds (*Guidelines on Physical Activity, Sedentary Behaviour, and Sleep for Children under 5 Years of Age*, 2019). The UK Chief Medical Officers (CMOs) recommend children under five should spend at least three hours per day in physical activity, including active and outdoor play (Davies S.C., Atherton F., et al.,

2019). When higher levels of screen use supplant or crowd out sleep or physical activity, this can be a source of harm (see sections 4C and 4G).

3. Methodologies of the review

How we collected and used evidence for this report

This report is informed by the most recent scientific evidence on the impacts of screen use on the under-fives, the expertise of the review panel, and discussions with and evidence from parents and carers, children themselves, early years specialists and advocacy groups, professional organisations and other major stakeholders. The report also draws on advice published by the UK CMOs (Davies S.C., Calderwood C., et al., 2019) the WHO (*Guidelines on Physical Activity, Sedentary Behaviour, and Sleep for Children under 5 Years of Age*, 2019) and guidance published by a number of other countries – including but not limited to Australia, Canada, USA, Singapore, New Zealand, Sweden, Germany and the Netherlands – as well as the views of parents and key stakeholders. Experts in the fields of early years education and child development within the UK have also provided their expert advice, especially where evidence was incomplete.

The voices of parents and children are central to this report and are considered alongside the views of broader stakeholders and the scientific evidence throughout.

To ensure we considered as broad a range of evidence and views as possible, we published a call for evidence from 2 February to 16 February 2026. 132 responses were received and have also informed this report.

Parent and children engagement

The Children's Commissioner's office conducted qualitative interviews and small group discussions with thirty-two families across six settings in the North and South of England. Participants included children aged three to eight years old and parents who have at least one child aged five or younger. Families varied in income, ethnicity, nationality and first language. Some children had or were in the process of being assessed for special educational needs.

A separate discussion was conducted with parents, on behalf of DHSC and DfE, to ascertain parents' views on what they wanted to see in guidance on the 'Best Start in Life' website. Fifty-three parents from a variety of socio-economic and ethnic backgrounds were surveyed. A summary of the key points made by parents and their children can be found in the annex.

Stakeholder engagement

Nineteen interviews were held with charities, academics, and sector experts. Several academics and charities also responded separately to the government's call for evidence (see list of contributors towards the end of this document).

Review of the scientific literature

We undertook a rapid assessment of the scientific literature. This was necessarily limited by the very rapid timescales available for the project, which was formally commenced on 12 January 2026 and published on 27 March 2026. We were therefore unable to undertake a fully comprehensive review but mitigated this through taking a dual approach to identifying the most recent and pertinent literature. The first element was a rapid scoping review of systematic reviews (RoR, also known as an umbrella review) undertaken by the review panel co-chair, Professor Russell Viner. Systematic reviews are considered one of the highest forms of evidence as they comprehensively review the scientific literature upon a particular topic. RoR is a recognised way of rapidly and comprehensively identifying the extent of scientific literature on a topic (Brignardello-Petersen et al., 2025).

Our RoR used standardised search terms in a single database (PubMed) to identify systematic reviews examining links between any form of screen use and any child health or development outcome in the under-fives published since 2010. This identified 48 systematic reviews. We recognise the rapid methods meant this was not an exhaustive review.

An additional 15 systematic reviews were identified by EYSTAG panel members and through our call for evidence. Findings from the 63 systematic reviews were summarised together in narrative form. Our detailed methodology for this element of the review can be viewed at: https://www.gov.uk/government/publications/screen-use-by-children-aged-under-5. The second element was analysis of additional identified individual research studies provided by members of the EYSTAG, through conversations with stakeholders and through our call for evidence. Across both elements, we found there is growing scientific literature on the impacts of digital screen use on child health and wellbeing and development. However, much of this literature focuses on older children and adolescents with many fewer studies of the under-fives. Publications from the 2010s and earlier largely only considered TV or video viewing and gaming, with fewer more recent publications considering more interactive or mobile screen use. Note all evidence discussed in this review relates to the under-fives except where explicitly noted.

Stakeholders expressed concerns about there being little high-quality research examining the effects of screen time on young children, and we concurred with this. Because of time constraints we did not explicitly assess the quality of the literature but note that the great majority of studies included in the reviews we identified were cross-sectional (i.e. studied at a single point in time). These studies are considered low-quality, as they can give us a snapshot of an issue, but are generally unable to ascertain cause and effect (causality).

Longitudinal studies examine the same children over time, which allows researchers to explore the relationships between screen use and health and development over time. This means that longitudinal studies are considered higher-quality and can make conclusions about causality. There were small numbers of other higher-quality studies such as detailed qualitative studies or randomised controlled trials.

A further limitation of the scientific literature was that many of the included reviews simply examined total time spent on screens, with few considering what young children were watching or engaging with, when they were viewing or using screens and whether they did so alone or with someone. A review in 2021 of 622 studies assessing screen time in young children found that only 10% assessed what was watched and only 7% assessed who screens were viewed with (Byrne et al., 2021).

