

Touchscreens may boost motor skills in toddlers

September 13 2016, by Conn Hastings



Credit: Frontiers

Does your toddler use a touchscreen tablet? A recent study published in *Frontiers in Psychology* has shown that early touchscreen use, and in particular actively scrolling the screen, correlates with increased fine



motor control in toddlers.

Smartphones and <u>tablets</u> are now commonplace at work and in the home. If you are reading this on your morning commute on <u>public transport</u>, it is likely to be on a touchscreen device, while surrounded by people who are completely absorbed by their own touchscreens.

There has been a dramatic increase in the ownership and use of tablets and smartphones in recent years. In the UK, family ownership of touchscreen devices increased from 7% in 2011 to 71% in 2014. It is therefore not surprising that <u>children</u> are using touchscreens from a very early age, but is this a good thing or not?

The effects of using touchscreens on young children are a concern for some parents and policymakers. Popular opinion holds that using touchscreens at an early age is likely to delay the cognitive development of children. The American Academy of Pediatrics advises that children should not be exposed to any screens, including touchscreens, before the age of two, and similar agencies in other countries have adopted these guidelines.

However, we don't yet know if these fears are justified, as it turns out that when it comes to touchscreens, they aren't backed by hard data. The current guidelines are arguably more of a knee-jerk reaction to a new technology than an informed health strategy.

Scientists have not yet extensively studied the relationship between childhood development and using touchscreens, because the technology is still so new and the children that have used it from early childhood are still very young.

Despite the guidelines, in reality many <u>toddlers</u> use touchscreens from a very early age. Dr Tim J Smith of Birbeck, University of London,



realized that there is a need for more solid data and with the help of his collaborators at King's College, set up an online survey for UK parents to answer questions about their children's touchscreen use.

This included questions about whether the toddlers used touchscreens, when they first used one, and how often and how long they use them. The survey also included specific questions to assess the development of the children, such as the age that they first stacked blocks, which indicates fine motor skills, or the age they first used two-word sentences, which indicates language development.

In total, 715 families responded and the study confirmed that using touchscreens is extremely common in UK toddlers. "The study showed that the majority of toddlers have daily exposure to touchscreen devices, increasing from 51.22% at 6-11 months to 92.05% at 19-36 months," explained Dr Smith.

They found no significant associations between using touchscreens and either walking or language development. However, "in toddlers aged 19-36 months, we found that the age that parents reported their child first actively scrolling a touchscreen was positively associated with the age that they were first able to stack blocks, a measure of fine motor control."

It is not yet known if this correlation indicates that using touchscreens can enhance fine motor skills, or if children with fine motor skills are more likely to use touchscreens earlier, and so further work is required to determine the nature of this relationship more precisely. However, it is clear that the current generation of toddlers is adapting rapidly to this new technology and these children look set to use these devices throughout their lives.

More information: Rachael Bedford et al, Toddlers' Fine Motor



Milestone Achievement Is Associated with Early Touchscreen Scrolling, *Frontiers in Psychology* (2016). DOI: 10.3389/fpsyg.2016.01108

Provided by Frontiers

Citation: Touchscreens may boost motor skills in toddlers (2016, September 13) retrieved 9 April 2024 from https://medicalxpress.com/news/2016-09-touchscreens-boost-motor-skills-toddlers.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.