Dreaming of Alpha

Sleep is the interest we have to pay on the capital which is called in at death; and the higher the rate of interest and the more regularly it is paid, the further the date of redemption is postponed.

Arthur Schopenhauer, *Parerga and Paralipomena*

Investment decisions reflect the strategy, research, process, and discipline consciously developed over many years. They also, as we have seen, reflect influences from the unconscious brain—even inadequate sleep. Sleep deprivation is epidemic in America. Among stressed-out portfolio managers, sleep seems to be a rare asset. Beyond making you feel drowsy or in need of caffeine, insufficient sleep heightens behavioral responses, inhibits learning, and weakens decision-making. This essay looks at new research about “running on empty” and how it can undermine your performance.
Huh, Yeah, Right

Everyone knows what it’s like to be sleep-deprived. Depending on how many hours are lost, and for how many consecutive nights, symptoms may range from a slightly wandering focus to full stupor. These commonly observed effects are easily reversed with extra sleep.

Yet even these transient effects can negatively impact investment decisions. Sleep deprivation can lead to stress. Stress shifts the thought process, weakening analytic thinking and promoting emotional reactions. Higher emotional states enable behavioral forces to influence investment decisions more powerfully. Behavioral motivations, in turn, push decisions outside of your strategy and process, often negatively impacting return and alpha.

I Must Have Missed That

Inadequate sleep hampers learning—not just memory, but the ability to extract explicit knowledge and insights from new information. Our short-term memory loses its current content before the information is integrated with what we already know.

New research from Harvard Medical School further explains this process. The Harvard study shows that a loss of sleep adversely affects the functioning of the hippocampus, which plays a central role in the sorting and storing of information in the brain. In describing the effect of sleep deprivation on learning, based on research conducted using functional magnetic resonance imaging (FMRI), Harvard’s Seung-Schik Yoo et al. write: “the impairment comes from impaired brain functioning—almost as if a temporary lesion had formed on the hippocampus—rather than reduced alertness and an inability to take in the images.”¹ In other words, learning is reduced not merely because we have less energy or focus, but largely because our brain is unable to process and store what we think we learned.

It Felt Right at the Time

The amygdala is the part of the brain that helps manage emotions. It is particularly important in providing context and enabling us to effectively deal with negative or adverse stimuli. The prefrontal cortex controls logical or analytic thinking and helps to suppress inappropriate urges from the amygdala. Brain research informs us that sleep deprivation can deliver a powerful one-two punch that undermines our ability to make disciplined decisions. Inadequate sleep causes the prefrontal cortex to shut down, leaving only the emotional portion of the brain available for decision-making.

Compounding this situation is the fact sleep deprivation also leads to hyperactivity within the amygdala. While investigating the effect of
inadequate sleep on the emotional centers of the brain, Dr. Yoo and colleagues reveal that the emotional centers of people sleep deprived were 60% more active than those with normal sleep.² Combining the reduced capacity of the prefrontal cortex with the higher excitement of the amygdala, the result is a brain that is incapable of logical or analytic thinking and that is likely to overreact to emotional stimuli—particularly of the negative variety.

Before You Doze Off

Being your best means you can attend to the small as well as large challenges you face. As we’ve seen, lack of sleep impairs decision-making by curtailing analytic thinking, heightening emotional reactions, and diminishing the ability to learn. This is not the sort of mental prowess showcased in the average “pitch book.”

So how much sleep do we need? According to Dr. Christopher Drake, a senior scientist with the Henry Ford Sleep Disorders and Research Center, “The human body needs approximately seven to eight hours of sleep a night to maintain optimal alert levels during the day. The idea that many people need just four or five hours of sleep a night is a myth.”³

Conclusion

A small and seemingly benign aspect of modern life, sleep deprivation can steal alpha from your portfolio. One of its effects is to substantially increase the likelihood of behavioral impulses affecting your buy and sell decisions. This risk is greatest where process and discipline are less developed—and that typically means selling.

Excess tiredness also robs you of focus and the ability to learn from new information. Since it heightens emotional responses, it can nudge you faster toward frustration or a regrettable outburst. All in all, sleep deprivation is not recommended for either your health or the health of your portfolio. Perhaps this information will motivate the addition of a new concept to your investment process—the alpha nap.
Notes


Further Reading