In our analysis of the evidence, we first considered the findings from our identified systematic reviews, noting differences between findings from lower-quality cross-sectional studies and higher-quality studies. We then also considered evidence from individual research studies that were high-quality or studies that were considered particularly relevant to the UK context (e.g. focused on UK young children). Despite the limitations noted above, we felt that the scientific literature together with our consultations allowed us to make a number of conclusions broadly supported by evidence. For other areas where evidence was much more limited, we relied on evidence from our experts and took a broadly precautionary approach.

4. Consideration of the evidence

Here we outline the evidence from the scientific literature, what stakeholders and parents told us, and what we don't know, in a series of summary statements. We recognise that content (what is watched) and context (how screens are watched) are connected, and so we weave them together here.

A. Simple measures of total time spent on screens appear linked with reductions in children's development and health

Much of the literature we found focused on simple measures of the total time spent on screens i.e. 'screen time'. A great deal of this literature considers screen time in isolation from how screens are used and what is watched. Greater time spent on screens has been linked with poorer development, health and wellbeing for young children. Specifically, higher levels of time on screens in the under-fives have been associated with:

- Poorer socio-emotional outcomes, meaning a reduction in children's ability to understand, manage, and express their own emotions (emotional) while simultaneously building positive relationships, empathising, and interacting effectively with others (social) (Ahmer et al., 2025; Fish et al., 2026; Gath et al., 2026; Li et al., 2020; Mallawaarachchi et al., 2024; Vasconcellos et al., 2025). The size of this association appears smaller for children under five years of age than that seen in older children (Elizabeth Al-Jbouri et al., 2026; Ross D. Neville et al., 2026). However, some reviews report mixed findings (Ferreira et al., 2025; Hu et al., 2025; Sticca et al., 2025).
- Poorer language development, meaning children starting to speak later or having a smaller vocabulary (Bal et al., 2024; Fish et al., 2026; Gath et al., 2026; Madigan et al., 2020; Mallawaarachchi et al., 2024). This finding appears quite consistent although some reviews report mixed findings (Arabiat et al., 2022; da Silva Junior et al., 2025; Sticca et al., 2025) and that greater screen use can also be associated with small benefits for vocabulary in young children (Jing et al., 2023; Sticca et al., 2025).
- Negative impacts upon other elements of cognitive development (Jourdren et al., 2023; Madigan et al., 2020; Mallawaarachchi et al., 2024) such as attention or executive function (Bal et al., 2024). However, mixed findings were also reported (Dutra et al., 2025; Jourdren et al., 2023; Sticca et al., 2025).
- Mixed findings for motor development (Sticca et al., 2025): some studies found benefits of screen use including interactive screens for the development of fine motor function, but others report minor delays (Arabiat et al., 2022). There was little evidence of benefit or harm for gross motor development (Arabiat et al., 2022).
- Myopia (short-sightedness): an increased risk of myopia was reported with higher screen use in cross-sectional studies but not in longitudinal studies (Foreman et al., 2021), suggesting this may not be a causal relationship.

- Obesity: the associations between sedentary behaviours such as screen use with obesity and lower levels of physical activity are reasonably well-established (Li et al., 2020). It is important to note that these links are largely from older literature focused on TV, and that not all modern screen use is sedentary (e.g. dancing to videos).
- Sleep: there is relatively consistent but low-quality evidence that higher screen time is associated with shorter night-time sleep duration (Belmon et al., 2019; Janssen et al., 2020; Li et al., 2020; Merín et al., 2024; Zhang et al., 2020) and trial evidence that reducing screen time slightly improves sleep duration (Martin et al., 2020) although others reported more mixed evidence (Lund et al., 2021; Sticca et al., 2025). Evening screen use appears to be associated with later bedtimes and shorter sleep (Janssen et al., 2020), but the evidence around screen impacts on daytime sleepiness and sleep disorders is mixed (Lund et al., 2021; Merín et al., 2024). The impacts of screen use on sleep in the early years appears to be less strong than in older children and adolescents (Lund et al., 2021; Martin et al., 2020), although this may reflect lower overall screen use in the early years.

Considering the literature on under-fives as a whole, we concluded that the level of these potential harmful effects was broadly consistent across studies, and were predominantly small, such as small reductions in cognitive development scores or modest reductions in sleep. Whilst many of the studies in our reviews were cross-sectional, there were a small number of complex longitudinal studies, which allow us to conclude that higher levels of screen use may causally negatively influence later development and health (Gath et al., 2026; Madigan et al., 2019; Neville et al., 2021, 2026).

But causality might run the other way: it is possible that poorer development or health has an impact on screen use. For example, young children with poorer development or health or wellbeing could be more likely to use screens or use them for longer. Few studies considered this possibility, although some evidence suggests that a child struggling to maintain focus on activities is as likely to influence that child's screen use as screen use is to influence attention (Jourdren et al., 2023). One study suggested that vicious cycles may occur with anger problems, where higher screen use is associated with greater anger problems which are then associated with higher screen use (Fitzpatrick et al., 2024).

The issue of whether research provides evidence to guide parents on when screen time becomes harmful in terms of total amount of time on screens is discussed in section G.

