

Not Too Old For Sensory Integration

By Diana A. Henry, MS, OTR

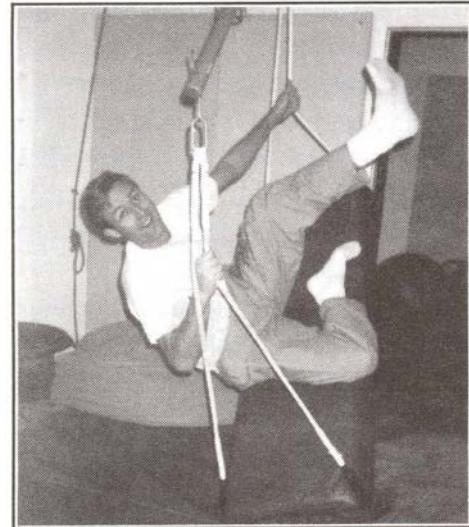
In 1972, when Dr. A. Jean Ayres first defined the sensory integration (SI) process as "the ability to organize sensory information for use", her research focused on identifying specific subtypes or patterns of dysfunction among children. (1) Unfortunately, the emphasis placed on the plasticity of the young brain (2) has been incorrectly interpreted by some to mean that individuals older than age 7 can no longer benefit from sensory integrative intervention. As clinicians, we can now turn to a scholarly and newly published textbook, Sensory Integration, Theory and Practice (1991), and find the following:

"Our experience in treating older children and adult clients with sensory integration dysfunction clearly indicates that these individuals have the potential for significant change, and experimental brain research indicates the plasticity persists into adulthood and possibly throughout life. Further, there is, as yet, no evidence that younger children with sensory integration disorders benefit more or change faster than do older children or adults who participate in sensory integration treatment programs." (3)

As the owner of an occupational therapy clinic specializing in providing SI treatment to both children and adults, I am continually impressed by the successful role SI treatment plays among the adult population. Many clients are intelligent and motivated professionals, who have struggled throughout their lives with their "hidden" SI handicaps. Among the persons who have benefited from SI treatment in my clinic are: an accountant, a speech and language pathologist, a child psychologist, and a university nursing student. Their creative compensation techniques and avoidance strategies have been both adaptive, as well as maladaptive. As this author recently discussed with noted clinician and researcher, Ms. Charlotte Brasic Royeen, Ph.D., OTR, FAOTA, SI dysfunctions can shape an individual's personality.

When told this author had been asked to write an article on adult SI treatment, Pete, a 27 year old accountant, requested that he be allowed to participate in order "to give the patient's point of view." Pete and his mother, an occupational therapist who had referred Pete for evaluation, sat down together three months after SI treatment had begun in order to review presenting problems and changes they had noted. Pete describes his life struggles as follows: "I graduated Magna Cum Laude from college with a degree in economics and accounting. Following graduation, I had enjoyed a successful five-year career with one of the nation's largest C.P.A. firms. But I realized that I probably was living my life the hard way. My achievements in life were made through arduous labor. Long nights at the library and even longer nights at the office characterized how I got things done. This coupled with a natural ability to verbally communicate allowed me to compensate for abilities and skills I lacked.

I agreed to an occupational therapy evaluation of SI because I wished to improve my: balance and coordination, trust in my physical abilities, ability to focus thoughts on one task at a time and to prioritize tasks to enhance concentration, ability to block out auditory disturbance, attention to details, reading comprehension and proof reading skills."



Pete on the glider (specially made by Southpaw, Inc. for H.D. T.S. clinic.)

Developmental history and present functioning checklists, clinical observations of postural ocular functions and performance on several tests from the Sensory Integration Praxis Tests(4) revealed difficulties in the following areas:

Posture, Balance, and Movement. Pete's mother had a long labor and forceps delivery. Pete never crawled, and pulled himself to standing at 8 months. When he began to walk at 12 months, Pete walked on his toes. Poor extensor tone was seen in his posture, which was generally poor and slouched. He frequently propped his head in his hand while reading and writing.

