

## A List of Executive Functions

With this example as a base, let's turn back to the question of what specific abilities are covered under the umbrella term of executive functioning. Below is the list of executive functions from Dr. Gioia and his colleagues. We've included a specific illustration of each executive function from our case study of Robin in parentheses after each definition.

1. **Inhibition** - The ability to stop one's own behavior at the appropriate time, including stopping actions and thoughts. The flip side of inhibition is impulsivity; if you have weak ability to stop yourself from acting on your impulses, then you are "impulsive." (When Aunt Sue called, it would have made sense to tell her, "Let me check the calendar first. It sounds great, but I just need to look at everybody's schedules before I commit the whole family.")
2. **Shift** - The ability to move freely from one situation to another and to think flexibly in order to respond appropriately to the situation. (When the question emerged regarding who would watch the cats, Robin was stymied. Her husband, on the other hand, began generating possible solutions and was able to solve the problem relatively easily.)
3. **Emotional Control** - The ability to modulate emotional responses by bringing rational thought to bear on feelings. (The example here is Robin's anger when confronted with her own impulsive behavior in committing the family before checking out the dates: "Why are you all being so negative?")
4. **Initiation** - The ability to begin a task or activity and to independently generate ideas, responses, or problem-solving strategies. (Robin thought about calling to check on the date of the reunion, but she just didn't get around to it until her husband initiated the process.)
5. **Working memory** - The capacity to hold information in mind for the purpose of completing a task. (Robin could not keep the dates of the reunion in her head long enough to put them on the calendar after her initial phone call from Aunt Sue.)
6. **Planning/Organization** - The ability to manage current and future- oriented task demands. (In this case, Robin lacked the ability to systematically think about what the family would need to be ready for the trip and to get to the intended place at the intended time with their needs cared for along the way.)
7. **Organization of Materials** - The ability to impose order on work, play, and storage spaces. (It was Robin's job to organize the things needed for the trip. However, she just piled things into the car rather than systematically making checklists and organizing things so important items would be easily accessible, so the space would be used efficiently, and so that people and "stuff" would be orderly and comfortable in the car.)
8. **Self-Monitoring** - The ability to monitor one's own performance and to measure it against some standard of what is needed or expected. (Despite the fact that they're off to Missouri without knowing how to get there, with almost no planning for what will happen along the way, and without a map, Robin does not understand why her husband is so upset.)

The executive functions are a diverse, but related and overlapping, set of skills. In order to understand a person, it is important to look at which executive skills are problematic for her and to what degree.