We have made recommendations for parents to limit screen time in section 2 of the Summary. We made these recommendations to help parents ensure that screen use did not prevent their children getting adequate sleep, physical activity and time interacting with parents, friends and family, to support good child development and health.

B. How screens are used determines their impacts upon health and development

In contrast to the evidence on harms related to longer screen time, we also found evidence showing that certain types of screen use can have more positive impacts upon child development and health and wellbeing than other types of screen use. This evidence relates to viewing high-quality educational content, content designed to improve social development, or to watching screens together with adults. Note that this review did not examine differences in learning from digital technology to learning in real-life situations.

Using screens together with adults is better for development and wellbeing

There is growing evidence that adults watching or using screens with their young children is beneficial for child health, wellbeing and development. This was a view echoed during stakeholder interviews.

Many reviews reported that co-viewing with parents actively engaged was linked with better language and other cognitive development than for solo screen use (Bal et al., 2024; da Silva Junior et al., 2025; Madigan et al., 2020; Mallawaarachchi et al., 2024; Sanders et al., 2023; Xie et al., 2024), although one reported more mixed findings (Pyne et al., 2025). It is likely that parental involvement creates opportunities through guided engagement for both language learning and development of executive functions that help with self-control. This suggests that the harms to development noted above from high screen time come predominantly from solo screen use without parent-child interaction (Bal et al., 2024).

Particularly important in this is contingent interaction (i.e. where a conversational partner responds promptly, appropriately, and meaningfully to a child's communicative signals). Interactions including conversational turn-taking, full joint engagement in the media activity between parent and child, and exchanges about how they or the characters within the online activity are feeling, have been found to negate the adverse effects that technology use can have on child language development (Cycyk & De Anda, 2021; Sundqvist et al., 2021).

Screens used interactively, intentionally and in developmentally appropriate ways can support learning

Parents wanted to understand whether interactive devices or apps are better than non-interactive receptive watching:

> ‘Are things that are interactive better? So they're not just brainless… I think the iPad is quite good for them, I don't know, so some guidance would [be good]’ - *Mother of five-year-old girl*

Educational content that is child-specific but delivered non-interactively on screens, for example on TV, appears to have little positive impact on cognitive development (Carson et

al., 2015). On the other hand, there is evidence that, compared with lower-quality screen use, watching high-quality educational content can improve children's emotional and social development (Mallawaarachchi et al., 2024; Xie et al., 2024). Compared with other types of screen use, digital media designed for learning can be beneficial for young children's social and cognitive outcomes, including benefits for children's early numeracy, literacy and language development (Sanders et al., 2023). The evidence suggests that interactivity is key to educational benefits: both the child interacting with the screen (including but not only through touchscreens) or interacting with parents or carers via the screen. Stakeholders echoed this view when we spoke to them.

Educational content on interactive screens can improve early learning performance (Xie et al., 2024) including vocabulary (Arabiat et al., 2022), executive function, working memory, problem solving and the child's ability to understand spoken, written, or signed language, as well as gestures and contextual cues (Arabiat et al., 2022). Other research has shown stronger benefits from interactive formats such as e-books compared with non-interactive receptive TV or video-watching (Jing et al., 2023).

As noted above, our review did not seek to examine whether digital screens had advantages over or were inferior to learning using traditional techniques. There is some evidence that young children may learn less well from screen-based media than they do in real-life interactions, and that this so-called 'video deficit' may persist until around school age (Sticca et al., 2025; Strouse & Samson, 2021). We also note that whilst the benefits of touch technologies for fine motor skills remains unclear, they may offer novel opportunities for young children to improve their drawing, writing and digital literacy skills due to the reduced dexterity required to use these tools (Crescenzi Lanna & Grané Oro, 2019; Huber et al., 2018).

In discussing educational content, the panel felt it important to note that there is a wide range of commercial content available that claims educational benefit for young children, but that it can be difficult for parents to identify which materials are and are not beneficial for their children. For this reason, we have called upon the Department for Education to provide advice and support for parents in identifying high-quality screen-based educational materials for young children.

C. The way that screens are used is important - what is watched, when, with whom, and how

In the above sections we have noted evidence that extended periods of time on screens can bring harms to development and health, but also that used in more positive ways, screen use can benefit child development. We can make sense of these seemingly contrasting findings by looking at the evidence on how screens bring harms to young children; and how parents can ensure these harms can be prevented and children can receive positive benefits from screens. Both what is on the screen, but also who uses the screen with the child, when they watch, and what they do whilst watching, are all important.

Screens can displace or ‘crowd out’ things that are essential for healthy development

Stakeholders were concerned that screens might be replacing conversation, physical play, and skill development, affecting areas such as vocabulary, motor skills, and emotional regulation.

The evidence suggests that the ways in which high levels of screen use might cause negative impacts for young children come predominantly from screen use displacing the things we know are key to support healthy development in young children, i.e. time interacting with parents and other adults, time in creative play either alone or with other children, involvement in routine household activities, being physically active, and sleep (Guellai et al., 2022; Sticca et al., 2025). The evidence suggests that young children with higher levels of screen time spend less time, on average, in social interactions with and talking with parents (Brushe et al., 2024; Sticca et al., 2025).

