

Sleep for Success

How Sleep Health Is Integral to Workplace Productivity, Leadership, and Morale

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Humans generally spend about a third of their lives sleeping. During this time, we are unaware of our surroundings, experience vivid visual and sometimes sensory hallucinations we call dreams, and are completely vulnerable to predators. Evolutionarily, why would this be? What is the risk-reward, especially in ages past, of allowing that vulnerability? What is the purpose?

That question is still unanswered and has been studied and theorized throughout human history. Ancient Romans, Egyptians, and Indians all have had deities for sleep. However, it wasn't until Galen, a relatively well known Roman physician, that the major body system involved in sleep was theorized to be the brain. Fast forward a few thousand years, the neuron was discovered, the first sleeping medication was invented, and the 90 minute sleep cycle was described. Only at the latter half of last century was the purpose of sleep well studied.¹

Sleep in adults is broadly characterized into 2 categories: rapid-eye-movement (REM) and non-REM sleep. Most dreaming takes place during REM sleep while the body is necessarily paralyzed. Within non-REM sleep there are further categories of sleep, separated into sleep stages mostly distinguished by characteristic brain activity. In non-pathologic sleep, these cycles alternate in roughly 90 minute intervals.²

Sleep has been theorized to be integral to general health and is considered to be part of the 3 pillars of good health, along with exercise and diet. The purpose of sleep is researched and studied primarily by observing the effects of sleep deprivation. In this way, lack of sleep has clearly shown to be integrally involved with cardiac health, brain health, emotional well being, and wound healing. Along with these, there is growing evidence that prioritizing sleep health can improve productivity, improve leadership, and increase morale in the workplace. In short, a well rested employee is a more productive employee.

Controlled prospective studies regarding the effect of sleep deprivation on a firm's bottom-line are limited. Most companies are not eager to sleep deprive half their employees and see what

happens. Therefore, inferences are made regarding these effects based on relatively small sleep deprivation studies using validated measures of cognitive and neuropsychological performance.

First, however, whenever discussing sleep, the question often arises: how much should anyone sleep? Especially recently, the general public is often inundated with data, not always presented in context, regarding ideal sleep time. While it is generally true that the population average time necessary to sleep is approximately 7 to 9 hours, this is not necessarily true for everyone. What does it mean to “need” a certain amount of sleep? How is this measured? Can limited sleep time be trained?

The amount of sleep needed by any individual person is defined by lack of symptoms during the day. There is no specific goal regarding hours slept. Some people need 10 hours; some only need 5. There is a very small subset of the population who are, in fact, able to sleep 6 hours or less nightly without consequence. This is defined as “short sleep syndrome” and is an aberration. Especially in business environments, there is a misconception that limiting sleep time can be “trained.” While it is certainly true that temporary periods of sleep deprivation can be compensated for, coping with long term limited sleep cannot be trained and cannot be learned.³

Sleep and work are directly related. Sleep health is impacted by work and work itself can be negatively impacted by poor quality sleep. Workload, stress, commute time, and scheduling all may affect an individual’s ability or opportunity to sleep and negatively impact sleep quality. This, in turn, can negatively impact productivity at work, interpersonal relationships between employees and leadership, and increase health related expenses at work.

There are many studies showing direct productivity loss and increase in counter-productive behaviors in the workplace relating to inadequate asleep. In many of these studies, workplace productivity is measured using validated questionnaires. Individuals with self-reported difficulty with sleep (inadequate total sleep time, insomnia, or other sleep disorders) scored consistently lower on productivity measures. Measures include tardiness, efficiency, and accomplishing tasks on time.⁴ Together, poorer productivity while at work is referred to as “presenteeism,” though of course, poor quality sleep also increases absenteeism. In addition, customer-facing roles of all kinds are affected by mood, which is negatively impacted by poor sleep, in particular REM sleep loss.⁵ Similar sleep loss has also been shown to increase unethical behaviors⁶ and increase risk-taking.⁷

An analog often used for understanding the ill-effects of poor sleep is the effects of alcohol. Psychological and cognitive measures performed after 17-19 hours of being awake are equivalent to a blood alcohol content (BAC) of 0.05. At 20 hours, the equivalent BAC is 0.1.⁸ A separate study measuring mostly reaction time and visual tracking, showed that 4 consecutive days of 5 hours sleep had equivalent results to a BAC of 0.06.⁹

Moreover, employees with sleep related health issues generally increase a firm's health related expenses by a measurable amount. As an example, medical expenses for individuals with insomnia are about \$4000 more than a control group.^{10 11} This is especially burdensome for firms that are self-insured. Adding to this burden is the cost of increased absenteeism and reduced productivity directly related to this issue. RAND estimates a total worldwide \$411 billion loss to the economy from insufficient sleep.¹²

Lastly, in addition to direct healthcare expenditures and direct productivity losses, the bulk of research also shows teamwork negatively impacted by poor sleep. When leadership is sleep deprived, they are viewed as more abusive by subordinates, which results in negative team interactions, worsened productivity, and less engagement at work. Critically, much of this is unrecognized by both individuals themselves.¹³

These negative impacts are overall also compounded by general lack of recognition of how poor quality sleep affects any individual by that individual themselves. An interesting survey by McKinsey of business leaders shows a substantial proportion of responders are dissatisfied with their sleep but an almost equal number believe it does not negatively impact their performance.¹⁴ This combination of clear, demonstrable limitations in productivity while being often unacknowledged by the affected individual is why better understanding of these ill effects and changes to the workplace culture should be encouraged.

