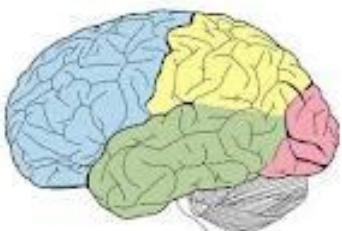


## Understanding Executive Functioning Difficulties

Executive function is an umbrella term for functions such as planning, problem solving, mental flexibility, working memory, impulse control, inhibition, multi-tasking, and switching focus, as well as for the initiation and monitoring of actions. A simple way to think about executive functioning is to think of it as the conductor of a large orchestra. The conductor is responsible for directing and co-ordinating each of the different orchestra sections, such as the strings and percussion. In the same way, executive functioning controls, organises, and monitors various cognitive processes in the brain, such as attention and memory.

### Executive functioning in Autism Spectrum Conditions

Deficits in executive abilities, often referred to as 'executive dysfunction', are seen to varying degrees in most individuals with an Autism Spectrum Condition (ASC). Problems in executive processes may result in difficulties with initiation, coping with change, self-regulation and control, as well as impacting on practical daily life skills that rely on good self-organisation and planning, such as shopping and cooking. It's important to highlight that not everyone experiences all of these difficulties, but they can be seen to underlie many of the key difficulties associated with autism.



Because executive processes are quite complex, difficulties with executive functioning are often hard for people with ASCs to explain and they may be hard for family members or teams working with the individual to understand.

Some individuals with an ASC can be very rigid and inflexible in their thinking and plans, and may want to stick to fixed routines. This again is a key executive function, and is often termed 'mental/cognitive flexibility'. This term basically refers to the ability to shift one's focus to a different thought or action according to changes in a situation.

### How does executive function affect our daily lives?

At home, university, or in the workplace, we're called on all day, every day, to perform tasks or activities that require executive processes. Executive function allows us to:

- Make plans and organise appointments
- Keep track of time and finish work on time
- Prioritise multiple tasks
- Solve unusual problems
- Keep track of more than one thing at once
- Meaningfully include past knowledge in discussions
- Evaluate ideas and reflect on our work
- Change our minds and make mid-course corrections while thinking, reading and writing
- Learn rules



## What are some signs of executive function problems?

An individual may have problems with executive function when they have trouble:

- Planning and carrying out a sequence of steps required to complete a task
- Making accurate judgements or finding solutions if things are going wrong
- Acting impulsively without fully thinking through the consequences, for example, spending more money than can be afforded
- Comprehending how much time a task will take to complete
- Controlling emotions, which may lead to outbursts of emotion, such as anger
- Initiating, participating in, or paying attention to conversations
- Telling stories (verbally or in writing) and struggling to communicate details in an organised, sequential manner
- Memorising and retrieving information from memory
- Initiating activities or tasks, or generating ideas independently
- Retaining information while doing something with it, for example, remembering a phone number while dialling

## What are some strategies to help?

There are many effective strategies to help with executive function difficulties. Here are some methods to try:

### ***General Strategies***

- Take step-by-step approaches to work; rely on visual organisational aids.
- Use tools like time organisers, computers or watches with alarms.
- Prepare visual schedules and review them several times a day.
- Ask for written directions with oral instructions whenever possible.
- Plan and structure transition times and shifts in activities.



### ***Managing Work and Time***

- Create checklists and 'to do' lists, estimating how long tasks will take.
- Break long assignments into smaller, more manageable chunks and assign time frames for completing each chunk.
- Use visual calendars to keep track of long-term due dates, chores and activities.

### ***Managing Space and Materials***

- Organise work space, minimise clutter
- Consider having separate work areas with complete sets of supplies for different activities
- Schedule a weekly time to clean and organise your work space

### **Additional resources on executive function**

<http://www.ucd.ie/artspgs/langimp/autismexecdysf.pdf>  
[http://research.gold.ac.uk/2560/1/hill\\_devrev04\\_GRO.pdf](http://research.gold.ac.uk/2560/1/hill_devrev04_GRO.pdf)