Given the high need young children have for sleep, play and interaction, screen use for any more than short periods each day will almost inevitably displace some of these essential activities. Screen use must be thought about in terms of how it fits into a child’s day, ensuring it doesn’t displace healthy activities like sleep or physical activity or replace time cuddling with and chatting to parents. There is evidence that children’s behaviour and socio-emotional development is better if they have the recommended hours of sleep and physical activity (Hu et al., 2025).

Extensive screen use without parental engagement is likely to be a source of harm to development and health

In the section above we noted that co-viewing or parental engagement with screen use was positive for development and helped to prevent harm. Without repeating the evidence, it should be noted that extensive use of screens without co-viewing with parents is likely to be a source of harm for development and health.

The content and pacing of some digital media content is unsuitable for children’s brains

Parents raised concerns about the movement, colour and luminance of digital screens and how they powerfully capture and keep the attention of young children:

> ‘I think there's a lot of talk online about…anything where it's very quick turnaround, very overstimulating colours and sounds. And I don't know whether people realise the impact that has, on their attention span’ - *Mother of four-year-old girl*

Research suggests that certain types of content accessed through screens fit poorly with the way that young children’s brains work. Young brains learn best from content that is slow-paced and predictable such as peekaboo, repeatedly pressing a button over and over again, or reading a favourite book multiple times (Liu et al., 2023).

The neuroscience literature tells us that brain pathways related to voluntary, understanding-driven attention are distinct from those related to non-interactive receptive attention, for example simply watching screens (Buschman & Kastner, 2015). There is some evidence that long periods watching screens in this non-interactive mode may change the development of young children's ability to focus and concentrate, potentially increasing the risk of attentional problems in children (Liu et al., 2023; Nikkelen et al., 2014).

Nevertheless, the evidence that such content negatively impacts children's attention remains mixed (Ferguson, 2015) and any observed negative effect is small (Beyens et al., 2018). Researchers have proposed that this could be due to children having fewer opportunities to develop ways to control their attention and regulate their behaviour in the absence of immediate reward, usually with non-interactive receptive viewing replacing the time interacting with parents or other children (Beyens et al., 2018). Others suggest that excessive non-interactive receptive watching of screens is associated with a decrease in cognitive engagement and may limit opportunities for deeper or creative thinking (Sticca et al., 2025).

However, there are a number of ways in which learning from screens can be enhanced, including repetition, language prompts, familiarity with the character and inclusion of social interactivity with an adult (Sticca et al., 2025). Content most suitable for young children is relatively slow-paced, with repetitive, rhythmic elements and retellings, that help young children's concentration, comprehension, and ability to predict what may be coming next (Wass & Goldenberg, 2025).

Violent or sexualised content created for adults is harmful to children

Parents were concerned about the type of content that children could access, noting that even with supervision this can be an issue:

> 'And as much as I put in parental guidance, as much as I put in filters, as much as I put in all of these things, there are still things that are coming up on their screens that I'm unhappy with.' - *Mother of two-year-old girl*

They wanted both tighter controls on what children can watch and advice on how to prevent children from being exposed to inappropriate content. Stakeholders generally concurred. Due to safeguarding concerns and the perceived benefits of the parent/carer engaging their child when using a device, they emphasised the importance of parents, wherever possible, supervising and being present when their child was using a device.

Concerns about the viewing of age-inappropriate content by young children, such as adult violent or sexual content, arise from our knowledge that exposure to such materials is not healthy for our children's development. There is also evidence from a large meta-analysis that greater exposure to content that is not appropriate for age (i.e., violence, action, or intended for a mature audience) is also associated with poorer psychological or social outcomes for children (Mallawaarachchi et al., 2024). Using parental controls on home internet routers and on screen devices themselves can help parents protect children from inappropriate adult content (Goodall et al., 2025).

Video games and apps have age ratings in a similar way to age ratings for films. When making choices about screen time activities, parents can use Pan-European Game Information (PEGI) age classifications for video games and British Board of Film Classification (BBFC) ratings for films. Age ratings for apps are commonly provided by the International Age Rating Coalition (IARC), though some storefronts, such as Apple, use their own. These age ratings can give confidence to parents making choices about age-appropriate content and screen use. For example, video games and films which feature violence or other adult themes are likely to be given a stricter age rating.

Little is known about the safety of AI chatbots or AI-enabled toys for young children

Parents asked for guidance that keeps pace with technological advances. Whilst any advice can only be based upon what evidence exists at the time it is drafted, there is a strong argument for that advice to be updated as technology changes.

AI is increasingly present in early childhood environments through educational apps, adaptive systems, social robots, and conversational interfaces, both using screens and not. Generative AI toys are a new category of interactive technology, enabling children to engage with systems that actively respond to and influence play (Goodacre & Gibson, 2026). Findings indicate that children readily incorporate these toys into social and imaginative play. However, current technologies may not fully align with the developmental characteristics of early childhood, particularly in relation to pretend play and nuanced social communication (Goodacre & Gibson, 2026; Sun et al., 2025).

