

12 November 2024

## **POLICY BRIEF (ISSUE 1)**

# **Impact of Extended Hours in Centre-Based Childcare on Early Child Development in Singapore**

### **Key points**

In Singapore, parents' long working hours<sup>1</sup> mean that children spend more time in centre-based childcare compared to their peers in other developed countries. Those in childcare spend 41 hours per week on average, and 38% spend more than 50 hours, as compared to the US, where children spend an average of 25-33 hours<sup>2</sup>. This raises questions about how these prolonged hours impact development.

- Bi et al used data from the Singapore Longitudinal Early Development Study (SG-LEADS) to explore the impact of time spent in childcare on aspects of early child development. This study examined 2,452 children aged 3 to 6 years, of which 95% (2,330) attended early childhood education programmes<sup>3</sup>.
- A complex relationship between childcare hours and development outcomes was seen:
  - ⇒ Under 35-40 hours a week: more hours were linked to better early academic achievements, but also higher externalising behaviours (e.g. aggression, hyperactivity)
  - ⇒ Above 35-40 hours a week: more hours were associated with fewer behaviour problems, but lower academic performance.
- Policy implications include improving social-emotional support in early childhood education programmes, and improving flexible work arrangements to reduce time spent in childcare.

## SG-LEADS

This study used data from the Singapore Longitudinal EARly Development Study (SG-LEADS), conducted from 2018 to 2019, consisting of 5,005 children under the age of 7 and their primary caregivers in 3,476 households across all ethnicities and socioeconomic status in Singapore<sup>4</sup>.

This research was funded and supported by The Ministry of Education Social Science Research Thematic Grant (MOE2016 – SSRTG – 044)

## Research findings

Children of working mothers spent an average of 45 hours in centre-based childcare per week, while those of non-working mothers spent an average of 32 hours.

There is an inverted U-shape relationship between centre-based childcare hours and behavioural problems. The turning point appears to be 35-40 hours per week: below this threshold, more hours were associated with more externalising behaviour problems (such as aggression); above this threshold, more hours were associated with fewer externalising or internalising behaviours (such as withdrawal). This may be due to stability in childcare arrangements.

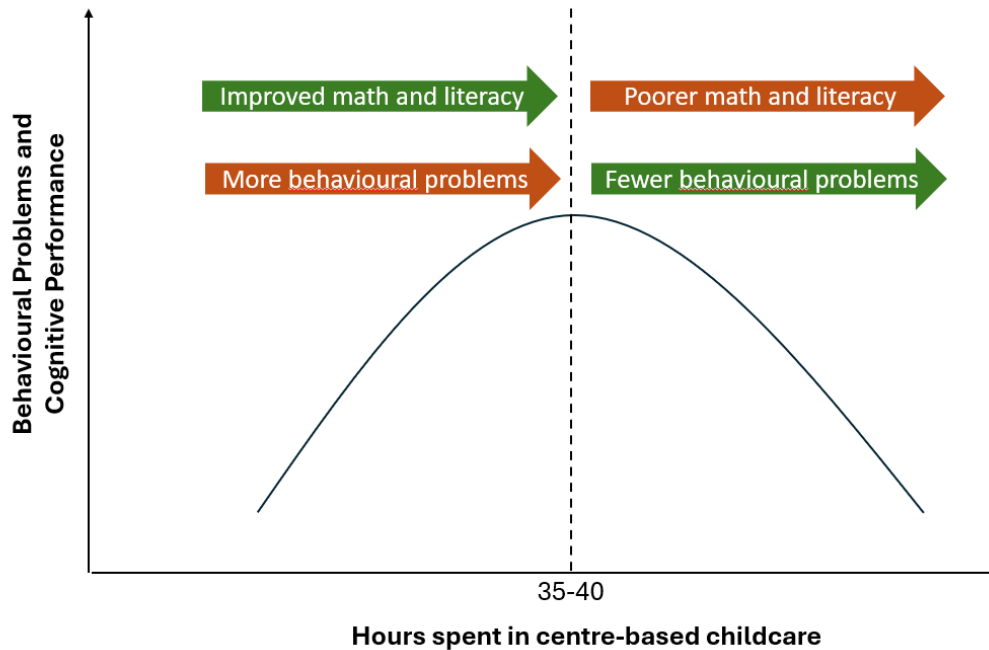
A similar relationship is seen between hours spent in childcare and cognitive development. Below 35 to 40 hours per week, more hours were associated with higher math and literacy scores. Above this threshold, more hours were associated with lower academic achievement. This may reflect increased opportunities to learn, up to a threshold beyond which other factors such as hunger, boredom or stress from being in a group setting limit children's ability to learn.

## Policy recommendations

**Improve social-emotional support.** Early childhood education programmes should offer support for social-emotional development, especially for those with multiple childcare arrangements or attending for long hours.

**Mitigate the impact of long hours.** Early childhood education centres should introduce measures such as nutritional support and interactive activities to reduce stress, boredom and hunger for children attending over 8 hours a day.

**Support flexible work policies.** Flexible work hours and shorter working days can reduce the amount of time children spend in childcare, potentially improving both cognitive and behavioural outcomes.



## References

1. Giattino C, Ortiz-Ospina E, Roser M. "Working Hours" Published online at OurWorldinData.org. (<https://ourworldindata.org/working-hours>).
2. Laughlin L. Who's Minding the Kids? Child Care Arrangements: Spring 2011. United States Census Bureau, April 2013 2013. (<https://www.census.gov/library/publications/2013/demo/p70-135.html>).
3. Bi Y, Ding XP, Yeung W-JJ. The link between hours of center-based childcare and child development in 3- to 6-year-olds: Evidence from Singapore. *Early Childhood Research Quarterly* 2024;68:76-89. DOI: 10.1016/j.ecresq.2024.04.004.
4. Yeung W-JJ, Parasaba LJM, Chen X, Chen L, Lee YS, Tan J. Singapore Longitudinal Early Development Study (SG LEADS): Wave 1 study guide. Centre for Family and Population Research. September 2020 ([https://fass.nus.edu.sg/cfpr/wp-content/uploads/sites/17/2022/08/W1\\_StudyGuide.pdf](https://fass.nus.edu.sg/cfpr/wp-content/uploads/sites/17/2022/08/W1_StudyGuide.pdf)).

### Suggested citation:

Policy Brief: Impact of Extended Hours in Centre-Based Childcare on Early Child Development in Singapore. (2024) Institute for Human Development and Potential, Agency for Science, Technology and Research, Singapore