

Written evidence submitted by the Royal College of Speech and Language Therapists (RCSLT)

Summary

- Language and communication skills underpin children’s early cognitive and emotional development, as well as their later educational outcomes.
- Too much screen time, introduced too early, is associated with lower language skills. However, when children and parents watch screens together, and when children view high-quality, educational content in moderation, this appears to have a positive effect on their language.
- More research is needed to look at the impact of handheld devices and interactive screen time, for example, using smartphones to play games or use apps.
- Screen use has the potential to support communication for children with speech, language and communication needs – through screen-based interventions or using devices as communication aids.
- Parental use of screens may negatively impact children’s language development, where it is a distraction which displaces opportunities for parent-child interaction.
- Parents/carers can use screen time to access high quality information about how to support their child’s language development.
- Messages to parents should include evidence-based advice about how they can support children’s language development, including how they can use screens in a positive way, as well as practical tips for managing screen use.

1. What is the current understanding of how screen time can support and impact children’s development and educational outcomes, including the effect on concentration and behaviour?

1.1 The impact of screen time on children’s language and communication development is a matter that has been raised for many years, commonly debated in the media as well as within academia. The question is an important one, given that early language skills underpin child development across many spheres, including early cognitive competencies, as well as social, emotional and behavioural development.¹ Later, children’s language skills are highly associated with their educational outcomes.²

2. Impact of screen use on language development

2.1 The latest research suggests screen time can have both negative and positive effects on language development, depending on the quantity and quality of screen use. A recent systematic review³ which looked at the association between children’s language ability and screen use – defined as watching television, films or DVDs on devices – found that lower language skills were associated with more hours spent using screens, and more hours with background television on.

- 2.2 However, viewing educational content on screens, and co-viewing – when parents/carers join their children for screen time - were factors associated with increased language skills. Boys in particular were found to benefit from co-viewing.
- 2.3 There was also a relationship between child language and the age at which children started using screens – children who started using screens at an older age were more likely to have better language skills than those who started using screens earlier.
- 2.4 The research acknowledges a number of limitations:
- The size of the associations found were small to moderate. The authors contrast this with other studies which have found larger effect size, for example between sensitive parenting behaviour and child language.
 - Screen use was measured by parental report, which may not be reliable.
 - The results demonstrate correlation rather than causation – we cannot say for sure that it is the screen use which is impacting on children’s language development, rather than another factor.
- 2.5 Increasingly children and young people use screens for purposes other than television or films, including using handheld devices to play games and use apps. Evidence on the impact of this type of screen use is still emerging, but indicates that interactive screens may reduce opportunities for parent-child interactions,⁴ and suggests that co-viewing may happen less when children are using handheld devices, compared to watching television.⁵ More research in this area is needed.

3. Screen use to support children with speech, language and communication needs

- 3.1 Screen-based devices have an important role to play in enabling communication for some children and young people. For example, augmentative and alternative communication (AAC) users may use tablet devices in order to communicate, improving their quality of life and enabling participation in everyday activities. Early adoption of AAC can assist children who have significant speech, language or communication challenges to develop cognitive, language, communication and literacy skills to their full potential.
- 3.2 There are also examples of screen-based interventions which aim to support children and young people to develop their language and communication skills. For example, E-PLAYS ('Enhancing Pragmatic Language skills for Young children with Social communication difficulties') is a computer game for children with social communication difficulties. These difficulties can include initiating conversations, re-telling a coherent narrative and understanding non-literal language. A small pilot study indicated that children receiving E-PLAYS showed improved language abilities. The National Institute for Health and Care Research are now funding a randomised control trial to evaluate the impact of the intervention on a larger scale.⁶

4. The impact of parental screen time

- 4.1 Another emerging area of research is investigating how parents’ use of smartphones may impact children’s language development. The term ‘technofence’ has been coined to describe instances where smartphone use disrupts a parent-child interaction. An article in

Child Development Perspectives suggest that when parents are distracted by their smartphones, this may reduce their responsiveness to their child, and it may disrupt gaze following and joint attention.⁷ These are all important factors which support the development of early language and communication skills, suggesting that technofence could significantly impact the development and educational outcomes of young children. However longitudinal research is needed to establish the impact of parental screen use on children's language outcomes.

