



## Course Learning Outcomes for Unit III

Upon completion of this unit, students should be able to:

3. Recognize factors that influence human behaviors and cognitions.
  - 3.1 Define circadian rhythms.
  - 3.2 Explain how the body's biological clock works (and what happens when it does not).
  - 3.3 Detail four psychological factors that influence how we perceive the world.

## Reading Assignment

### Chapter 5:

Body Rhythms and Mental States

### Chapter 6:

Sensation and Perception

## Unit Lesson

### Chapter 5: Body Rhythms and Mental States

How often do you find yourself daydreaming? Have you caught yourself drifting in and out of a conversation only to realize that you have somehow found yourself in a hypnogogic state? Research purports that consciousness ebbs and flows instead of remaining in a constant, discrete state as many have argued. Wade and Tavris (2017) explain that our conscious thoughts in one state can directly filter over into another area of consciousness. For instance, Cartwright (1974) posited that our conscious thoughts can have a direct correlation to our dreams. She argued that if one spent a great deal of the day contemplating a particular thought, in all likelihood that same thought or a slight variation would manifest in the individual's dreams that night (Cartwright, 1974). What do you think? Have you ever been in such a situation? As you read this chapter, you will gain better insight into our conscious thoughts and behaviors as well as sleeping patterns. Are these areas somehow intertwined? Are there linkages that actually exist which can explain why we have certain dreams? What is the true function of our dreams?

As you further your studies of the information, begin to examine your sleeping patterns. Do you ever find yourself feeling drowsy for seemingly no reason at all? Many argue that our industrialized society might possibly be the culprit behind our sleep deprivation. One's biological clock sometimes gets out of sync due to exposure to bright lights. Research has studied the effects of too much exposure to bright lights and one's internal clock. Furthermore, experiments have even been conducted that capitalize on this theory to positively affect seasonal affective disorder. As you go through your day, begin to notice when you feel sleepiness creeping upon you. Are you usually tired around 9 p.m.? Has watching your favorite late night talk show become a daily ritual? What happens if you do not get to bed at your normal hour? How is the next day altered if you did not get an adequate amount of rest?

Are you more productive in the mornings? Do you hit your stride in the afternoons? We all have preferred times in which we are more prone to greater productivity. However, research has discovered that most adolescents require more sleep than fully developed adults. In fact, many have argued that schools should have later start times to compensate for these differences. Take a few moments to contemplate this issue. Would your teen do better in school if he or she could get an extra hour of snoozing? Could more sleep possibly improve your son or daughter's level of comprehension?



Have you ever driven while drowsy? According to Wade and Tavis (2017), there are warning signs of drowsy driving that exist. How do you handle this issue? Do you crack a window if you are sleepy behind the wheel? Have you ever blasted the radio in an attempt to stay awake? Would it be more effective to simply pull over and take a short nap? More advancements have arisen to address this issue; in fact, BMW has a warning system that monitors drivers' eye fluctuations to assess alertness levels. Does your vehicle have this capability?

Do you believe in hypnosis? Many argue that some individuals are more prone to hypnosis than others. According to Wallace (1993), individuals who tend to be most productive during the day hours are more prone to hypnosis in the evening hours. Conversely, those who are most alert in the evening hours are more susceptible to hypnosis early in the morning (Wallace, 1993). Keeping this in mind, have you ever been under the influence of hypnosis? Could you remember anything that you said or did while hypnotized?

Should it be illegal to drive while drowsy?  
Some states have advisory signs to encourage drowsy drivers to get off of the road.  
(Konstantin, 2007)

Should certain drugs be legalized? As you conclude your study of this chapter, begin to examine your thoughts on mind-altering drugs. For example, in 1935, the United States government

opened a drug treatment center to rehabilitate individuals who were addicted to illegal drugs. The official name for the institution was the Narcotic Farm. Located in Lexington, KY, the treatment center was actually a federal prison. By utilizing the settings of a rural farm, researchers believed that inmates and other patients could successfully overcome their addictions and return to society as functioning, productive citizens; however, well-meaning the original plan was, there was much controversy surrounding treatment practices. Many individuals who had successfully stopped using drugs such as heroin were addicted to other drugs in order for researchers to study the process of withdrawal. These volunteers were often rewarded for their research participation by being given access to certain drugs for recreational purposes. Research on LSD was also funded by the CIA to ascertain its effectiveness as a truth serum to be utilized during interrogations (Choi, 2008). What do you think about the farm? Do you think this research was ethically sound? Ponder this scenario as you conclude your examination of the chapter.

## Chapter 6: Sensation and Perception

How can you determine if something is warm? When do you know that your mouth is parched? What triggers you to feel nauseated, fatigued, or various elements of pain? Wade and Tavis (2017) report that our bodies possess three different types of sensory systems: exteroceptors, interoceptors, and proprioceptors. Each sensory system has a different function. Notice how each system affects one's daily activities. What would you do if one was not functioning properly? How would you adjust?

As you continue your examination of this chapter, pay particular attention to the section related to vision. Have you ever had an eye exam? What were your thoughts as the doctor asked you to determine differences between your visions in lens one versus lens two? In essence, the doctor was checking for just noticeable difference. If he rushed you, were your perceptions altered? Many argue that our perceptions and sensations are affected by more than just psychophysical laws alone. Many scholars purport that our emotions greatly affect our perceptions as well. What do you think? Can one's emotions affect how the individual sees or hears something while also altering the way in which the meaning is perceived? How does your state of mind influence your perception of the world around you?



