

Consequences of sleep deprivation on students



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School should start and end later because sleep deprivation in adolescents and children decreases both the ability to focus in the classroom and the drive to learn, often resulting in poorer performance and decreased life satisfaction. Recent studies have shown that delaying school start times result in students that sleep longer, wake more rested, function better in school, and have higher overall life satisfaction. While adults may be able to habitually generate energy from a caffeine drink, children and youth find there is no good substitute for extra sleep when it comes to energy and enthusiasm.

Most of today's youth do not get enough sleep. " Adolescents between the ages thirteen and eighteen should regularly get eight to ten h[ours] of sleep each night." (Carkskadon et. al., 2002 as cited in Chan et. al., 2018)

However, with all of the after-school activities, little-league sports teams, and general guidelines of how to have a healthy child, sleep becomes an item often placed on the backburner. The issue is no longer students falling asleep during long lectures in class; the issue has grown into parents having daily struggles to get their children out of bed on time for the start of school. In an article entitled " Feasibility and Emotional Impact of Experimentally Extending Sleep in Short-Sleeping Adolescents," Tori R. Van Dyk et. al (2017) state that

" The day-to-day life of an adolescent is significantly different during the school year, and it is possible that the schedules and stressors unique to this period (e. g., school attendance, homework, increased peer interaction, athletic commitments) could have a distinct impact on sleep and its

associated outcomes such as diet, physical activity, attention, learning, and mood” (p. 1).

However, education board members and teachers alike have rarely acknowledged the issue. Over the last decade, agencies have conducted studies and found that our youth are starving for rest. A drastic increase in media availability, longer daily schedules with increased activities and other factors mean that our youth do not “rise and shine” like they used to. To understand why sleep is so important, perhaps we should start with an explanation of the sleep cycle. As explained by Laura Leahy (2017) in her article “In search of a good night’s sleep,” sleep is not a simple process. Five stages make up a complete sleep cycle, and each stage offers something different in bettering an individual’s sleep quality and overall health. The first stage lasts five to fifteen minutes, or five percent of the total sleep cycle, while the second stage lasts approximately forty-five minutes. The third and fourth stages of the sleep cycle are deeper in sleep intensity, and it is more difficult to wake the individual. In these stages, the body begins to restore tissue, strengthen the immune system, as well as build and store energy for the next day. Lastly, the fifth stage occurs almost ninety minutes after first falling asleep. The brain becomes more active, and heart rate, blood pressure, and breathing increase (p. 20-21). When one does not complete all five steps in the cycle-approximately eight hours of sleep-one runs the risk of permanently damaging themselves from sleep deprivation.

Damage from a lack of adequate sleep can occur instantly, or it can slowly cause harm over time. Sleep helps the brain work properly and focus. While sleeping, the brain is preparing for the next day by forming new pathways to

help us learn and remember information. Whether learning English, how to play football, or how to drive a motorcycle, sleep helps enhance focus.

Adequate sleep also helps one be more creative, pay attention, and make decisions. All of those are skills necessary for children to have in order to share a successful grade school experience.

In a study conducted by both the University of Hong Kong and the Education University of Hong Kong, researchers found an increase in sleep duration associated with improvement in health and psychological outcomes. This study recruited a total of two hundred and twenty-eight eleventh-grade participants across two groups of students from boarding school in Hong Kong. Participants were told to complete an online survey by their teachers. Self-reported sleep times in the past month was measured by answering the question of how many hours of sleep they get per night. Participants reported their bedtime and wake-up times for one month. Students were then asked to rate their life satisfaction, perceived health, sleepiness, behavioral problems, and insomnia for two weeks. Ultimately, students reported higher life satisfaction and less behavioral problems after obtaining one more hour of sleep each night (Chan et. al. 2018).

