

# How do executive functions affect your learning?

A problem in one of these key areas, can interfere with academic and social performance

**DID YOU KNOW – 40 % of first year university drop outs have ADHD?**

**DID YOU KNOW – There are special accommodations for ADHD university students with ADHD, like 20 – 25 % more time for exams and assignments, write in separate room, oral tests, use of a scribe, computer etc.?**

**DID YOU KNOW – According to SARS all ADHD expenses are tax deductible?**

Executive functions are the management system of the brain. They play a similar role to that of an orchestra conductor. He manages, directs, organizes and integrates each member of the orchestra. He cues each musician - so they know when to begin to play, how loud or soft to play, how fast or slow to play, and when to stop playing. The conductor is the most important person in an orchestra. Without the conductor, the music would not flow smoothly or sound as beautiful.

Our executive functions help us to manage and organize our daily life. Like an orchestra, each of these mental functions must be able to work together in various combinations. When one area is impaired, it affects the others. A person with ADHD may have impairment in one or several areas of executive functioning. This makes it more difficult for them to plan, prioritize, organize, pay attention, remember detail and control emotional reactions.

## 1 **Activation:** Organizing, Prioritizing and Getting Started on Tasks

A student who has problems in this area has difficulty getting study materials organized, anticipating and planning for future events, struggles to simply get started on a task, estimating the time needed to complete tasks, and distinguishing between relevant and non relevant information.

## 2 **Focus:** Focusing, Maintaining and Shifting Attention

Individuals with ADHD are easily distracted and miss important information provided in class. They are distracted not only by things happening around them in the classroom but by their own thoughts. They can get stuck on a thought, hyper focusing only on that topic and have difficulty shifting attention when necessary.

## 3 **Effort:** Regulating Alertness, Sustaining Effort, Processing Speed

Unless this student is actively engaged in the task at hand, he has a hard time regulating alertness. When he has to sit still and be quiet in order to listen to a lecture or read material that isn't interesting and stimulating, he will appear drowsy. It's not that he is tired, but that he simply can't sustain concentration if he is bored. The speed at which a student takes in and understands information is very important. Some students with ADHD process information very slowly, and others have trouble slowing down long enough to process information accurately.

## 4 **Memory:** Using Working Memory and Accessing Recall

Working memory is the brains "temporary storage system". It holds several facts or thoughts while solving a problem or performing a task. Helping you hold onto the information long enough to use it in the short term, focus on a task at hand and remember what to do next. An ADHD student will have trouble following the lecturer's directions, memorizing facts and retrieving information from memory when needed in learning subjects. They may also have trouble computing problems in their head.

## 5 **Emotion:** Managing Frustrations and Regulating Emotions

A student with problems in this area can have a very low tolerance level for frustration and be extremely sensitive to criticism. Since difficult emotions can easily become overwhelming, emotional reactions can become very intense.

## 6 **Action:** Monitoring and Self-Regulating Action

These ADHD sufferers trouble regulating their behaviour. This can hamper social relationships. A student, who has difficulty inhibiting behaviour, may react impulsively without thought to the context of the situation. He can over focus on the reactions of others and become inhibited and withdraw from interactions with his peers.

### Dr Shabeer Jeeva is a Specialist Child and Adult Psychiatrist

He is an ADHD patient with 25 years Canadian experience in depression, anxiety, panic attacks and executive burnout; with strong experience in child, adolescent and adult ADHD.

For more information contact Dr Jeeva at [www.adhdclincjeeva.com](http://www.adhdclincjeeva.com)  
You can also view/listen to his talks on radio, Bonita's House Call, 3 Talk and Carte Blanche