Does our perception of a situation influence the outcome? This cartoon illustrates this concept.  
(Wansink, 2004)

“Can you hear me now? Can you hear me now?” This common phrase from a popular television commercial provides great insight into further examination during this chapter. Scientists have discovered that as we get older, damage done to hair cells in the cochlea impact our ability to hear. For example, have you noticed that teens can generally hear sounds that older individuals cannot discern? Do you hear as well now as you did ten years ago? Have you ever found yourself asking others to repeat statements quite often? Keep this in mind while you read the section on hearing.

If you smell an obtrusive odor, what is your reaction? Have you noticed that certain smells influence your behavior? Baron and Thomley (1994) argue the affirmative. They conducted an experiment in which participants were instructed to perform certain tasks under low and moderate stress while some had a fragrant air freshener present and others did not. Some of the participants also received a small candy-filled bowl for their efforts. It was noted that the participants were able to recall the words more easily if the air freshener was present along with the small candy. In fact, the effects of the air freshener and the gift were seen as comparable motivators for completing the voluntary experiment (Baron & Thomley, 1994). As you peruse this chapter, you will identify other senses that affect one’s perception. Take note of these areas and your thoughts while reviewing the data.

As you end your examination of this unit, begin to reflect upon the influences of sensations and perceptions on our daily lives. In essence, does one’s external surroundings affect one’s reaction during a stressful situation? Can women truly embrace dichotic listening better than men? Is it possible to actively listen to two conversations at once? Has your perception of the world around you changed over the years? What truly impacts our abilities for various perceptions? Can others truly alter our perceptions and senses?

## References

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- Cartwright, R. (1974). *A primer on sleep and dreaming*. Reading, MA: Addison-Wesley.
- Choi, C. (2008, October 24). Reaping a sad harvest: A "narcotic farm" that tried to grow recovery. *Scientific American*. Retrieved from <http://www.scientificamerican.com/article.cfm?id=narcotics-recovery-farm>
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- Wade, C., & Tavis, C. (2017). *Psychology* (12th ed.) [VitalSource Bookshelf version]. Retrieved from <https://bookshelf.vitalsource.com/#/books/9781323598269/>
- Wallace, B. (1993). Day persons, night persons, and variability in hypnotic susceptibility. *Journal of Personality and Social Psychology*, 64, 827–833.
- Wansink, B. (2004). *Bottomless bowl-Wansink* [Image]. Retrieved from [https://commons.wikimedia.org/wiki/File:Bottomless\\_Bowl-Wansink.jpg](https://commons.wikimedia.org/wiki/File:Bottomless_Bowl-Wansink.jpg)

## Suggested Reading

The links below will direct you to both a PowerPoint and PDF view of the Chapter 5 and 6 Presentations, which will summarize and reinforce the information from these chapters in your textbook.

Click [here](#) to access the Chapter 5 PowerPoint Presentation. (Click [here](#) to access a PDF version of the presentation.)

Click [here](#) to access the Chapter 6 PowerPoint Presentation. (Click [here](#) to access a PDF version of the presentation.)

*In order to access the following resources, click the links below:*

The following are psychology articles found within PsycARTICLES database located in the myCSU library. The articles discuss the topics of bodily rhythms and sensation.

Copen, R. G. (1993). A phenomenological investigation of the experience of insomnia. *The Humanistic Psychologist*, 21(3), 364-369. Retrieved from <https://libraryresources.columbiasouthern.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=1994-21986-001&site=ehost-live&scope=site>

Freier, L., Mason, L., & Bremner, A. J. (2016). Perception of visual-tactile colocation in the first year of life. *Developmental Psychology*, 52(12), 2184-2190. Retrieved from <https://libraryresources.columbiasouthern.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=pdh&AN=2016-56613-011&site=ehost-live&scope=site>

## Learning Activities (Non-Graded)

Non-graded Learning Activities are provided to aid students in their course of study. You do not have to submit them. If you have questions, contact your instructor for further guidance and information.

Knowledge Check!

The short quizzes below are a great way to self-test your knowledge of the concepts learned in this unit. Take a few minutes to complete these quizzes to check your understanding. They are located in the textbook on the page(s) given. The answers are provided in the document below the quizzes, but try to answer the questions before checking the answers.

### Chapter 5

- Quiz for Module 5.1 (page 148)
- Quiz for Module 5.2 (page 155)
- Quiz for Module 5.3 (page 160)
- Quiz for Module 5.4 (pages 165-166)
- Quiz for Module 5.5 (page 172)
- Chapter 5 Quiz (pages 175-176)

### Chapter 6

- Quiz for Module 6.1 (page 186)
- Quiz for Module 6.2 (pages 198-199)
- Quiz for Module 6.3 (page 203)
- Quiz for Module 6.4 (page 211)
- Quiz for Module 6.5 (pages 215-216)
- Chapter 6 Quiz (pages 219-220)

### Answer Keys

Click [here](#) for the Chapter 5 answer keys.

Click [here](#) for the Chapter 6 answer keys.