We found no convincing evidence analysing the impacts or safety of AI chatbots or AI-enabled toys for children under five.

Advertising can influence children's health and development

Screens can bring harms through exposure of young children to commercial interests through advertising. This can either be directly through advertisements or more indirectly through methods that establish brand consciousness e.g. through cartoon characters. There is clear evidence that advertising influences food choices (Villegas-Navas et al., 2020) and food intake (Russell et al., 2019) in children under twelve years, and that children under five years are not generally able to distinguish advertising from other content in programmes. Young children may be particularly vulnerable to advertising based upon brands, celebrities, and the physical features of products (Livingstone & Helsper, 2006).

Other theories on how screens are harmful

There are a number of other theories about ways that screens may be associated with harms to young children, including through exposure to electro-magnetic radiation or the impacts of blue light on sleep. We found no convincing evidence to support these theories for young children.

D. Parents and carers are central to healthy screen use

In addition to the evidence that co-viewing with adults and interactivity can promote child development for young children, there is also evidence that the way parents use technology themselves influences their children's use.

Many parents we spoke to were worried about their own screen use and how this would lead to their children copying their behaviour.

> 'I'm super addicted to my phone; I didn't want that for him' - *Father of one-year-old boy*

> 'Just for ourselves. I mean, you feel like you can feel you're addicted. I can see that they are not going to be able to kind of manage anything by themselves' - *Mother of four-year-old girl*

Several parents said their younger children started using screens earlier than their older siblings, partly because there were already screens being used in the house, making it difficult to restrict access.

Parents' own screen use influences their child's screen use and distracts parents

The realities of digital technology in the lives of modern families have been discussed in an earlier section of this report. Aside from the need for parents to use digital technology, there are some benefits for young children of their parents using mobile screen technology. These include allowing parents to better balance home and work life, manage child-focused activities, stay connected to children and spouses when apart, and to access social interactions when at home with young children (Beamish et al., 2018).

Yet technology use in the presence of children (also called technoference by some research) has been associated with higher screen use by young children (Lee et al., 2020; Paudel et al., 2017; Pyne et al., 2025; Xu et al., 2015). This may reflect parental attitudes and beliefs about screen use (Chong et al., 2023), reflect modelling of behaviour (where children imitate parents) or distraction from supervising children (Ferguson, 2015). Studies have also found that smartphone use can distract parents from being as aware of their children in that moment (Beamish et al., 2018; Braune-Krickau et al., 2021), although, of course, parents continue to think of their child's needs whilst using phones (Beamish et al., 2018). This is supported by what we heard from parents ourselves:

> 'I feel really guilty if I'm using it while she's there, ' you go on the phone to check an email, or to reply to a message, and then you realise that you've got distracted and you're scrolling through Instagram, and then they're going, 'Mummy, mummy', and you don't hear them the first few times, and then I feel terrible' - *Mother of four-year-old girl*

Parents using screens in the presence of young children, including during meals or at playtime, has also been linked with poorer outcomes for children, such as higher levels of

emotional and behavioural problems and lower levels of attention, executive function and self-regulation (Chong et al., 2023; Mallawaarachchi et al., 2024; Toledo-Vargas et al., 2025). These effects are thought to arise because children behave disruptively to try to get their parent's attention, or because lower interaction whilst parents are on their own devices limits a parent's ability to support their child's development (Braune-Krickau et al., 2021; Toledo-Vargas et al., 2025). When parents actively control their own use, their children are less likely to use screens (Pyne et al., 2025). Parents using their phones occasionally and for short periods appears to be less disruptive to parent-child interactions than phone use over longer time periods (Braune-Krickau et al., 2021).

Beyond parental media usage, it is important to consider a child's digital media experiences with all household members, including siblings and the extended family. Other family members' digital usage impacts how young children experience media for their own use and as 'background' activity.

Parents' busy lives may increase the amount of time children spend using screens

Stakeholders stressed that 'real life' often presents barriers to parents managing screen time, for example, screens are often used to occupy a young child whilst the parent completes an essential task. This was confirmed through our discussions with parents:

> '[she watches TV] when I'm trying to cook dinner – I'm a single mum' - *Mother of two-year-old girl*

Children's screen use can increase when parental attention is limited, because parents under pressure can rely more on screens to manage routines, and reduced interaction can then amplify the likelihood of children turning to screens for stimulation and engagement. This in turn can lead to more important enriching activities being displaced (Mallawaarachchi et al., 2024).

Parenting stress and confidence may be linked with increased screen use

Parents highlighted the issue of parental stress increasing screen use, with screen time being used to regulate behaviour:

> 'I feel like he's more [interested in eating when] watching the TV. But if I was to take that away […] during dinner time, I don't think he'll eat as much.' - *Mother of five-year-old boy*

> 'It's like, if the TV is on, I can get him dressed. Like, no dramas' - *Mother of three-year-old boy*

Research evidence is inconclusive about whether children's challenging behaviours precipitate or stem from parent technology use (McDaniel & Radesky, 2018). The evidence is also unclear about whether differing ways or styles of parenting impact upon screen use in young children (Pyne et al., 2025). However, there is some evidence that

children use screens less when their parents are more confident in their parenting (Lee et al., 2020; Pyne et al., 2025). This suggests that helping parents have confidence in their parenting skills may help their children regulate their screen use.