What can any individual do?

For any individual, sleep needs to be valued as a necessary and critical part of the day. Sleep should not be the go-to sacrifice when time in the day is limited. Having healthy sleep habits is critical for anyone to perform at their best.

Have a routine.

Sleep health thrives on regularity, predictability, and routine. A regular bedtime and regular rise-time is key, even on days off. As part of that regularity, a stress-free routine should always precede getting into bed. A major philosophy of treating many different sleep disorders is to establish a clear psychological connection between being in bed and sleeping. Getting into bed with the expectation of *not* sleeping (expecting instead to stress, worry, watch TV, fold laundry, eat, or argue), does not allow for healthy sleep.

Caffeine, alcohol, and exercise.

It should go without saying that caffeine in the evening is generally unhealthy for sleep. In a very different way, however, alcohol also worsens sleep quality by causing interruptions in the latter half of the sleep period. Exercise is healthy in reinforcing proper brain rhythms needed for sleep, but exercise in the evening in many people is too activating and too energizing.

Sleep tracking devices

If there is a concern for sleep, many individuals attempt to track their sleep using various sleep-tracking devices. Putting aside the questionable accuracy of some of these devices, they also reinforce focusing on the wrong metrics. Sleep time is generally less important than sleep quality. Most people ultimately learn to rely on this extrinsic measurement to gauge their sleep health, rather than a simple measure of how they feel in the morning, which is far more important.

Sleep debt

Many who are chronically sleep deprived attempt to “make up” for sleep loss by sleeping in on weekends or on other days off. While sleep debt can be repaid over long periods of time, a few extra hours of sleep on a weekend does not adequately compensate for sleep deprivation during the work week.¹⁵

Manage jet lag

Those who travel for work are clearly at a disadvantage in terms of performance if there are significant jet lag symptoms due to multiple time zone changes. Ideally, for short work trips, home schedules should be maintained and meetings scheduled accordingly. When that is not feasible, or when the trip lasts longer than a few days, slowly adjusting to the destination schedule prior to the trip is ideal.

Identify and treat sleep disorders

Sleep disorders are chronically under-diagnosed. Insomnia and sleep apnea are particularly prevalent in the population, but even more unusual disorders, like narcolepsy and various sleep-walking syndromes, are much more common than popularly understood. Symptoms of sleepiness interfering with quality of life or other symptoms of poor quality sleep despite adequate sleep time are often a clue to an underlying medical issue that should be addressed.

What can a business and leadership do?

Employees and associates at a business can help themselves and leadership can actively adopt forward-thinking policies relating to sleep health.

Model good behavior

Most importantly, the leadership of a company that understands the value of sleep to productivity should model these behaviors and encourage a culture within the business that values a rested employee. Too many high-stress businesses view lack of sleep as a badge of honor and conversely, the need to prioritize sleep as a sign of weakness. A forward-thinking business culture that values sleep can have a meaningful impact on employee well-being, morale, and business health.

Set reasonable expectations of employee availability and workload

Simply, the business culture should not encourage and reward 24/7 availability. Similarly, supervising leadership should try to consider whether an associate can truly be at their best, in terms of productivity, morale, and general health, if they are regularly billing 80+ hours weekly.

Match biology to business roles

There is significant variability in intrinsic brain rhythms that govern the sleep-wake cycle. Some are programmed to awaken early and go to sleep early, and some are programmed to arise later and go to bed later. Productivity varies throughout the day based on this intrinsic rhythm and this preference can be measured. Among other factors, the tendency to be a “night owl” or “early bird” should be considered when forming teams for projects, determining partnerships in various roles in a company, and scheduling business trips.

Incorporate sleep health training into wellness programs

Educating on the importance of sleep health can both help individuals in a company and also exemplify a company's commitment to these goals. Professional sports, particularly those that require frequent travel crossing time zones (most notably Major League Baseball and Formula One racing), regularly employ sleep consultants to help athletes perform at their best.

Sleep is integral to well-being, mental and physical health, and mood. In the workplace, it is critical to efficiency, success of teams, healthy interpersonal relationships among employees and clients, and effective leadership. A business culture that encourages healthy sleep habits and values rest, can improve morale, workplace effectiveness, and productivity.

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