In another study, the Cincinnati Children's Hospital Medical Center in conjunction with the University of Cincinnati recruited seventy-six healthy high school students ages fourteen to eighteen years who routinely slept five to seven hours on school nights. They advertised using community flyers, online advertisements, and emails sent within a large regional area. Families interested in participating were verbally consented and mailed actigraph wristwatches with baseline condition instructions. Participants were asked to increase time in bed on school nights by one and a half hours per night.

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Results showed that adolescents would greatly benefit emotionally from sleeping longer (Tori R Van Dyk et. al. 2017).

A growing amount of evidence indicates that sleep deprivation not only causes weariness but also introduces many physical changes, including decreasing immune system effectiveness, increases the chance of weight gain, and deteriorates vision. Beyond that, sleep deprivation can affect daily performance by impairing memory, lengthening reaction times, reducing precision and causing micro-sleep episodes during wakefulness where people fall asleep briefly without the individual realizing.

“ Napping, whether intentional or unintentional, will occur. Unintentional napping may happen during classes or while students are working. That is bad enough, but they may also fall asleep while driving... Sleep deprived people experience periods of micro-sleep.” (Wise 2018 p. 200) Only lasting a few seconds, micro-sleep- also referred to as micro-episodes- are commonly thought of by scientist as one of the most dangerous consequences of sleep deprivation. In a recent study conducted by Poudel, Innes, Bones, Watts, and Jones (2014) of twenty non-sleep-deprived adults, who were asked to perform various repetitive tasks, it was established that fourteen of the subject matters had a minimum of thirty-six micro-sleeps during the fifty-minute testing period (as cited by Wise 2018 p. 196). Imagine how many micro-episodes one child could have during an hour and a half class period while being sleep deprived. Would the child really be learning anything at all?

Not everyone is in favor of a delayed school day, however. Many people worry that a delayed school day will result in a cascade of other delays or interruptions in normal daily activities as well as fiscal problems. Things like <https://assignbuster.com/consequences-of-sleep-deprivation-on-students/>

school bus routes, parent work schedules, and after-school activities are reasons given by opponents. Multiple child families could be hardest hit by school day delays, especially if their children attend multiple schools and the schedules change independently.

In families with multiple children, the older children are often looked upon to be caregivers for their younger counterparts and a later school start time for one sibling could hamper those efforts. In many families today, both parents work to make ends meet financially, so they look to older siblings to take care of the younger ones or to also get some after-school employment. A change in school schedules could adversely affect both of those situations. Changes in school start and end times could also wreak havoc on transportation needs. As mentioned before, most families are in a situation today where both parents work to make ends meet and are dependent on a set schedule that allows them to drop off their children at school as they head to work. Should the school schedule change to a later time, the parents would have to seek alternative, often costly, transportation means. Also, changing school start and end times might result in a logistical nightmare with school bus routes. School districts seldom operate on sufficient budgets and use buses multiple times each day at multiple schools to transport children. Interrupting that schedule could cause cascading problems.

Still, many health professionals today agree that starting school later would be very advantageous for our youth. Health problems and education issues resulting from a continued lack of sleep outweigh perceived inconveniences in scheduling and resources. One thought is that children with better sleep habits will need fewer resources and will function better to the degree that time and resources are saved, not lost. Some school systems have tried a <https://assignbuster.com/consequences-of-sleep-deprivation-on-students/>

later school start and found positive results. Will later school start times be beneficial to everyone? Probably not, but it could help many and deserves a fair chance to see what might happen.

Laura Leahy (2017) states in her article “ In Search of A Good Night’s Sleep” that “ A good night’s sleep is essential to overall physical, cognitive, and emotional well-being,” (p. 19). How we feel when we are awake depends, partly, on what happens while we are sleeping. The body is working to maintain physical health and support accuracy in the brain. In children, sleep also helps support growth. With that said, children often are not allowed an adequate sleep time due to the early start time of grade schools. Moving the start and end times of school an hour later will support our children’s growth and well-being, both physically and emotionally.

References

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