E. Money, resources and home circumstances influence screen use and its impacts on young children

There is considerable evidence that family circumstances, in particular parental education level and poverty, have a strong influence on young children's screen use.

Findings from systematic reviews have been mixed (Paudel et al., 2017), perhaps reflecting the complexities of family lives and the differing influences on access to devices, access to educational resources and time available for parental supervision.

In a nationally-representative survey of just under 5000 primary caregivers of two-year-olds in England, several factors were linked with higher screen time (time spent either watching screens or playing computer games) at age two, including lower family income, and lower primary caregiver education levels. For example, children in the lowest income quintile had nearly double the screen time of those in the highest (179 compared to 97 minutes per day) (Fish et al., 2026).

These links between family background and screen use have a number of implications, both for our understanding of the impacts of screen use on children and also for our recommendations for parents.

First, because factors such as household income are linked to both screen use and to children's health and development (Dutra et al., 2025; Gath et al., 2026), there is a possibility that we might wrongly attribute harms or benefits to screen use when in fact it is issues such as poverty that are responsible for poorer health or development (Przybylski & Weinstein, 2019). High-quality longitudinal studies show that not taking account of factors such as family income or parental education level markedly inflates the links we see between high screen time and poorer development in young children, but that there is still a (smaller) link between high screen time and poorer development when we do take poverty and parental education into account (Gath et al., 2026).

Second, there are implications for our recommendations for parents. The resources available to parents, in terms of time in particular, will inevitably influence whether they can manage their children's screen use as effectively as they might wish to. It may be difficult, for example, to prevent children from accessing screens at bedtime when a person's home is a small flat or bed-sit. Some of the most effective methods parents can use to protect their children, such as co-viewing screens with them, may be the most difficult for time-poor working parents. Yet screen co-viewing with parents appeared to limit potential negative impacts for young children from more deprived backgrounds (Xie et al., 2024). This suggests that for time-poor parents and those from more resource-limited households, co-viewing screens with young children offers an important opportunity to promote their child's development and minimise harm from time spent on screens.

F. The use of digital technology to support children with disabilities and special educational needs

We found a number of systematic reviews concerning assistive technology use in young children with disabilities, although more general reviews of screen use in young children largely neglect those with disabilities or special educational needs.

Reviews have shown that using assistive technology devices is related to improvements in child outcomes for young children with mild and severe disability or intellectual delay (Slobodin et al., 2019; Vanderloo et al., 2025). In particular, game-play on screens and virtual reality technology have been used to support improvements in motor function in children with disabilities (AlSoqih et al., 2025; Chen & Shi, 2018; Crebbin et al., 2023; Mentiplay et al., 2019; Page et al., 2017; Ravi et al., 2017), particularly cerebral palsy, with some evidence that young children benefit more than older children (AlSoqih et al., 2025).

Screen-based communication can be important for children with disabilities or neurodivergence, including with professionals (Shin et al., 2025). Screens may also offer a period of much needed respite for both children and parents (Vanderloo et al., 2025). Yet we should recognise that young children with disabilities and neurodivergence are likely to be subject to the same harms identified for the general population if high levels of screen use, particularly non-interactive receptive screen use, displaces interaction with parents, physical activity and sleep.

We have emphasised in this report that how screens are used is as or more important than total time on screens, and that parents and carers should seek a balance between the potential harms relating to higher screen use and the benefits that can result from positive screen use. This balance will be different for young children with disabilities and neurodivergence although we suggest that parents remain cautious about screen use.

We suggest that the limits on use recommended by us for children under 5 should also apply for non-assistive and non-specialist screen use in children with disabilities and special education needs. However we suggest that parents should allow assistive screen technologies for these children where it is clearly beneficial and not remove access to beneficial screen technology due to concerns about time on screens.

G. How much screen time is too much?

The evidence above tells us that the way screens are used by and with young children is as important as the amount of time spent on them. For parents this means that time limits or thresholds for use should go hand in hand with advice on how screens should be used. Many of the parents we spoke to wanted government guidance on appropriate time limits for screen time for each age group.

From these conversations we found that limits on the amount of screen time each day varied widely between families. Some children were limited to one episode of a TV programme a day, others had access to TVs or tablets for several hours at a time, and a few parents reported constant access with the TV on all day in the background.

The concept of ‘problematic’ screen use that is increasingly referred to in older children and adolescents (Montag et al., 2024) has no agreed definition in young children. We consider that screen use in the under-fives becomes problematic when it puts children in unsafe situations or crowds out healthy social interaction, play, sleep and physical activity. Two caveats are important here. First, this observation relates to the absence of evidence, rather than direct evidence of safety. Second, it is important to note that multiple short periods of screen use in a day may add up to longer periods, and that can displace healthy activities.

