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Later school start times – a question of fairness

A shift to a later start is not only healthier for most children but can also help reduce social disparities. Healthy school start times are a long-term investment for the common good.

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For The Straits Times

It has been known for some time now that among life's disparities is sleep – or the lack of it.

People with a lower socio-economic status generally sleep less well than those of high status. Research shows that sleep inequality begins in childhood. The sleep gap is driven by multiple factors, including weaker support systems, lower quality of life and stress, and sub-optimal sleep conditions. This is associated with poorer physical and mental health, which has human and economic costs.

Healthy school start times promote social justice by providing fair treatment for those who are disadvantaged. Indeed, children at the lower end of the socio-economic spectrum stand to benefit the most by delaying school start times because they are more likely to have insufficient sleep.

In Singapore, many secondary schools start at 7.30am, which does not allow for adequate sleep. This may have economic implications.

An analysis in the United States projected that a nationwide shift to an 8.30am start time could contribute US$83 billion (S$112 billion) to the US economy over a decade, far outweighing the initial costs associated with changes in school infrastructure or bus schedules.

Healthy school start times are a long-term investment for the common good.

Wealthy parents may be inconvenienced by an early start time, but they have the option of taking their child to school by car. Their child can wake up later and still have a decent breakfast before school. Their child has recourse to higher-quality tuition and, if all else fails, can look to parents with the wherewithal to try for a place in international schools, which can cost up to $50,000 a year for secondary students.

Economically disadvantaged parents in Singapore are more likely to send their child to school by public transport, or rely on school bus operators who dictate pickup times. Consequently, many teenagers must wake up before 6am to reach school on time, without adequate time for sleep or breakfast.

Children who attend local schools get less sleep than their counterparts at international schools in Singapore. Part of this disparity is explained by the earlier start times of local schools.

Students attending international schools can sleep in longer because their schools often start closer to 8.30am, which is considered a healthy start time.

We found that adolescents with the optimal combination of young age, early chronotype ("morning-type" individuals), enrolment in an international school, later school start time and shorter daily travel time had an average nocturnal sleep duration on school days of about 8.5 hours – a healthy amount of sleep.

By comparison, adolescents with the least favourable combination of factors for nocturnal sleep duration (older age, not early risers, enrolment in a local school, early school start time, and longer daily travel time) had an average sleep duration of less than six hours on school nights – an unhealthy amount of sleep, associated with physical and mental health problems.

CIRCUIT BREAKER EFFECT

An independent study concurred that students in local schools could get a healthy amount of sleep when they were freed from their usual (early) start time by conditions during Singapore's Covid-19 circuit breaker last year which allowed for later waking times. In fact, students slept nearly the same amount of time as their counterparts in private or international schools. Importantly, despite the freedom to sleep later, a later waking time still increased student sleep duration. The "new normal" of living after the pandemic should include plans for sustaining healthier sleep in local students.

There are few individuals with familial natural short sleep – those who habitually sleep from four hours to 6.5 hours a night as adults. Unlike ordinary people, they do not have daytime sleepiness or report de?cits from sleep deprivation. They do not take catch-up sleep on weekends and free days, and have greater ?exibility around sleep timing. They also tend to have a high behavioural drive, resulting in their holding high-pro?le, high-pressure and, often, leadership positions. To top things off, they appear to have high pain thresholds and resilience to life stressors.

Additionally, some people are natural morning types, or "larks", for whom sleeping early is not a problem. Such individuals, whose body clock is oriented to an earlier start to the day, have health, academic and socio-economic advantages. There are fewer of such people than those who naturally sleep later, or "owls". Chronotype is a biological trait that is not as readily "trained" as some might suggest.

We don't expect every student to end up an Olympian, and we should not expect average people to sleep on cue, turn from owls to larks, or fight against the tide of factors pushing for later bedtimes.

Previous generations did not have the kind of academic expectations most students have at present. More than 40 per cent of secondary school students in one of our studies indicated that "completing homework" was the main factor determining their bedtime.

The pressure to keep up on multiple fronts increases cognitive arousal, predisposing one to sleep onset insomnia. Finally, increased exposure to light (of any wavelength) late at night biologically delays sleep onset.

AN EFFECTIVE MEASURE

To be sure, efforts to help students go to bed earlier are important and welcome. Parental supervision of bedtime and reducing students' workload can make way for more sleep. However, we must manage our expectations.

There are biological limits to how much earlier adolescents can fall asleep. Sleep education programmes and behavioural interventions targeted at bedtime have proven far less effective in improving sleep duration, compared with delaying school start times.

In 2017, we reported that a 45-minute delay in school start time increased time spent in bed by 22 minutes. The recent parliamentary discussion focused only on the amount of objectively measured sleep. Self-reported time in bed is typically used in most studies because of systematic differences between subjective and objective sleep assessment, and it is the basis for sleep duration recommendations.

More importantly, it was not mentioned that students who gained more in sleep enjoy greater improvement in alertness, have less trouble staying awake, and show greater reduction in depressive symptoms. A total of 75.6 per cent of the parents in the study welcomed the later school start time and found it better for their child; 67.6 per cent of the teachers had the same opinion.

One cannot please everyone, but in the same vein, Singaporeans who initially complained about Electronic Road Pricing and wearing masks during Covid-19 recognised later that our leaders were brave enough to correctly act on data.

We do not think that starting school later is a magic bullet, but it is a sign that the Government understands that disadvantaged students are the ones who stand to benefit from a later start time.

There are many questions about sleep that remain to be answered, but concerning starting school later and sleep habits, evidence from research conducted both abroad and locally should suffice for a policy decision.

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