

# Concentration & Memory

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**Concentration** is defined as the ability to give something our undivided attention to the exclusion of other distractions. Most students report dissatisfaction with their ability to concentrate and feel they do not work as efficiently as they would like. You need to bear in mind that most adults can concentrate on a task for a period of 35 to 45 minutes before growing distracted. However, there are some techniques that you can utilize that may help minimize external and internal distractions so you can use your study time more effectively.

## Try the **PATS** Model to Help You Stay on Task

- **P** P**ick the Best Environment for You to Study In.** Choose a place to study where you feel secure and comfortable (but not too comfortable—you may fall asleep). Does it have adequate lighting? Is it too warm or cool?
- **A** A**lways Reduce Visual Distractions.** Are there too many line-of-sight distractions? Is there a television nearby that might tempt you? Do friends find and distract you easily? (Hide, disable the “instant messenger” on your computer, or learn to say “Sorry, I’m studying!”)
- **T** T**ry to Eliminate Noise Around You.** Some people are distracted by music while others are helped by music. Generally music with lyrics is distracting. Some find listening to baroque music (a type of classical music with a very slow beat) improves their ability to concentrate. If noise distracts you, use earplugs or a machine that generates white noise, like a fan. And turn off that cell phone!
- **S** S**elf-talk to Control Internal Distractions.** When you notice your mind has drifted off task, stop what you are doing and put a checkmark on some scrap paper. Keep track of your checkmarks as a way to keep track of your tendencies to lose focus. Also, talk to yourself and direct your attention back to studying with an affirmative statement: “I know I have a lot to do today, but I have to read this chapter first.” Keep a notepad next to you and if you start to worry about something, write it down, promise yourself to attend to it later, and then get back to work.

## Set the Stage for Success

- Plan out your study times in advance. Be specific about what you want to accomplish and timelines for doing so.
- If you are distracted by the amount of material you have to cover, “chunk” (divide) the information into smaller, more manageable units.
- Schedule your most demanding subjects at the time of day you feel best (after breakfast for “morning people”; late evening for “night people”).
- Establish a regular routine of proper nutrition, sleeping and exercise.
- Watch the caffeine. While small amounts can improve alertness in the short term (like in a single can of pop or cup of coffee), higher doses can cause anxiety, dizziness, headaches, and the “jitters” and can interfere with normal sleep. Try herbal tea if you need the comfort of a warm beverage.
- Know and respect your own concentration span. If you find yourself consistently daydreaming, schedule more frequent breaks, take a walk, take a nap, etc. Some days it will be tougher to concentrate than others—and that’s okay. Expecting peak efficiency 100% of the time isn’t realistic. Aim for improvement—not perfection!

### Improving Your Memory

Having a good memory is a cornerstone of academic success. Don't berate yourself for absentmindedness. Start today by telling yourself you have a good memory and it's improving every day!

It is thought that humans possess two major types of memory: Short-Term Memory (STM) and Long-Term Memory (LTM). If you wish to be successful on tests and exams, it is important to have crucial information stored in your long-term memory. Frequent review of material is important. Always review your lecture notes and recite material within 24 hours of your class to encourage information transfer from your STM to your LTM. LTM allows retrieval of information decades after it is stored, and its capacity is considered to be infinite.

### Hints from Cognitive Psychology

Here are some research findings from studies on cognition that you can utilize to improve your memory:

- **Chunking.** This involves learning small pieces of a concept first and later putting them together to form the whole. A good example of this is your student number. It is far easier to recall separate groups (or chunks) of numbers than nine individual digits.
- **Elaborative Rehearsal.** We are more likely to remember things when we consider the *meaning* of something as opposed to its structural components. A good way to remember a theory or concept is to find everyday examples so the information is more relevant. Putting material into your own words also makes it more meaningful.
- **Generation Effect.** You are more likely to remember information that you come up with individually (i.e. you generate on your own) than information that is simply presented. Consider studying in pairs so you have ample opportunity to generate information. Using flash cards is also beneficial.
- **Dual Coding.** If we have a verbal and visual memory for a piece of information, we are more likely to remember it. For example, if you want to remember someone's name you can say their name out loud while visualizing a particular image. Having both a verbal and visual memory makes it much more likely you will recall their name.
- **State and Context Dependant Memory.** We tend to remember information best when the state/context we are in matches the state/context we were in when we acquired the information. The state refers to your state of mind, and the context refers to any part of your environment. This finding comes into play during tests and exams. Students get stumped on a question and grow anxious, which is a very different state of mind from when they originally studied the material. If this happens to you, simply move on to another question and try to relax. Other questions may provide you with the retrieval cues necessary to answer the question correctly!
- **Spacing Effect.** Not surprisingly, spacing out your review is much more effective than "cramming" in the long term. Research indicates that the best study intervals (time between study sessions) are those that match the retention interval (the time between the last study session and the test). For example, if your test is two days away, study once a day. If your test is in two hours, study once an hour.

Adapted from Tigner, Robert B. (1999) *Putting Memory Research to Good Use: Hints from Cognitive Psychology*. Journal of College Teaching, 47, 149-152.

### Resources Available at the Academic Advising & Career Centre

You will find more information on **memory and concentration** in some of the study skills books in the Academic Advising & Career Centre (AA&CC). Some books to begin with include: *Learning Power, 2nd Edition*, and the *The Memory Book*.