What evidence is there for time thresholds for screen use?

A number of countries and international bodies have recommended various maximum thresholds for screen time in young children, although these are based in the main on expert opinion, applying a precautionary approach to suggest limiting the amount of time young children spend on screens.

None of the literature we identified provided convincing evidence for specific thresholds of screen time, and studies which have attempted to test the suggested thresholds have found little difference between those over and under limits suggested by various nations or organisations (Przybylski & Weinstein, 2019). Stakeholders broadly reflected this position in their comments. Most felt that avoiding bedtime screens and screen use during other key activities such as meals was more important than strict time limits.

The harms and concerns noted in previous sections relate to either extended periods of screen use, issues with fast-paced or inappropriate content or use at specific times such as at bedtime or during meals. If these are avoided, we found no convincing evidence that short periods of screen use, of up to 30 minutes, were in and of themselves harmful for young children aged two and over.

When considering evidence for potential thresholds for screen time in young children, we noted that a number of studies suggest that associations between screen time and outcomes are not linear, meaning that harms appear to accelerate beyond a particular threshold.

A large longitudinal study from New Zealand that assessed screen time in early childhood and later language and socio-emotional problems found that issues appeared to increase with screen time of more than 1.5 hours per day at age two, whilst problems relating to other children increased with screen time of more than 2.5 hours per day at age four (Gath et al., 2026). A nationally-representative study of babies growing up in England found that, at nine months, children were as likely to be read to by their parents if they spent no time or up to 2 hours on screens per day (Campbell & Cooper, 2026). In fact, parents whose nine-months-old babies experience up to two hours on screens each day were more likely to report daily pretend play, turn-taking activities and daily singing, than those with no screen use, although levels of screen time over 3 hours were associated with lower daily engagement in these activities than either group (Campbell & Cooper, 2026). The same study looking at two-year-olds found the main association of screen time with poorer language skills when screen time was above 86 minutes (i.e. approximately 1.5 hours) (Fish et al., 2026). These examples show that there is no clear evidence for a single

threshold above which harms occur. But these data do support suggestions that there is little evidence of harm with screen use below one hour a day for children aged two and over. This level of use fits with what we know of young children's lives and the need for sufficient sleep, social interaction and physical exercise.

The following recommendations by the EYSTAG panel are not based directly on evidence but are based broadly on knowledge of child development and health in the early years and informed by the evidence and international guidance reviewed by EYSTAG.

- Screen use for infants and toddlers under two years should be restricted to activities with parents that support learning and family bonding. These could include video calling to relatives, reviewing family photo albums, reading e-books with parents or siblings.
- For children aged two to five years, how screens are used matters as much as the length of time they are used. There is no clear evidence for a single 'safe' threshold. However, there appears to be minimal risk of harms at or below about an hour a day of screen time – this includes unhealthy, more non-interactive receptive watching of screens as well as unsupervised use with parental controls in place. This is likely to be particularly true when screens are used in short chunks and not around bedtime or mealtimes. Whilst parents are advised to avoid more unhealthy types of screen use where they can, this is not always possible for busy parents, and short periods such as 30 minutes of non-interactive receptive watching at a time appear unlikely to be a source of harm. Longer periods of quality educational or interactive screen use may bring benefits for child development. However, they may also have opportunity costs in displacing beneficial real-world interaction, sleep or physical activity.

We recognise that parents may find judging an hour a day very difficult as young children tend to use devices in multiple short bursts which vary by type of activity (Winter et al., 2025).

The above time limits do not apply to screen-based assistive technologies for children with SEND. For some children these technologies have essential benefits for communication, well-being and quality of life.

H. What do we know works in reducing screen time?

There is a small but growing scientific literature on how parents and carers might reduce or change screen use in young children. However, most of these have looked at simple overall screen time as part of broader attempts to reduce time children spend being sedentary with the aim to reduce childhood obesity, and none have looked at impacts on child development.

There is evidence that interventions by parents or in early years settings have some effects in reducing overall screen time (Ferguson, 2015; Jones et al., 2021; Nikkelen et al., 2014; Pyne et al., 2025; Wu et al., 2025), for example, by educating parents in what young

children need in terms of healthy play and activity or by providing parent counselling (Ferguson, 2015).

This area constitutes a major knowledge gap and large, well-controlled trials to examine potential benefits to child development of reductions in screen time or changes from less healthy to healthier screen use are needed.

Contributors

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Stakeholders

Engagement with a range of stakeholders, including professional bodies, the tech sector, charities and academics informed the development of this report.

Respondents to the call for evidence

We received 132 responses to our call for evidence. This included responses from 45 nurseries, early years settings and primary schools, 54 organisations, and 31 individuals.

Parents and children

The Office of the Children's Commissioner for England conducted 32 family interviews.

Parents had at least one child aged under five, and several also had older children. Children aged between three and eight years contributed directly to the discussions. Sessions took place in six different school, nursery and playgroup settings across the North and South of England.

Percentage of pupils eligible for free school meals in each setting ranged between 6% and 36%. Families were from a mix of ethnicities and nationalities, including some parents and children with English as a second language and some children had, or were being assessed for, special educational needs or disabilities.

