

# Are longer hours in pre-school better for kids?

Study finds those who stayed in childcare beyond 40 hours had lower maths and literacy scores, but better behaviour



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The longer your kid aged three to six spends in childcare beyond 40 hours a week, the greater the toll it takes on his or her academic performance, a 2024 study reveals.

Children in Singapore spend on average 41 hours a week in childcare, one of the highest durations in the world, according to a November 2024 policy brief from A\*Star's Institute for Human Development and Potential (IHDP). The document, which is online at [str.sg/Bjku](http://str.sg/Bjku), aims to educate the public and policymakers on new research findings and recommendations.

Over one in three children here (38 per cent) spend more than 50 hours weekly in such centres, a reflection of parents' long working hours.

In contrast, children in the United States spend an average of 25 to 33 hours a week in childcare, says Professor Jean Yeung, director of Social Sciences at A\*Star's IHDP and a professor in the Department of Paediatrics and the Human Potential Translational Research Programme at the NUS Yong Loo Lin School of Medicine.

Childcare centres in Singapore typically open on weekdays from 7am to 7pm and cater to children aged eighteen months to six years old. There were more than 152,000 children in childcare in 2023, according to figures from the Early Childhood Development Agency's (ECDA) website.

The latest childcare findings draw from the Singapore Longitudinal Early Development Study, a large-scale and nationally representative study of 5,000 children who were below age seven when it started in 2018.

For the study, scientists examined 2,330 children aged three to six who attended early childhood education programmes and their academic performance then. The findings were published in *Early Childhood Research Quarterly* in April 2024.

It found that for kids in childcare below 35 to 40 hours a week – or seven to eight hours a day across a five-day week – the more hours they attended childcare, the higher their maths and literacy scores.

This reflects increased learning opportunities, says Prof Yeung. Children were tested for their verbal and numeracy skills at home using the Woodcock-Johnson Achievement Test, an international standardised test of cognitive achievement.

But the longer the kids remained in childcare beyond 40 hours, the lower their test scores, even after the researchers factored in their family's socio-economic status and other variables.

For instance, children who spent more than 50 hours a week in childcare scored about seven percentile points lower in the verbal test and 10 percentile points lower in the numeracy test, compared with children who spent 41 to 50 hours a week in childcare.

That is typically when hunger, boredom and stress from being in a group sets limits on what a child can take in.

Prof Yeung says: "Even for adults, if you work for more than eight hours, you start to get high stress, become tired and have reactions that may make learning become more difficult."

While early achievements tend to predict later achievements, she adds that researchers have yet to track the effect that tuition during the school years has on reversing these effects.

## CAN FLEXIBLE WORK HELP?

But the study also found that the number of hours spent in childcare facilities had the opposite, in fact beneficial, effect on children's behaviour. The longer the time spent in childcare, the better the reported behaviour of kids.

In children who attended childcare below the 40-hour threshold, more hours were associated with higher externalising behaviour problems such as aggression and hyperactivity.

This is consistent with studies in other countries and can be attributed to the quality of early care including the caregiver-to-child ratio, the physical space or the emotional environment, such as how supportive or responsive the



Children in Singapore spend an average of 41 hours a week in childcare, one of the highest durations in the world. My First Skool centres, which is under NTUC First Campus, embed social-emotional learning into daily activities. ST PHOTO: BRIAN TEO

caregivers are to the children, in the care setting, says Prof Yeung.

Kids who stayed in childcare beyond 40 hours weekly showed fewer externalising behaviour problems, although the decrease was less than the drop in academic achievement, she adds.

Childcare operators the scientists spoke to suggested that children who stayed longer may have developed a closer relationship with staff members, which helped to reduce their social-emotional problems, she says.

However, the researchers cautioned that the Singapore study interviewed only the kids' parents and did not check with their teachers, so the findings may be biased.

The institute's policy brief recommends that early childhood education programmes improve support for children's social-emotional development, especially for those staying longer hours.

This could include devoting more curriculum time to nurturing pre-schoolers' social-emotional skills and more training for care providers to handle the social-emotional problems of their young charges.

As most centres have their last snack at around 3pm, they could consider introducing an additional snack around 5pm for kids who are routinely picked up late. They might also hold interactive activities or take kids outdoors to keep stress and boredom at bay.

Finally, flexible working hours and shorter work days for parents could reduce the amount of time kids spend in childcare and potentially improve their cognitive and behavioural outcomes, the researchers suggest.

Singapore recently launched its Tripartite Guidelines on Flexible Work Arrangement (FWA) Requests in December 2024, which aims to help workers formally request FWAs and for bosses to consider them fairly.

"There is no substitute for parents to spend quality time, interacting with kids, talking and reading to them, and playing with them," Prof Yeung says.

