



Young children have varying levels of access to books, toys and technology at home, which creates varying home experiences for them during the circuit breaker, says the writer. She adds that at this time, these resources become even more important for children's socio-emotional and cognitive development, when school and outside resources are not available. ST FILE PHOTO

Covid-19 can widen gaps in children's development

Insights from a longitudinal study in Singapore suggest Covid-19 and home-based learning can exacerbate socio-economic inequalities, leading to wider learning gaps.

Wei-Jun Jean Yeung

For The Straits Times

How are Singaporean children experiencing the circuit breaker period, when workplaces and schools are closed to stop transmission of the coronavirus?

With anxieties riding high over the health risk from the Covid-19 pandemic and the economic impact of the shutdown on families, many children and their caregivers' daily lives are being upset in an unprecedented manner.

As this crisis exacerbates inequality in key resources for children, we are likely to see a widened gap in children's health, and socio-emotional and cognitive development in the aftermath of the virus outbreak.

Findings from the Singapore Longitudinal Early Development Study (SG Leads), conducted by the Centre for Family and Population Research at the National University of Singapore, shed some light on how Covid-19 can affect children's development.

This Ministry of Education-funded study (of which I am principal investigator) collected data last year from a nationally representative sample of 5,021 Singaporean children aged up to six years and their primary caregivers who live across the nation. Children from all socio-economic statuses and racial groups are properly represented in this study.

FAMILY TIME

For some children, the circuit breaker may be a golden opportunity for them to strengthen the bond with their parents – to see more of them, share meals, read, play, cook and work together more. Children may be sleeping and eating more, and have more relaxed schedules since there is no commuting, and the tutorial and enrichment classes have mostly been cancelled.

Parents who have a stable job, more flexible work hours, proper

living quarters that allow them to work from home during this period, and have help at home, may welcome the chance to stay home and enjoy more family time. For children and parents who have fewer resources, the experience may be quite different.

SG Leads data shows that, before Covid-19, 58 per cent of Singaporean children aged up to six years ate with their parents at least once a day, and 35 per cent of parents read to their children every day.

Children's time diaries show that a young Singaporean child spends, on average, 3hr 49min and 1hr 41min on a weekday engaging directly with his/her mother and father, respectively.

And on a weekend day, a child spends 7hr 29min and 5hr 57min engaging directly with his/her mother and father respectively. During the circuit breaker, these frequencies can be expected to have increased significantly, particularly, children's time with their fathers on weekdays.

Before Covid-19, children under three spent about three hours on a weekday in daycare, while three- to six-year-olds spent about 6½ hours in daycare centres or schools.

With daycare centres and schools closed now, it falls to parents to teach, monitor and provide learning opportunities. However, families have varying capabilities to handle these responsibilities.

Research shows that parents of higher socio-economic status (SES) provide a more enriching learning environment for their children.

They tend to be better informed about their children's developmental needs, have more resources, and are better equipped to create an environment that is safer, healthier and more stimulating for children. They are also shown to be more involved in children's learning in and outside of school, set more limits for children's activities, and are more likely to set a regular time and place for their children to do schoolwork.

Better-educated parents have better skill sets to help with their

children's schoolwork, particularly for older children. SG Leads data supports these patterns.

LIVING SPACE

In Singapore, families' SES can roughly be identified with the public housing types they live in, with the most advantaged living in private condos and landed properties or Housing Board five-room or executive units, and the most vulnerable families living in HDB rental units (hereafter referred to as "rental flats/units"), most of them in one- or two-room flats. Parents in rental units have the lowest earnings and educational attainment and a higher proportion of them are single parents.

Among the SG Leads families living in rental units (about 400 families), the household size ranges from two to 13 persons. Among rental units, 30 per cent have five to six persons, and 10 per cent have seven or more persons. Of these households, 7.4 per cent have four children (under the age of 18) and 9 per cent have five or more children.

With four in 10 having five or more household members squeezed into flats of 36 sq m to 45 sq m, the space constraint makes it difficult for family members to have personal space. This is particularly difficult during the circuit breaker when everyone needs to stay home all the time, working from home or doing online home-based learning, and doing chores and cooking.

Juggling work and family life in a crowded, confined space can create friction and increase stress among family members. The tight space will make it hard for children to concentrate on their learning.

MATERIAL RESOURCES AND PARENTAL INVOLVEMENT

Singaporean young children have varying levels of access to books, toys and technology at home, which creates varying home experiences for them during the circuit breaker. At this time, these resources become even more important for children's socio-emotional and cognitive development, when school and outside resources are not available.

Among children living in private condos or landed properties, 56 per cent have 50 books or more, compared with 10 per cent of those living in rental flats.

Half of the children (53 per cent) living in rental flats have fewer than

10 books. In addition, half of the parents living in private condos and landed properties read to their children every day. In rental flats, 14 per cent of the parents read to their children daily, but 31 per cent of them never read to their children. Similarly, those in smaller housing units have much fewer toys, musical instruments and other cognitively stimulating materials at home.

SG Leads data also shows that children of parents with higher SES spend less time on electronic devices, and more time on achievement-oriented activities, sports and other active play.

DIGITAL GAP

Over a week, children who live in one- to two-room flats spend about 8hr 4min watching TV, compared with 4hr 15min for those living in private condos or landed properties.

In addition, children in rental flats spend 4hr 28min a week on other electronic devices such as computers, tablets, or smartphones, compared with 1hr 12min for children in private condos and landed properties.

These are staggering differences when accumulated over time.

Children living in rental flats also spend less time in active activities. Unfortunately, the screen time can be expected to have increased further and the active time decreased during the circuit breaker, particularly for those with low SES parents and those in small housing.