A discussion was also conducted with parents, on behalf of DHSC and DfE, to ascertain their views on what information advice for parents on children's screen use should contain. 53 parents from a variety of socio-economic and ethnic backgrounds were surveyed and their views were considered for this report as well as for parent-facing advice.

Glossary

Algorithm

A set of step-by-step instructions. An algorithm tells a machine how to find answers to a question or solutions to a problem. An algorithmic tool is a product, application, or device that supports or solves a specific problem, using complex algorithms.

Algorithm-served content

Content that is suggested to users through an algorithm.

Application or app

Computer program or software application designed to run on a mobile device such as a phone, tablet, or watch.

Assistive technology

Products or systems that support and assist individuals with disabilities, restricted mobility or other impairments to perform functions that might otherwise be difficult or impossible.

Branded gamified content

Content which uses ideas from games to advertise for company, product or campaign. This could involve earning points or taking part in leaderboards and challenges.

Causation or causality

A direct relationship where one event (cause) produces another event (effect).

Cognitive development

How children’s brains process information and how they think, explore and solve puzzles.

Correlation or correlative

A relationship or connection between two or more variables. This does not mean that one causes the other.

Cross-sectional study

A research study which collects data at one point in time and provides a ‘snapshot’ of what a group of children are experiencing.

Early years

Babies and children who are under five years old.

Executive function

Executive function (also known as cognitive control) refers to mental processes that begin to develop from birth and are considered essential for learning, as well as for cognitive, social and psychological development.

Experimental study

A research study where children are randomly split into two groups. One group receives an internation and the other does not. Outcomes are then compared between the two groups to determine if the intervention changes outcomes.

Fine motor skills

The small muscles in children’s hands, fingers, lips, tongue, and eyes that work together with their brain and nervous system to control precise movements. They help children to eat, write, move objects and get dressed.

Gross motor skills

The movements children develop using their whole body, enabling them to become more confident, agile, and coordinated. They involve using large muscles in children’s arms, legs, and torso for activities like crawling, running, jumping, and walking.

Intervention

A policy, service or programme designed to improve outcomes, reduce risks, manage conditions or change behaviour.

Longitudinal study

A research study which follows up the same group of children over time.

Media use

Relates to the different types of media a child may use. This includes but is broader than screen use.

Meta-analysis

This pulls together findings from numerous individual studies, reports, and evaluations to create a consolidated, high-level analysis. This helps identify patterns across studies and determine effectiveness and impact. It provides greater confidence in findings and can be the one of the most robust ways to assess evidence about a topic.

Non-interactive receptive watching

When a child is watching content on a device without interacting with the content or another person. The child is not required to respond, touch, or speak with the device.

Screen time

Relates to how much total time a child spends using screen-based devices. This includes but is not limited to watching TV, playing games, or video-calling family.

Screen use

Relates to the different screen-based activities and devices a child may use. This includes the whole range of use of digital screens on any device, across television, computers, gaming devices, e-book readers, mobile devices such as smartphones or tablets. Screen use can also include screens on toys and household devices.

Social behaviour

The interactions and responses between people that are influenced by social and culture contexts, their wider environment and their previous behaviours.

Socio-emotional difficulties

When children experience challenges in managing emotions, behaviour, and relationships.

Peer problems

Challenges children face in their interactions with other children, including social conflicts and feelings of isolation.

Personal, social and emotional skills and development

The skills and behaviours children develop that allow them to understand and manage emotions, build positive relationships and attachments, make responsible decisions, and act with resilience.

Systematic review

A comprehensive, structured process that identifies, evaluates, and brings together all relevant evidence to answer a specific question.

Young children

Babies and children aged under five years old.

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Annex – Parent, child and carer views

We spoke to parents, carers and their young children. They told us they wanted guidance that was clear, evidence-based and non-judgemental. It should acknowledge that screen use is normal and advise how to use screens better rather than setting unhelpful and unrealistic standards. They asked for advice covering the following topics.

- Appropriate screen use and content by age:
    - the type of screen use and content which is appropriate for each age group.
- Understanding content types and quality:
    - the impact of high and low stimulation content;
    - the impact of long-form versus short-form content;
    - platforms that are high-quality and safe for children.
- Setting time limits and other boundaries:
    - concise recommendations on healthy daily time limits for young children's screen use; and practical advice on:
    - setting and enforcing boundaries;
    - managing behaviour when transitioning away from screen time to other activities;
    - managing screen time for early-years children when they have older siblings;
    - how to ensure a consistent approach to screen use when children are with other family members;
    - managing parents' own screen use in front of children; and
    - how to model and teach safe and healthy habits before children have their own devices or social media.
- Identifying problems and offering alternatives including practical advice on:
    - spotting problematic behaviour in children or reactions to screens;
    - alternatives to screens when parents need to focus on other responsibilities (cooking, caring for siblings, working from home); and
    - alternatives to screens for moments when children are distressed (in cars, when unwell).
- Advice on how to access places/professionals which/who can provide more information or more specific help on screen time related issues.

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