Reducing the effects of insomnia on the workplace

2/17/2017
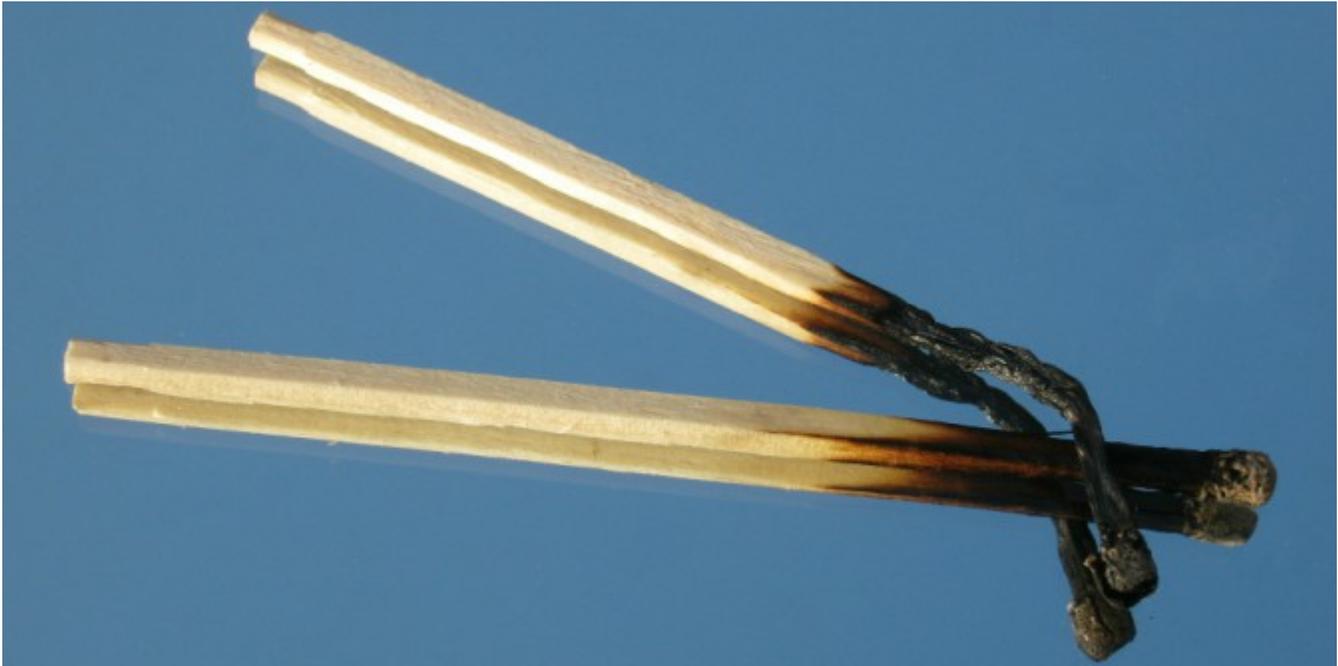
Researchers and media outlets have expressed growing concern about the widespread harmful effects of insomnia on health. More recently, this research has examined how these effects spill over into the workplace as well. The Rand Company estimates that the economic impact of insomnia costs the United States $411 billion a year. A growing body of research indicates that poor sleep leads to a variety of harmful negative organizational outcomes, including poor performance, increased work-related injuries, cyberloafing, and unethical behavior.

Many managers are beginning to appreciate the importance of these issues, but feel helpless to do anything about it. Fortunately, sleep researchers have developed some useful tools which can help to partially address at least some of the problems. For example, circadian science can be applied to more effectively design employee schedules, affective display rules can be relaxed to lower work-related stress, and traditional sleep therapies can be used to improve poor sleeping patterns. However, solutions like these are often challenging to implement, deal with only a small subsection of insomnia's root causes, or are expensive and difficult to scale across a large workforce. As a result, these solutions may seem unacceptable or impractical leaving managers feeling ill-equipped to adequately deal with the problem.

Recognizing this dilemma, my coauthors and I endeavored to address the problem. We began with a tool that was previously developed in the field of sleep medicine. CBT-I (cognitive behavioral therapy for insomnia), effectively improves sleep, with several studies revealing powerful positive effects of CBT-I on sleep. Through a number of recent technological innovations, companies are now able to both automate the therapy while providing personalized content to the individual in an online format. As a result, an individual can now access the benefits of one-on-one CBT-I programs without the high costs of a personal therapist and organizations can scale the treatment to reach an almost infinite number of individuals unlimited by the number of certified CBT-I providers available. For these reasons, we believed that if the online CBT-I programs positively affected employees at work, these programs would be ideal tools for managers to combat the negative work-related issues resulting from insomnia.

Extending current research we tested whether an online CBT-I program affected work-related outcomes. We invited 223 full-time, part-time, and shift work employees across a range of different industries to participate in a randomly

assigned field experiment. In the study we examined whether the online CBT-I program would positively affect a number of outcomes important to managers including employee mood, job satisfaction, self-control, citizenship behavior, and counterproductive behavior at work. We randomly assigned the employees to one of two conditions. Half of the employees received the research validated online CBT-I treatment called Sleepio. The remaining participants were placed in a waitlisted condition (where they received the treatment after the study's completion). In both conditions the work relevant measures were assessed at the onset of the study and again after the 10 week online CBT-I program was completed for the treatment condition.

The treatment we used in the study, like other forms of internet-based CBT-I, included personalized adaptive feedback and training across the 5 core components of cognitive behavioral therapy for insomnia. Specifically the program (1) helped train the participants to associate their bed with rapid onset of sleep, (2) created sleep restrictions to boost their sleep efficiency, (3) trained the participants to eliminate anxiety, intrusive thoughts, and physiological arousal, (4) adapted faulty beliefs about sleep and insomnia, and (5) educated participants about healthy sleep practices and the environmental factors that affected their sleep.

The results of the CBT-I program aligned with previous research on CBT-I. The treatment group improved on a number of different sleep performance measures compared to the control group. These measures included sleep efficiency, the amount of time taken to fall asleep, and the total time asleep. More relevant to our fundamental question however was how the online treatment affected work-related outcomes. Again we found a positive impact of the online CBT-I program. The treatment directly improved employees' mood, job satisfaction, and self-control, and indirectly affected employees' organizational citizenship behavior and counterproductive behavior at work. More detailed information on the study can be found in our article in the Journal of Applied Psychology.

In summary, while research continues to show the negative effects of insomnia in the workplace our results suggest that online cognitive based therapy programs, can be powerful low-cost tools in reducing the negative effects of poor sleep. These programs not only help employees sleep better, but they improve their performance at work across a number of different outcomes. Due to the relatively small costs of online CBT-I treatment, my colleagues and I strongly encourage organizations to take advantage of these programs when dealing with insomnia in the workplace.

♣♣♣

Notes:

- *This blog post is based on the author's paper Helping employees sleep well: Effects of cognitive behavioral therapy for insomnia on work outcomes, co-authored with Christopher Barnes and Sophie Bostock, in Journal of Applied Psychology, Vol 102(1), Jan 2017, 104-113*
- *The post gives the views of its author, not the position of LSE Business Review or the London School of Economics.*
- *Featured image credit: Burnout, by steinchen, under a CC0 licence*
- *Before commenting, please read our Comment Policy.*

Jared Miller is a PhD student in Organizational Behavior at the Michael G. Foster School of Business at the University of Washington. His research focuses on how relationships shape perceptions and behavior within the workplace. His work has been published in various top management journals including: *Journal of Applied Psychology* and *Academy of Management Review*.