

Cognitive Shifting

Cognitive shifting is the brain's ability to **adapt your behavior and thoughts to new, changing, or unexpected events**. In other words, shifting is the ability to see that what you're doing isn't working, and make the appropriate changes to **adapt to new situations**.

Mental shifting is the main component in cognitive flexibility, and is so closely related that they are often referred to as the same concept. However, cognitive flexibility refers to the *ability* to adapt to a change, while mental shifting is the *process* that makes it possible to adapt to the change.

Shifting plays an **important role in learning** and **problem solving**. It allows you to choose a strategy and carry it out to adapt to the changing situation in which you find yourself. It helps capture information from the environment and respond to it flexibly and effectively, adjusting your behavior to the changes that the situation requires.

Characteristics of someone with strong cognitive shifting may be the following:

- Good mental shifting allows you to **adapt quickly** to changes or new situations.
- Cognitive flexibility helps **tolerate changes** that may occur when problem solving or carrying out a task. It allows you to create alternative solutions.
- People with good cognitive shifting are easily able to **transition from one activity to another** and know how to carry themselves properly in every situation.
- They can capture various dimensions of reality, see from **different points of view**, and recognize hidden relationships, which allows them to easily find different solutions to the same problem.
- People with mental flexibility can **better tolerate errors and changes**, are able to think about a situation from another person's point of view, and are easily able to find compromises.

Cognitive shifting and mental flexibility are two of the basic superior cognitive functions in metacognition, and **make up part of our Executive Functions**. Executive functions are a crucial part of success and proper development both at school and in daily life. **It allows you to make goals, plan, and carry out the plan**, supervise your own actions, and correct your behavior depending on the results. **Cognitive flexibility is related to fluid intelligence**, fluid reasoning, and the ability to problem solve easily and efficiently.

Proper mental shifting and cognitive flexibility **allow you** to think about other ideas, values, and ways of thinking, which will help understand **other people's points of view** and value other's opinions. This is why mental flexibility is **strongly related to empathy** and social interaction.

Examples of Cognitive Shifting and Mental Flexibility

From the time you wake up to the time you go to sleep, you use your cognitive flexibility and mental shifting almost constantly. **How can you see cognitive shifting in your daily life?**

- One example is when you're getting ready to have breakfast and you realize that there's no milk left. What do you do? Do you get mad and go to school or work without eating? Do you go to a café and eat there? Do you have something else for breakfast? Cognitive shifting allows you to think about other options when your original plan is altered with an unexpected change.
- If your good friend stops talking to you, mental flexibility helps you think about why this may be. It allows you to think about things that have happened, and come up with a possible reason as

to why they may not be talking to you. If you can think about things from other people's points of view, it helps you put yourself in their situation and think about what may have happened.

- You always take the same route to work. One day, it's pouring rain and you know that there will be traffic for miles. What do you do? You could take the train, you could leave the house early and try to get ahead of the traffic, or you could take other public transportation in hopes that you make it to work earlier. Your original plans or routine were changed by an unexpected situation, but your cognitive flexibility and shifting allow you to think of possible alternative solutions to help you get to work on time. You'll have to use the same abilities that you use when making a decision: experience, expectations, motivation, knowledge, and emotions.
- If you ring the doorbell and no one opens the door, you'll infer that no one is home rather than continuing to ring the doorbell to an empty house. Being able to understand this and look for another solution is another example of mental flexibility. You start looking for other ways to get in touch: calling the person to see where they are and if they will be back soon.

Cognitive Rigidity: Poor Cognitive Flexibility and Mental Shifting Cognitive rigidity is the consequence of a lack of mental flexibility. It could be defined as the **inability to change behavior or beliefs** when they are ineffective in order to reach your objective. Cognitive rigidity could cause alterations in the regulation of the behavior, creating inefficient behavioral patterns.

If you were asked to say words that begin with the letter "A", without being able to use proper nouns, and the only word you could think of was "Anthony", you would be experiencing cognitive rigidity, as you would be unable to create alternatives to "Anthony".

The feeling that this phenomenon causes is feeling "stuck", without being able to find a way out. Cognitive rigidity can have negative consequences in daily life, as you may find that there are often situations that require you to create alternative strategies or solutions.

There are different degrees of cognitive flexibility or rigidity. The earlier example would be an extreme degree of cognitive rigidity, but other cases may not be so clear. However, even lower degrees of cognitive rigidity will likely interrupt daily life (when a child has a hard time changing from subject to subject without forgetting information).

Why do some people have cognitive rigidity? The human brain likes stability and tries to avoid instability however it can. Someone with a high degree of cognitive rigidity may need to adjust to a change in a certain situation, but will be unable to adapt their behavior or way of thinking. It's normal to have a hard time adapting to changes, but people with poor mental shifting will have a much harder time than someone else.

Preservation is specifically associated with cognitive rigidity, as it is made up of a reiteration of actions that may have been effective in other situations, or that have been planned, but do not work with the current situation.