

# Screen Time and Sleep During the Pandemic

**WHAT KINDS OF DIFFICULTIES** did children and adolescents with ADHD experience with screen use and sleep during the pandemic? This research update reviews two recent studies.

The first study found that compared to those who had less problematic digital media use, youth with ADHD who had more problematic use showed worse attention levels, more oppositional and emotional problems, less motivation for learning, and had less family cohesion. They were also less engaged in physical activity, which is related to mental wellness. The second study found that significantly more children and teens with ADHD went to sleep later at night during lockdown, with changes in sleep-wake rhythms.

Together, the findings of these two studies underscore the need to set limits on screen-time use as well as maintain consistency in sleep routines for children and adolescents with ADHD.

## Problematic digital media use

COVID-19-related lockdowns and the transition to remote learning increased access to the internet by youth. Combined with parental challenges in supervising youth due to competing work demands, this greater access heightened the risk of problematic digital media use by youth. This study examined such use among youth with ADHD aged 8 to 16 who had accessed an outpatient hospital clinic in Shanghai, China.

One hundred and ninety-two parents completed questionnaires examining signs of problematic mobile phone use (such as withdrawal symptoms, consequences on physical and mental health, and cravings), internet addiction, ADHD and other psychological difficulties, executive functioning, life stressors,

the family environment, and motivation for learning. Participants were then categorized into those with high versus low problematic digital media use.

The results showed that youth with higher problematic digital media use were older and experienced more co-occurring oppositionality and tics compared to youth with lower problematic use. As well, youth with higher problematic media use had worse attention and executive function problems (such as shifting attention, emotional control, working memory, and planning), oppositionality, conduct problems, emotional problems, lower family cohesion, higher life stress, and lower motivation for learning. Furthermore, those with problematic digital media use engaged significantly more in its use (e.g., video games, social media) and were involved in fewer days of exercise, compared to youth with less problematic use. Overall, this study points to specific challenges associated with problematic media use and highlights the importance of limiting such use.

Shuai L, He S, Zheng H, Wang Z, Qiu M, Xia W, ... & Zhang J. (2021). Influences of digital media use on children and adolescents with ADHD during COVID-19 pandemic. *Globalization and Health*, 17, 1-9. <https://doi.org/10.1186/s12992-021-00699-z>

## Sleep disturbances

Research has found that anxiety regarding COVID-19 as well as pandemic-related media and screen time were related to changes in sleep patterns during the pandemic. This study examined differences in sleep disturbances in children and adolescents with ADHD in Italy during lockdown compared to pre-lockdown, and also examined how screen time was related to sleep during lockdown.

Nine hundred and ninety-two parents of youth with ADHD completed a questionnaire regarding sleep and screen use

before and after lockdown. Compared to pre-lockdown days, bedtime was significantly later for about 60% of children and 70% of adolescents, such that there were fewer youth whose bedtime was 8-10 PM and more youth with bedtime at 11 PM or later. As well, compared to pre-lockdown, more youth slept less than six hours per night, and more youth slept more than or equal to ten to eleven hours per night.

This result suggests that lockdown was associated with disturbances in sleep duration in both directions (shorter and longer). Further, compared to the days before lockdown, youth in this study were reported to have higher sleep disturbances (such as difficulty falling asleep, night awakenings, daytime sleepiness, and bedtime anxiety) during lockdown. They also generally engaged in higher use of screens for leisure during lockdown, except for watching television. Compared to youth whose sleep stayed the same or increased in duration, a greater proportion of youth who had lower sleep duration used screens for most of the day.

These findings suggest that COVID-19-related lockdowns resulted in sleep disturbances and highlight the need to focus on maintaining sleep habits during times of lockdown.

Bruni O, Giallonardo M, Sacco R, Ferri R, & Melegari MG. (2021). The impact of lockdown on sleep patterns of children and adolescents with ADHD. *Journal of Clinical Sleep Medicine*, 17, 1759-1765. <https://doi.org/10.5664/jcsm.9296>



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