

"Those actions which appear the most insignificant, if only they are constantly repeated, will form for us in the course of weeks or months or years an enormous total which is inscribed in organic memory in the form of ineradicable habits."

The Education of the Will; The Theory and Practice of Self-Culture, (1914) pg. 209.

Jules Payot, a friend of Santiago Ramon y Cajal (1898), Pioneer of modern Neuroscience.

Stroke Educator, Inc. is committed to educating the wider public about stroke and the 50 state "Aim High for Aphasia!" Aphasia Awareness Campaign.

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Aphasia Insights!

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Rise Time: An Auditory Function Deficit.

By Tom Broussard, PhD.

People with aphasia (PWA) are often plagued by missing the first 2-3 words of a sentence at the start of a conversation. I had been practicing all of my modalities and stumbled across a new deficit of which I was unaware. It is called "I can't hear and

unaware. It is called rise time or slow rise time and it is an auditory function deficit.

I discovered that I had missed the first part of many incoming auditory messages. I became aware that I couldn't "hear" my wife, Laura's words until the middle of a sentence. If Laura was saying "Claudia is going to Gainesville to see her sisters," I could not hear until I could hear the words "to Gainesville." At that point, I could tell that Laura was well into the sentence while I had no idea what she was actually saying until the third or fourth word.

Once I understood that this was a real problem that I could define, I told Laura about it. To this day, when I realize that I am missing the beginning of a sentence, I still jump in and say, "What was that?" That allowed the conversation to be reset

such that I could hear everything from the beginning.

I didn't know what it was called until I had bought, *Aphasia Rehabilitation* (Ross and Spencer), and also discovered an article, *The Role of Auditory Functions in Rehabilitation of Aphasic Individuals* (Brookshire). They both described my experience exactly.

Rise Time-The patient whose

processing system is characterized by slow rise time tends to miss the initial portions of incoming auditory message because his/her processing

systems takes a greater amount of time to shift from a passive nonprocessing state to an active processing state (Ross and Spencer).

Timing is a large part of the problem. PWA take time to shift from passive to active listening. Healthy people can shift from one to another in milliseconds (ms.) as short as 10-50ms. PWA take much longer to grasp the incoming messages, often 400-500ms. As a result, they will have lost the first 2-3 words.

Use an alert, as easy as saying, "Hey Tom" before starting the conversation, helps to prepare a PWA to hear what is *about* to be said. That is called rise time but it has nothing to do with one's hearing!