What Does the Working-Memory Index Measure?

At its core, the working memory index measures a child’s ability to hold verbal and visual information in mind and sustain mental control. The working memory index measures the capacity to maintain and manipulate visual and verbal information in one’s mind. Working-memory tests require attention to auditory and visual detail and sustained concentration. The working memory index reflects the capacity to keep information active in one’s mind and mentally resequence information.

Children with strong working-memory skills are able to identify visual and auditory information and keep it in mental storage for a brief amount of time and can control, manipulate, or adapt verbal and visual information.

Children who struggle with working memory display difficulty following instructions, have problems with tasks involving simultaneous processing, and lose track of their place in complex tasks. As a result, they tend to stop a task without completing it. Working-memory deficits cause children to forget what they wanted to say at home or school, forget instructions that they are attempting to follow, or be unable to recognize the details in a complicated task. They may also reflect modest or low cognitive functioning in general. Working-memory deficits are also associated with poor academic progress and acquisition of complex knowledge and skills. Specific academic issues related to poor working memory include difficulty with writing sentences or paragraphs, doing math computations that involve more than one step, and recalling information that has just been seen or heard.