

What About The Children?

Patrons: Sir Michael Morpurgo, Rebecca Abrams, Sir John Timpson, Dame Sarah Storey

'Raising awareness of the never-changing emotional needs of the under-threes in our ever-changing society'

Registered Address: Feldon House, Chapel Lane, Newbold on Stour, CV37 8TY.
Email: enquiries@whataboutthechildren.org.uk or research@whataboutthechildren.org.uk



RESEARCH SUMMARY

Prolonged touch screen device usage is associated with emotional and behavioural problems, but not language delay, in toddlers.

Lin, H-P, Chen, K-L., Chou, W., Yuan, K-S., Yen, S-Y., Chen, Y-S., Chow, J. C.
Infant Behaviour and Development (2020) 58, 101424

Early childhood is a time of rapid development when many functions of the brain develop. This cognitive-behavioural development is particularly susceptible to certain stimuli such as exposure to digital media. The American Academy of Paediatrics in 2016 recommended children under 18 months avoid screen media use, except for video calls. Less than 1 hour per day of screen time was recommended for children aged 2 to 5. Previous studies have shown that over-exposure to television can increase emotional, behavioural and speech problems.

Touch screen devices have become ubiquitous in recent years, incorporating new functions, video games, videos and video-calling. It is estimated that the percentage of children under eight with access to mobile devices increased from 52% to 75% between 2011 and 2013. One study based on children from a paediatric clinic in a low income area showed that 96.6% of under-4s used a mobile device, with 75% of those owning their own device. With more time being spent on digital media use, less time is therefore spent on physical, cognitive, social and academic activities. Earlier studies have highlighted how excessive television viewing in early childhood is associated with cognitive, language and social/emotional delays. There has also been shown to be an increase in the risks of problems such as obesity, myopia, aggressive behaviour, social behaviour problems, attentional problems and emotional problems.

More recently it has been found that many parents now use touch screen devices, such as IPADs, as 'electronic babysitters' to calm or comfort their child. Studies have shown that excessive media use is associated with difficult temperament or self-regulation problems in young children. Mobile devices have also been shown to be used as a way of calming down toddlers with social-emotional delays.

Touch screen devices have been shown to lead to 'addiction proneness' in children aged one to six, with an association with problematic behaviours and reduced emotional intelligence, although it is still unclear whether this also applies to young children of 18 to 36 months.

However, a recent study from Taiwan focused on this age group. 161 children and their parents of 18 to 36 months were recruited by Han-Pin Lin and her team from a paediatric inpatient department and outpatient clinic. Children who had a history of

very preterm prematurity, traumatic brain injury, inborn metabolic disease or diagnosis of developmental delay were all excluded.

Children were assessed for emotional and behavioural problems using the 'Child Behaviour Checklist' for ages 1 ½-5, as well as being screened for communication and language delays. They were also assessed for variables that may affect emotional or language development, such as being an only child, parents' educational levels, and language used at home. Information was collected on the age at which children first used touch screen devices, the amount of use per day, the purpose of the device, and the type of use.

The findings from this study indicated that children who spent more time on touch screen devices were more likely to have emotional problems, anxious/depressive symptoms, somatic complaints, social withdrawal symptoms, attention problems and aggressive behaviours. However, using touch screen devices was not associated with language development. Overall, increased exposure to touch screen devices for children aged 18 to 36 months indicated that this may be negatively associated with their emotions and social behaviours. Additionally, the study found that being a single child was associated with the likelihood of more emotional, somatic and attention problems, but better language development.

These are critical findings, though the limitations of this study by Han-Pin Lin and her team need to be acknowledged. For example, the research took place in only one centre – this being a clinical setting. Arguably, further, and more extensive studies in a range of settings will be needed before wider and more definitive conclusions can be drawn about the effects of prolonged touch screen device usage by very young children. However, there is clear evidence from this study from Taiwan that the impact of touch screen devices on very young children is a serious cause for concern.

Increased exposure to touch screen devices may mean that children are spending less time on social activities, such as social interaction or communication –important to their emotional and behavioural development. A child may therefore have fewer chances to learn how to express their feelings or to learn behaviours that are suitable in different contexts. Failure to engage in interactions with adults may lead to a deficit in self-regulation, as it is known that the quality of the caregiving in a parent-child interaction is important, and that child self-regulation requires parental facilitation.

Children without siblings may have fewer opportunities to learn how to get along with others. This can lead to more emotional problems relating to screen use than are seen in children with siblings, but has been shown not to affect language development, arguably because of the extra interaction with the parents.

Parental use of touch screen devices can also affect children, with a child learning from, or imitating usage, of their caregivers. Parents' smartphone usage patterns can influence smartphone overuse in young children. Parents therefore may need to find strategies to reduce their child's quantity of time spent on touch screen devices, such as spending more time with their children, spending more time outdoors and setting schedules to restrict device use.

Dr Clare Cunningham