

# Put a pause on screen time for young kids



The results of a recent local study, gleaned from more than 500 pre-school children in Singapore, provide scientific evidence that screen viewing displaces time that is otherwise spent on more positive activities, such as physical play.  
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**Findings from a local study suggest toddlers who use screens more than three hours a day could grow up to display sedentary behaviour later in life**



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With the coronavirus outbreak showing no signs of abating, parents may be keeping their children indoors more. But they should take care that this not result in a spike in screen time.

As screen use rises among children, more evidence continues to surface that this does more harm than most parents realise. Results from a recent local study suggest that heavier screen time use by toddlers could lead to more sedentary behaviour and lower physical activity later in life. The study was published in The

Lancet Child and Adolescent Health journal in late January.

It found that children aged two to three who had more than three hours of screen time a day, such as viewing videos on a smartphone, were less physically active at age 5½ than children who used screens for an hour or less each day.

These findings – gleaned from more than 500 pre-school children – came from the Growing Up in Singapore Towards Healthy Outcomes project, a longitudinal birth cohort study that started in 2009 with the recruitment of pregnant women at two public hospitals.

"It is the first study in very young children to explore the longitudinal associations between screen viewing and activities of daily living in the context of 24-hour time use," said Associate Professor Falk Mueller-Riemenschneider, the leader of the Physical Activity and Nutrition – Determinants in Asia research programme at the National University of Singapore's Saw Swee Hock School of Public Health.

The study provides scientific evidence that screen viewing displaces time that is otherwise spent on more positive activities, such as physical play, he said.

Ms Chen Bozhi, a graduate research student and the study's co-investigator and lead author, said the research showed children aged two to three spent an average of 2.5 hours a day watching screens.

Last year, the World Health Organisation said children between two and five should be limited to 60 minutes of screen time a day, the less the better. Chil-

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**GRADUATE RESEARCH STUDENT CHEN BOZHI**, who is the co-investigator and lead author of the recent *Gusto* study on screen time, *Gusto*, which stands for Growing Up in Singapore Towards Healthy Outcomes, is a longitudinal birth cohort study that started in 2009.

dren under two, it says, should not spend any time with screens at all.

Children must also get better quality sleep and have more time for active play if they are to grow up healthy, it added.

Ms Chen said: "The findings (of the recent study) also highlight that even screen viewing at as early as age two was negatively associated with physical activity at age 5½."

"This emphasises the need for public health action aimed at reducing screen viewing early in life."

She said one surprise in the findings was that screen viewing did not appear to affect sleep duration, contrary to the suggestion from existing hypothesis and previous research, though this warrants further study.

She also said their findings did not support beliefs that more modern and interactive types of screen devices are better for children's health than television.

While the majority of screen time studies so far have focused on television time, this study looked at the exposure to different types of screen devices, particularly mobile devices, which reflects the current use of screens, said Prof Mueller-Riemenschneider.

He said the study strengthens existing evidence linking screen viewing with later child health.

For the study, parents gave information about their children's daily total and device-specific screen viewing time (television, handheld devices and computers) at clinic visits when the children were aged two to three years old.

Then, at 5½ years old, the children's activity was measured for

seven days using wrist-worn accelerometers.

However, the researchers were not able to discern the content of the reported screen viewing.

"For instance, we are not able to distinguish between time spent watching movies, engaging with educational materials or playing interactive games," said Prof Mueller-Riemenschneider.

"Differentiating the content of screen use in addition to the time spent on screen devices will be essential in our future research."

Excessive screen time in childhood has been linked to a range of health problems, including increased risk of obesity and reduced cognitive development.

A 2016 study that Prof Mueller-Riemenschneider was involved in found an alarmingly high usage of screen devices in very young children in Singapore.

"These findings have been replicated in Singapore and across the world, reflecting our personal experience that the use of screen devices is highly prevalent among young children," he said.

The study had found that the majority of children aged 18 months to 24 months – about 88 per cent – engaged in daily screen viewing.

It had concluded that improving parental knowledge of screen viewing recommendations, reducing parental screen time and, particularly, implementing strict rules on screen time could help to reduce screen viewing in young children.

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