1.7: Learning (Statistics)

As we close this chapter, if you are not at least a little overwhelmed, then you probably didn't read the chapter closely enough. We went over many, many words that you know what they mean, but now they have technical definitions use in statistics and research that much more specific than how most people use the words. When learning a new field, you must learn new vocabulary. In this case, you are learning statistics for the social sciences. A disadvantage of the social sciences is that so much of the vocabulary that we use are technical definitions of words that you are familiar with.

What can you do to learn?

Learn How To Learn

This five-part video series from cognitive psychologist Dr. Chew, first mentioned in 1.3: Scientific Method, provides many suggestions for how best to learn in any class. We will be returning to some of these ideas throughout the first unit. You might want to watch one video every day for the first week of class to get in the practice of spending time and effort on your classes. Plus, the videos have a lot of information in them, so it's best not to watch them all at once.

- Part 1: Beliefs that Make You Fail
- Part 2: What Students Should Know about How People Learn
- Part 3: Cognitive Principles for Optimizing Learning
- Part 4: Putting the Principles of Optimizing Learning into Practice
- Part 5: I Blew the Exam, Now What?

Spend Time Before, During, & After Class

In his videos, Dr. Chew emphasizes how important time and effort is for learning. In addition to some of the practices that he suggests for learning, you can also read this article by Zanardelli Sickler (2017) that describes what you can do before your class session or lecture video, what you should do during lecture, and what you can do after lecture to make sure that you learn and understand the material.

Another strategy is to decide what activities can be done easily enough on your phone for when you are on the go or don't have access to a bigger screen. For example, if you are reading this textbook (or any online material for your classes, really), then your phone might be a great option, especially if you are taking notes in an online document. Your phone might be a great way to preview assignments so that you can start thinking about what you'll be submitting. However, maybe taking quizzes should be reserved when you have a bigger screen and time to think. Doing practice problems are probably best when you have a table or desk to write on. Just planning ahead for what activities can be done when and how will help you organize your studying.

Practice!

- Use the Exercises throughout the chapters as practice. Don't just read them, but try to do them on your own, then check to see how close you are to the answers.
- Utilize this support "course" or try to finish the chapters during the first few weeks of the semester: Support Course for Elementary Statistics, which is a course to prepare you to take a more math-focused statistics course (rather than social science focused like this textbook)
- Your school probably has tutors or a learning lab (math lab?), so set up *weekly meetings* to go over what you're learning in class. Don't just show up in a panic before an exam or paper is due; learning takes time.
- Work in pairs to check each others' work. But don't do exactly what your partner is doing (that looks like cheating).
- What else might work for *you*?

Phew! That was a lot! Take a break, and I'll meet you in the next chapter to learn about organizing data!