While the Wi-Fi penetration rate is near-universal in Singapore, 8 per cent of the SG Leads families living in rental units do not have a connection, and thus have difficulty accessing online resources.

Among them, 44 per cent do not have a computer or a laptop at home (compared with 4 per cent for those living in private condos or landed properties).

Among the children living in the rental units, 54 per cent do not have a tablet, compared with 11 per cent among those living in a condo or a landed property.

Almost all households have a smartphone. A high proportion (47 per cent) of the children living in rental units have access to one and use them more frequently and with less parental supervision than children in other housing types.

During the circuit breaker, children have to share these devices with siblings and parents and those with less access may have reduced efficiency in learning.

In addition to the hardware, higher SES parents are expected to be able to help children's learning more, sourcing additional online resources and supervising their homework and technology use more, hence these digital gaps can be expected to have widened.

FINANCIAL STRAIN

The pandemic exerts uneven impact on families' economic resources. While all families have suffered, it is particularly debilitating for those who were already struggling to stay afloat before Covid-19.

Even with the Government's various assistance packages, some parents may suffer significant income or job loss. The self-employed and workers with fixed-term or no contracts, and daily-remunerated labourers are among the hardest hit. According to a recent Business Times report, layoffs in Singapore may hit 100,000 this year with the worst hit likely in the retail, aviation and tourism sectors.

Among the SG Leads families who live in one- to two-room HDB units, about half of them have only one parent working; and 54 per cent of the mothers are housewives. One-third of the fathers work as machine operators, and plant and assembly line workers; and 15 per cent are cleaners, labourers and related workers. Among the working mothers, 10 per cent of them are cleaners, labourers and related workers, and 15 per cent are in services and sales. These jobs are highly susceptible to cuts.

Before Covid-19, a higher proportion of the SG Leads families living in rental units experienced economic strain than other families. A third of these families (compared with 6 per cent of the entire sample) reported that they did not have enough money to make ends meet at the end of the month, 36.5 per cent said they had just enough, and 30.7 per cent had some left over.

During the past year, 28 per cent of them had borrowed money from friends or relatives, 31 per cent had applied for government assistance, 38 per cent had fallen behind in paying bills, and 9.5 per cent had their utility services cut off. These rates can be expected to have risen during the circuit breaker.

When families experience income or job loss, one common coping strategy is to cut food costs

by reducing vegetables, fruits and proteins, and increasing high-calorie and high-fat food.

Before Covid-19, one in three of the SG Leads families in the rental units reported that they worried about the current food level at home. One in seven (14.5 per cent) said the child did not have enough food because they could not afford it. Among them, three in 10 said they had to cut the child's food one or two months a year, six in 10 said they had to do so in some months, and one in 10 said they had to do so almost every month.

The food insecurity rates for the disadvantaged families can be expected to have risen during the circuit breaker.

Economic strain and hunger negatively affect young children's physical, brain and socio-emotional growth. They also create emotional stress in parents that can lead to depression and punitive parenting behaviour. Conflicts and abuse can rise as a consequence.

Among the SG Leads families, 12 per cent of those living in rental flats reported that there was no one they could call or borrow money from in an emergency. Urgent assistance for these disadvantaged families is needed.

ACHIEVEMENT GAP

The factors mentioned above all contribute to a child's learning – living space, material resources, parental involvement, caregivers' education and psychological stress, nutrition, and children's time spent in various activities.

SG Leads children aged three to six in different housing types show a wide gap in their cognitive achievement.

For the word recognition tests, while half of the children who live in private condos or landed properties ranked 78th percentile or higher, half of the children living in rental housing ranked lower than the 35th percentile.

For the maths applied-problem tests, half of the children living in condos or landed properties ranked 74th percentile or higher whereas half of those living in rental units ranked lower than the 15th percentile.

These achievement gaps in early childhood are staggering and research shows that they are likely to widen as children get older.

During the circuit breaker, we expect to see a "summer learning gap effect", which shows the learning gap becoming larger during summer vacations when high-SES parents use their resources and networks to secure stimulating learning opportunities and experiences for their children, while children in more disadvantaged families cannot afford these opportunities and lag further behind when school resumes.

The Government has been quick to react by providing fast cash relief, electronic devices and food at home, online learning resources, and daycare or school for some children with special needs. Assistance from communities and other private sources have also been forthcoming.

More and sustained assistance is urgently needed as schools and offices gradually reopen, and as we crawl out of the shadow of Covid-19 and its aftermath.

More free food, books and educational resources, high-quality programmes and games on television or on tablet devices and online, could be provided to children in disadvantaged families to narrow the gaps in parental resources and capability.

More parent-based measures can also be implemented to reduce stress at home, by offering job search and training, counselling service and support for parents to maintain healthy psychological well-being, providing more guidance on how to organise the home, provide nutritious meals, supervise and work with children, seek out creative activities for children, and spend quality family time together.

Companies and community groups can be encouraged to engage more in public-private partnership to help needy families.

Only when concerted interventions are implemented can we contain and mitigate the impact of Covid-19 on widening the already large developmental gaps among Singaporean children.

stopinion@sph.com.sg

• Wei-Jun Jean Yeung is provost chair professor in the department of sociology, National University of Singapore (NUS), and the founding director of the Centre for Family and Population Research in the Faculty of Arts and Social Sciences at NUS.

Professor Yeung is speaking at a Facebook Live panel discussion at 5.15pm today, May 21, on Covid-19: Too Close For Comfort, Will The Pandemic Make Or Break The Family? The event can be viewed from the Facebook page of the organiser, the Lee Kuan Yew School of Public Policy.