4.2 It is also the case that smartphones and other screens can enable parents to access information and advice about how to support their child's language development. For example, Tiny Happy People is an initiative by the BBC to help parents support their child's language and communication skills.⁸ The website hosts a range of articles and videos featuring expert advice and evidence-based activities that can be built into a child's daily routine. An evaluation of the programme by the University of Sheffield is underway.

5. How can parents be better supported to manage children's screen usage?

5.1 Evidence suggests that simply telling parents they should reduce screen time is ineffective.⁹ Instead it may be beneficial to advise on how screen time and devices can be used in ways which support language skills, alongside information about other simple activities which can help children's development.

5.2 Speech and language therapists, working at the local service level, or with national partners like the BBC's Tiny Happy People,^{10,11} have developed positive and practical messaging to parents and carers, with ideas such as:

- Use screens together and talk about what you're watching
- Balance screen time with face-to-face time
- Choose programmes and games that are educational and appropriate for your child's age or stage of development.
- Use smartphones to take pictures of activities throughout the day, and then use the pictures as prompts to talk about what you did together
- Make video calls together to family or friends
- Set boundaries around screen use and create a visual timetable to help younger children understand how and when screen time fits into their daily routine

6. About the RCSLT

6.1 The RCSLT is the professional body for speech and language therapists (SLTs), speech and language therapy students and support workers, with more than 20,000 members across the UK.

6.2 SLTs are an integral part of the children's workforce, working alongside parents/carers and with other professionals across education, health and social care to support children with speech, language and communication needs (SLCN), and those with eating, drinking and swallowing difficulties.

6.3 SLTs' specialist knowledge and skills regarding children's speech, language and communication development mean they also have a key role in enabling universal approaches to supporting speech and language development for all children, and planning targeted interventions for those at increased risk.

References

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² *ibid*

³ Madigan S, McArthur BA, Anhorn C, Eirich R, Christakis DA. Associations Between Screen Use and Child Language Skills: A Systematic Review and Meta-analysis. *JAMA Pediatr.* 2020;174(7):665–675. doi:10.1001/jamapediatrics.2020.0327

⁴ Munzer T.G., Miller A.L., Weeks H.M., Kaciroti N., Radesky J. (2019). Parent-toddler social reciprocity during reading from electronic tablets vs print books. *JAMA Pediatr.* 173(11). doi:10.1001/jamapediatrics.2019.3480

⁵ Domoff S.E., Radesky J.S., Harrison K., Riley H., Lumeng J.C., Miller A.L. (2019). A naturalistic study of child and family screen media and mobile device use. *J Child Fam Stud.* 28(2):401-410. doi:10.1007/s10826-018-1275-1

⁶ NIHR (2023). E-PLAYS-2 (Enhancing Pragmatic Language skills for Young children with Social communication impairment) trial; evaluation of a computerised intervention to promote communicative development and collaborative skills in children. Accessed online 12 October 2023: <https://fundingawards.nihr.ac.uk/award/NIHR131745>

⁷ Morris, A. J., Filippetti, M. L., & Rigato, S. (2022). The impact of parents' smartphone use on language development in young children. *Child Development Perspectives*, 16, 103–109. <https://doi.org/10.1111/cdep.12449>

⁸ University of Sheffield (2023) Tiny Happy People: closing the language development gap in preschool children. Accessed 12 October 2023: <https://www.sheffield.ac.uk/research/features/tiny-happy-people>

⁹ Wahi G, Parkin PC, Beyene J, Uleryk EM, Birken CS. Effectiveness of interventions aimed at reducing screen time in children: a systematic review and meta-analysis of randomized controlled trials. *Arch Pediatr Adolesc Med.* 2011;165(11):979-986

¹⁰ BBC (2023). How is the rise in screen time affecting children? Accessed online 12 October 2023: <https://www.bbc.co.uk/tiny-happy-people/rise-in-screen-time/zck8cmn>

¹¹ BBC (2023). Children's screen time: Ways devices can be good for preschoolers' learning. Accessed online 12 October 2023: <https://www.bbc.co.uk/tiny-happy-people/good-screen-time/zq4b8p3>

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