## PRE-SCHOOLS SAY KIDS WELL TAKEN CARE OF

The findings come at a time when more Singapore children attend pre-school for longer durations as the number of dual-income families grows and parents recognise the importance of early childhood care and education.

An ECDA spokesperson says that more parents are enrolling their



Ms Cindy Yeo and her husband Alston Li believe that how parents spend time with their kids outside childcare hours matters more to their development. PHOTO: COURTESY OF CINDY YEO

children in full-day childcare over half-day programmes to balance their work and family commitments.

ECDA has been improving the quality of pre-school care and education, the spokesperson adds. It has updated its national pre-school curriculum frameworks to place greater emphasis on developing children's social and emotional competencies.

"To ensure children are meaningfully engaged, pre-schools' programmes should cover indoor and outdoor experiences, active and quiet play, structured and free play, as well as opportunities for children to interact in small and large groups, and to have individual activity time. Pre-schools must also not deprive a child attending the centre of any meal or basic need."

Two large pre-school chains say they have adequate resources and support to tackle the impact of long hours on children's cognitive development, and any behavioural issues that may arise. They were not able to provide percentages or numbers of their students who spend more than 50 hours on site.

PCF Sparkletots Preschool, which has more than 40,000 children enrolled at its 350 pre-schools, says its Stemie (Science, Technology, Engineering, Math, Invention and Entrepreneurship) programme helps children develop social-emotional skills, such as

empathy, when they identify a problem to be solved. It also imparts self-directed learning skills to nurture a lifelong love of learning, says Ms Angela Yang, its director of professional and education development.

Its teachers also teach the young ones emotional vocabulary to help them express their feelings and learn to self-regulate.

Children who appear hungry may be offered snacks between scheduled mealtimes and some of its centres have flexible snack times, Ms Yang says. Teachers will also offer children who look bored alternative activities or resources to engage in.

Ms Coreen Soh, chief child development officer of NTUC First Campus, which runs more than 180 pre-school centres under its My First Skool and Little Skool-House networks, says its centres embed social-emotional learning into daily learning activities and its teachers are guided by specialised toolkits developed in-house.

The centres, which take care of about 29,000 children islandwide, also feature thoughtful designs to support social emotional development, such as with quiet zones where they can self-regulate when they feel overwhelmed, as well as dramatic play areas to express and explore their emotions.

Mindfulness activities, such as storytelling and relaxation techniques, as well as empathetic teachers, help children to reduce stress.

## PARENTS NOT WORRIED, EMPHASISE BONDING ACTIVITIES

Parents interviewed by The Sunday Times were not unduly worried about the new research findings, as they think that the structured activities in childcare are a better alternative than having their kid idle on his or her own at home.

"Rather than sitting idle, they are participating in activities that they are familiar with, and with people who can be trusted," says communications consultant Deborah Dayani Nanayakara, who is in her 30s. Her daughter, three, and twin sons, 18 months old, attend full-day nursery and playgroup programmes, respectively.

However, she has noticed that the later her children stay in pre-school, the more meltdowns they have, along with a lack of appetite for dinner. She advocates having a pre-dinner snack for kids who are picked up later and more engaging activities in the afternoons.

Ms Nanayakara, who enjoys flexible hours in her work, supports FWA arrangements for parents.

"The more time parents spend with their children, the better they develop and the stronger their bonds," she says.

Ms Cindy Yeo, a mother of two, believes that school is just one part of the equation when it comes to children's cognitive development. Her son, four, attends childcare from 9am to 5pm a day, or about 40 hours a week. Her 15-month-old daughter will start childcare later in 2025.

"I am not convinced that childcare hours affect their development. On the contrary, I would think the remaining hours spent with the parents beyond school hours matter more," says Ms Yeo, 34, who is self-employed.

She and her husband, electrical engineer Alston Li, 34, make it a point to take their children outdoors and overseas for experiential learning, which she hopes will make them more creative and adaptable.

Experts hasten to add that these findings should be interpreted correctly. They should not dissuade "time-poor" parents from sending their children to childcare centres, says Adjunct Associate Professor Chong Shang Chee, head and senior consultant from the Division of Developmental and Behavioural Paediatrics in the Department of Paediatrics at Khoo Teck Puat – National University Children's Medical Institute, National University Hospital.

In cases where parents cannot cope with caring for their child, such as single parents, or do not have the resources to engage them at home, extended childcare may be a protective environment, even if the study findings indicate a slight disadvantage.

"Behavioural and developmental outcomes of children depend on a complex interplay of factors, including innate temperaments, behavioural styles, learning abilities, quality of childcare and quality of home environments," says Prof Chong.

While childcare settings deliver a universal curriculum, parents who understand their children and provide positive learning experiences at home, adapting to the children's temperament and needs, will be able to help them develop well.

"No childcare, even the highest quality ones, is able to replace the role of home caregivers in the care of their child," she says.

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