Children’s Sleeplessness May Be Linked To Bedtime Use Of Electronic Gadgets

By Ariana Eunjung Cha

If you shrugged off the new screen-time guidelines issued by the American Academy of Pediatrics last month, you may want to grab your kid’s tablet back for a second and reevaluate your position.

An analysis published Monday in JAMA Pediatrics of data from 26,000 children provides the strongest evidence yet of a link between bedtime use of electronic devices and poor sleep, inadequate sleep and excessive daytime sleepiness. While the popular characterization of America’s sleep-deprived children walking around like little zombies is a bit of an exaggeration, the problem is a serious one. Researchers say that our overscheduled and media-addicted kids, especially teens, are experiencing an epidemic of sleep disorders and that this is contributing to all sorts of health issues, including obesity, depression, anxiety, hyperactivity, enhanced appetite, mood issues, slower reaction times and degraded memory.

In recent years, the Centers for Disease Control and Prevention has been pushing for later start times for middle schools and high schools as a way to increase the odds that teens can get in the eight-hour minimum. That idea is supported by science but has been controversial for all kinds of financial, logistical and political reasons.

The new JAMA Pediatrics paper, led by researcher Ben Carter at King’s College London, involved analyzing past studies of children between ages 6 and 19 in North America, Europe, Asia and Australia. Carter and his colleagues found that children who had mobile media devices at bedtime were more than twice as likely as others to sleep less than nine hours a night. Those who kept phones or other gadgets in their rooms were 50 percent more likely to get poor sleep and 200 percent more likely to be excessively sleepy during the day.

In a commentary accompanying the study, Charles A. Czeisler, of the sleep medicine division at Harvard Medical School, and Theresa L. Shanahan, a pediatrician at Harvard, explained that “the use of mobile media devices at bed time provides socially and physiologically stimulating material at a time when the transition to sleep requires the brain to wind down. Interesting content is often difficult to resist, and children frequently have a fear of missing out if they disconnect,” they wrote.
The issue is not just about delayed bedtimes. There’s also a physical component to screen exposure. Czeisler and Shanahan described the blue light emitted by screens, as well as by LED lamps, as “biologically potent” and said that it suppresses melatonin, a hormone that tells the brain to sleep. And don’t forget awakenings due to the ping of text messages.

Czeisler and Shanahan note that the study shows that the mere presence of a device in the room at bedtime can cause sleep disturbances. They suggest that more work needs to be done to understand what this is doing to children’s minds and bodies. “These findings make it clear that the rapid development of technology and media use has outpaced the ability of medical researchers to assess the positive and negative effects of ubiquitous exposure to media during the critical years of brain development in children and teenagers,” they said.