Impact of Adolescents’ Screen Time and Nocturnal Mobile Phone-Related Awakenings on Sleep and General Health Symptoms: A Prospective Cohort Study

# Details

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843 children from 7th to 9th grade

## Implications For Parents About

Parental practices / parental mediation

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Healthcare

# Abstract

Nocturnal media use has been linked to adolescents’ sleeping problems in cross-sectional studies which do not address reverse causality. To prospectively assess the new occurrence of sleep problems or health symptoms in relation to electronic media use and nocturnal mobile phone use, we used data from the longitudinal Swiss HERMES (Health Effects Related to Mobile phone usE in adolescentS) cohort on 843 children from 7th to 9th grade. Logistic regression models were fitted and adjusted for relevant confounders. Adolescents reporting at baseline and follow-up at least one nocturnal awakenings from their own mobile phone per month were more likely to have developed restless sleep (Odds Ratio (OR): 5.66, 95% Confidence Interval: 2.24–14.26) and problems falling asleep (3.51, 1.05–11.74) within one year compared to adolescents without nocturnal awakenings. A similar pattern was observed for developing symptoms, although somewhat less pronounced in terms of the magnitude of the odds ratios. With respect to high screen time at baseline and follow-up, associations were observed for falling asleep (2.41, 1.41–4.13), exhaustibility (1.76, 1.02–3.03), lack of energy (1.76, 1.04–2.96) and lack of concentration (2.90, 1.55–5.42). Our results suggest a detrimental effect of screen time and mobile phone-related awakenings on sleep problems and related health symptoms. However, the results should be interpreted cautiously with respect to adolescents’ natural changes in circadian rhythm, which may coincidence with an increase in mobile phone and media use.

# Outcome

Adolescents reporting at baseline and follow-up at least one nocturnal awakenings from their own mobile phone per month were more likely to have developed restless sleep and problems falling asleep within one year compared to adolescents without nocturnal awakenings. With respect to high screen time at baseline and follow-up, associations were observed for falling asleep, exhaustibility, lack of energy and lack of concentration. Our results suggest a detrimental effect of screen time and mobile phone-related awakenings on sleep problems and related health symptoms. However, the results should be interpreted cautiously with respect to adolescents’ natural changes in circadian rhythm, which may coincidence with an increase in mobile phone and media use.