

Do You Get Enough Sleep?

Many college students do not get enough sleep. In a survey of more than 200,000 first year students, more than 80% say that stayed up all night at least once during the last year. To evaluate whether you are sleep deprived, answer the following questions.

Yes **No**

- | | | |
|-----|-----|--|
| ___ | ___ | I need an alarm clock to wake up at the appropriate time. |
| ___ | ___ | It's a struggle for me to get out of bed in the morning. |
| ___ | ___ | I feel tired, irritable, and stressed out during the week. |
| ___ | ___ | I have trouble concentrating. |
| ___ | ___ | I have trouble remembering. |
| ___ | ___ | I feel slow with critical thinking, problem solving, and being creative. |
| ___ | ___ | I often fall asleep watching TV. |
| ___ | ___ | I often fall asleep in boring meetings or lectures in warm rooms. |
| ___ | ___ | I often fall asleep after heavy meals or after low doses of alcohol. |
| ___ | ___ | I often feel drowsy while driving. |
| ___ | ___ | I often fall asleep within five minutes of getting into bed. |
| ___ | ___ | I often sleep extra hours on weekend mornings. |
| ___ | ___ | I often need a nap to get through the day. |
| ___ | ___ | I have dark circles around my eyes. |
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What are the Consequences of Sleep Deprivation?

There are disruptions in:

Behavior	<ul style="list-style-type: none">• Drooping eyelids• Staring• Trembling hands• Complex motor skills such as decreased reaction time• Weakened immune system• Increased caloric intake
Mood	<ul style="list-style-type: none">• Increased irritability• Paranoia• Increased risk of depression
Mental Abilities	<ul style="list-style-type: none">• Slowed speech and thinking• Poorer judgment• Decreased attention / concentration (on the job or at school)
Perception	<ul style="list-style-type: none">• “Tunnel vision”• Increased sensitivity to pain• Hallucinations

Costs of Sleep Deprivation and Benefits of a Good Nights Rest

Sleep researcher William Dement reports that 80% of students are “dangerously sleep deprived”.

Such individuals “are at high risk of some sort of accident...sleep deprivation entails

- tendency to make mistakes,
- diminished productivity,
- difficulty studying,
- irritability and
- fatigue.”

To manage your life with enough sleep to awaken naturally and well rested is to be more

- alert,
- happy,
- sociable,
- productive and
- resistant to stress.

What do Psychologists Know about the Function of Sleep?

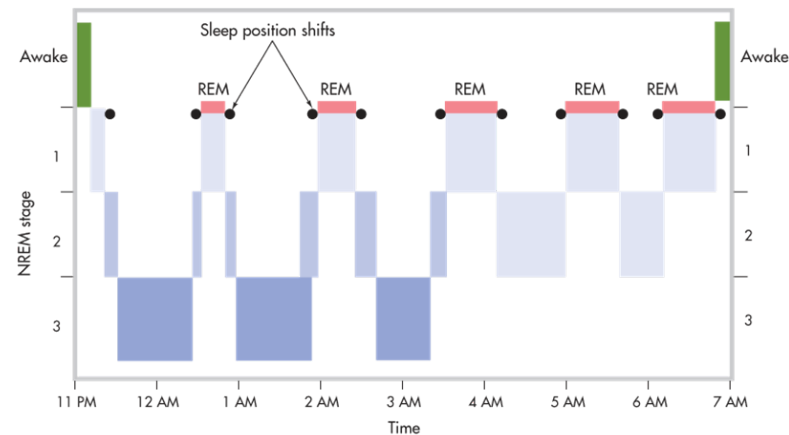


Figure 4.4
Hockenbury/Nolan, *Psychology*, 8e, © 2018 Worth Publishers
SOURCE: Data from Hobson (2004).

The restorative theory of sleep suggests that sleep promotes physiological processes that restore and rejuvenate the body and mind. Psychologists know that if we don't sleep, our immune system is compromised. Mice that are deprived of sleep die of causes related to a weakened immune system.

- NREM sleep is thought to be important for restoring the body. NREM sleep is increased following sleep deprivation, starvation, and strenuous athletic activity. It lasts about 50-70 minutes.
- REM sleep is thought to restore mental and brain functions. Both animal and human studies have shown that REM sleep increases after learning a novel task and that sleep deprivation following training disrupts learning. It lasts 5-15 minutes (depending when it is in the sleep cycle).

Sleep and the Brain

During REM sleep:

- the frontal lobes (planning and decision-making) and
- parts of the primary visual cortex (processing visual information from the environment) are inactive
- the amygdala, hippocampus and other visual association areas are active

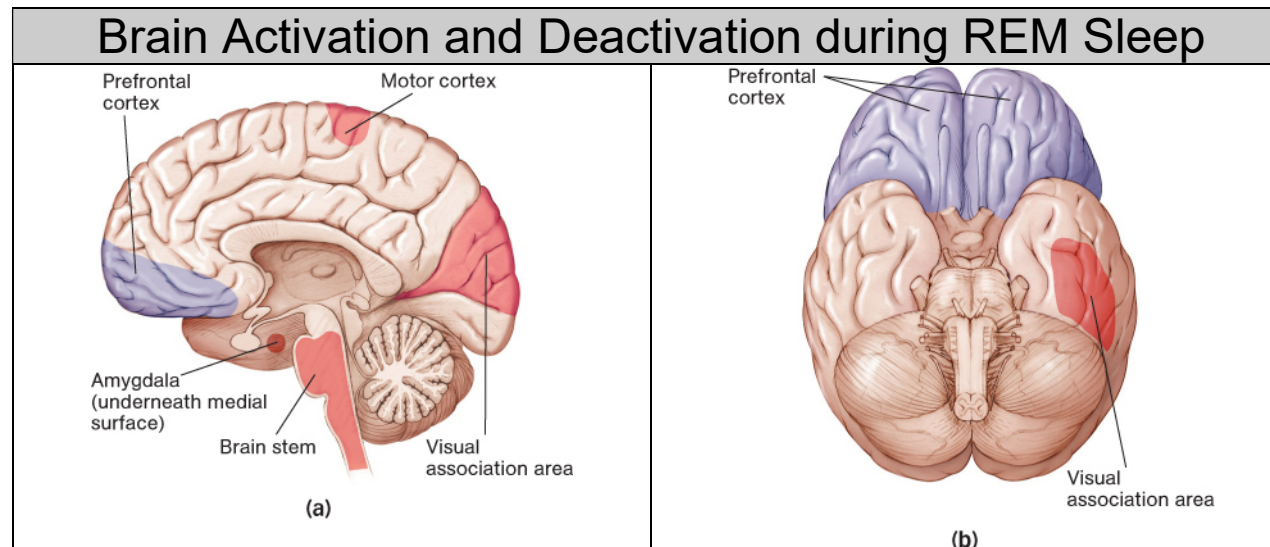


Image source: Schacter et. al.

What are the consequences of working irregular shifts?

Many Americans are night shift-workers and engaged in various patterns of shift work.

How do irregular shift workers differ from regular shift workers?

- Irregular shift workers average 5.6 hours of sleep compared to regular shift workers average 7.5 hours of sleep.
- There was no difference in heavy cigarette smoking, coffee drinking between those working an irregular schedule compared to those working a regular work shift.
- Men who work irregular work schedules had higher rates of heavy drinking, job stress, and emotional problems compared to men working regular work schedules.
- Women who worked irregular shifts report more use of sleeping pills, tranquilizers, and alcohol as well as more job stress and emotional problems.

- What occupations are at risk of sleep deprivation?
- What are the specific risks of sleep deprivation for these irregular shift workers beyond falling asleep?