Plenty of light during daytime reduces the effect of blue light screens on night sleep

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The use of smartphones and tablet computers during evening hours has previously been associated with sleep disturbances in humans. A new study from Uppsala University now shows that daytime light exposure may be a promising means to combat sleep disturbances associated with evening use of electronic devices. The findings are published in the scientific journal *Sleep Medicine*.

The use of blue light emitting devices during evening hours has been shown to interfere with sleep in humans. In a new study from Uppsala University involving 14 young females and males, neuroscientists Christian Benedict and Frida Rångtell sought to investigate the effects of evening reading on a tablet computer on sleep following daytime bright light exposure.

'Our main finding was that following daytime bright light exposure, evening use of a self-luminous tablet for two hours did not affect sleep in young healthy students,' says Frida Rångtell, first author and PhD student at the Department of Neuroscience at Uppsala University.

'Our results could suggest that light exposure during the day, e.g. by means of outdoor activities or light interventions in offices, may help combat sleep disturbances associated with evening blue light stimulation. Even if not examined in our study, it must however be kept in mind that utilizing electronic devices for the sake of checking your work e-mails or social network accounts before snoozing may lead to sleep disturbances as a result of emotional arousal,' says senior author Christian Benedict, associate professor at the Department of Neuroscience.

More information: Frida H. Rångtell et al. Two hours of evening reading on a self-luminous tablet vs. reading a physical book does not alter sleep after daytime bright light exposure, *Sleep Medicine* (2016). DOI: 10.1016/j.sleep.2016.06.016

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