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How Screen Time Affects Sleep and Work Performance

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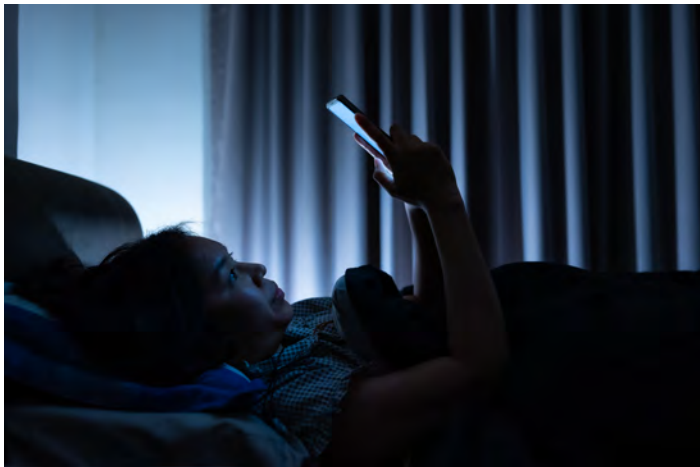
Have you ever been told to turn off your electronics and give your brain some rest from screen time right before you go to bed? You may have been told that exposure to electronic stimuli will disrupt your sleep schedule and have a negative effect on your well-being the next day. Our research illustrates that this is only sometimes true. In our research, we examine *cyber leisure* to evaluate electronic effects on next-day vitality and performance through sleep quantity and quality, bedtime procrastination, psychological detachment, and the moderating role of mindfulness.

Our Study

For the purposes of this study, we focus on cyber leisure, which is using electronic devices to seek relaxation, recreation, and entertainment.¹ Cyber leisure is like other lower-effort recovery activities such as watching TV, reading a book, lounging on the couch, or doing nothing, in that it is relatively passive and takes limited physical exertion.²

We proposed a dual-path model to measure how full-time employees used their devices at the end of their workdays and how that usage has a positive or negative effect on next day's psychological vitality and job performance. The subjects completed a survey three times daily for ten days—at bedtime, the next morning, and the next afternoon. We hypothesized three key points that were confirmed by our results.

Detrimental Cyber Leisure



Increased evening cyber leisure is negatively and indirectly related to that night's sleep quantity and sleep quality via evening bedtime procrastination. Bedtime procrastination is defined as doing something before going to sleep that distracts or interrupts the act of going to bed. Cyber leisure is associated with bedtime procrastination because individuals have a hard time ending their cyber leisure and trying to go to sleep. The more an individual delays bedtime,

the more sleep quantity and quality are diminished. This commonly occurs because users stumble across a source, such as social media or a news report, that triggers strong emotions—stress, guilt, or anger.³⁻⁶ Such intense emotions can disturb sleep-wake regulation, decrease the amount of deep sleep and sleep efficiency, and increase awakenings throughout the night.^{7,8}

Cyber leisure is a stimulating and highly engaging experience, so it's recommended to engage in cyber leisure earlier in the evening rather than immediately before bed.⁹ Our suggestion is, if you find yourself regularly procrastinating going to sleep due to engaging in cyber leisure, it is important to have a proactive plan. Consider putting away the device earlier in the evening or putting it out of reach altogether so it does not detract from the crucial eight hours of quality sleep that your body needs to function properly the next day.

Beneficial Cyber Leisure

We also find that cyber leisure can also be beneficial, depending on how it is used. Increased evening cyber leisure is positively and indirectly related to that night's sleep quantity and sleep quality via evening psychological detachment. Psychological detachment is defined as an individual's sense of being away from the demands of work and feeling mentally disconnected by refraining from work-related thoughts and activities.^{10,11} It's important to know when to mentally distance yourself from work. This is a healthy method of recovery, and devices can be a great tool to use when looking to recover from a long day.

Recovery occurs when the psychophysiological systems being activated by work demands are no longer being called upon. This psychological detachment is necessary to avoid mental, emotional, and physical burnout. Experiencing such burnout depletes our body's neuroendocrine system and alters our next-day performance and vitality. Engaging in leisure helps individuals stop thinking about work demands, which helps them relax, and enables the psychophysiological systems to return to baseline levels.¹² Therefore, we suggest using cyber leisure wisely can be a beneficial form of psychological detachment.

Trait Mindfulness Associations

Trait mindfulness acts as a conditional moderator, determining whether cyber leisure is detrimental or beneficial to an individual's sleep quantity and quality, and in turn, next day psychological vitality and performance. Trait mindfulness is the tendency to be attentive to and aware of what is taking place in the present and entails the self-regulatory capacity to bring our attention back to the present moment.^{13,14}

At lower levels of mindfulness, people tend to pay less attention to the present, potentially making them less likely to consider or question why they should discontinue engaging in cyber leisure.¹⁵ As mindfulness increases, employees are more likely to acknowledge their circumstances with clarity, making them less likely to allow the immersive activity of evening cyber leisure to disrupt their plans to go to sleep.¹⁵

Along those lines, we found that higher levels of trait mindfulness mitigated the detrimental impact of cyber leisure on bedtime procrastination and enhanced the beneficial impact of cyber leisure on psychological detachment.

Real Estate Implications

The impact of participating in cyber leisure at the end of a long workday can be both beneficial and detrimental for real estate professionals' next-day vitality and performance. Whether cyber leisure will be beneficial or detrimental depends upon one's ability engage in cyber leisure mindfully, making the most of the relaxation



experience but without getting carried away. Agents and team leaders need to be able to work to the best of their ability at their firms and in the field. If employees are delaying sleep because they are glued to their devices at night, they will have less psychological resources available for next-day productivity. Lower levels of sleep quantity and quality are associated with impaired memory, learning, attention management, impulsive decision making, a propensity to make errors, and reduced overall cognitive performance.¹⁶⁻²⁰ Such conditions can also result in hostility and reluctance to help others in the workplace.^{21,22}

The best thing real estate professionals can do when engaging in cyber leisure is to be mindful while doing so. Cyber leisure can facilitate psychological detachment, which is healthy and necessary to recover and prepare properly for the next day. However, it is important to be disciplined and set time limits on cyber leisure. Doing so will ensure that you get high quality sleep so that you can engage your real estate clients with high-energy and at your optimal performance level.

Recommended Reading

Liu, Haiyang, Yueting Ji, and Scott Dust (2021), “‘Fully Recharged’ Evening? The Effect of Evening Cyber Leisure on Next-Day Vitality and Performance Through Sleep Quantity and Quality, Bedtime Procrastination, and Psychological Detachment, and The Moderating Role of Mindfulness,” *Journal of Applied Psychology*, 106(7), 990-1006.

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