As a child, Pete avoided balance activities. He liked to be tossed in the air, and he reported he did better in motor activities when he moved fast (i.e. riding a bicycle). He had difficulty sitting still.

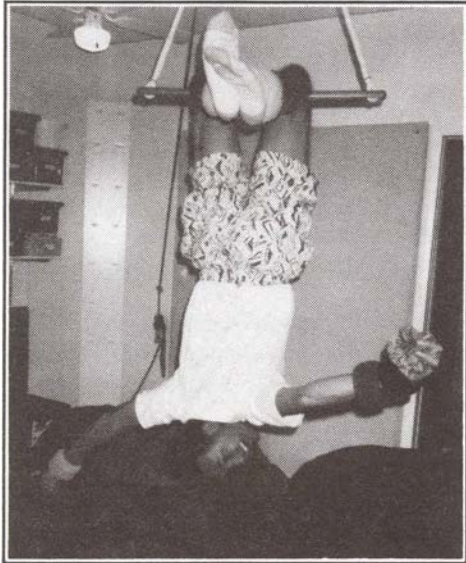
Sensory Modulation. Although "okay now", Pete reported he used to "hate to touch and be touched". He described himself as a loner. Along with sensitivity to touch input, Pete also demonstrated sensory defensiveness to auditory and visual input. He was particularly distracted by sounds which went unnoticed by others and preferred to work in separate cubicles, high enough to prevent him from hearing and seeing others.

Bilateral Motor Integration. Testing results revealed a subtle, but definite, tendency to avoid use, rotation and weight bearing onto the left body side. When attempting rapid alternating movement of the forearms, deficiency was noted with the left arm, both independently and when performing with both hands together. Asymmetry between body sides was also noted in his person drawing.

Visual Motor Integration. Pete drew glasses, but no eyes in his person drawing. He reported that during testing of ocular tracking, he had difficulty not moving his head. During table top activities, poor postural adjustments were noted. Pete frequently leaned his head in his left hand and during design copying tasks, he rotated the paper completely around. Although accurate,

visual spatial tasks were performed very slowly and deliberately. Pete stated that he performed the Bilateral Motor Coordination test listening to the sounds instead of watching the patterns.

Motor Planning (Praxis). Pete found participation in gym distasteful and had difficulty learning to skip. He reported feeling much discomfort growing up as he could not participate as he wanted with peers because he lacked good athletic abilities. Despite taking many golf lessons, Pete reported he felt it necessary to relearn the movements each time he played golf.



Pete on the trapeze bar throwing koosh balls at a target.

Following a meeting with Pete and his parents to review initial test results, Pete agreed to weekly SI treatment. Pete was also beginning a graduate program at the university.

"Of course, I was skeptical that SI could do much to correct my problems. Before SI treatment began, I viewed the process in strictly physical terms. I imagined that each session would include a set of formulated movements designed to stimulate my sensory systems. The sessions included a large amount of sense stimulating movement, but they encompassed much

more. Not only did I spin, bounce, twirl, hang, throw and jump, but I received a holistic view of the connection between my mind and body. Ms. Henry showed me how the use of physical stimulus could help focus my thoughts and forge connections between me and surrounding world.

SI treatment has given me tools which I use daily. My balance has improved, I'm better organized and I find myself reading more. Although the treatments are not complete, Mom and I have notice improvement and I have gained an understanding that maintaining sensory stimulation through movement is an important tool in maximizing my potential.

Growing up, I was ashamed of my physical limitations. I carried this shame into adulthood. Living in a society which places a premium on physical abilities and performance, such shame led to a low self-esteem. Perhaps the greatest benefit I have experienced through SI treatment is an improved sense of self-worth."

In addition to Pete's own observations regarding his progress, this author has noted that Pete is more aware of using his left side and his golf game has improved. He is more playful and friends have said he looks younger. He no longer has to depend on a calculator for simple arithmetic. Pete has had a successful first semester in graduate school, and has decided to open his own business. Pete's participation demonstrates that SI treatment continues to change the quality of life of countless individuals.

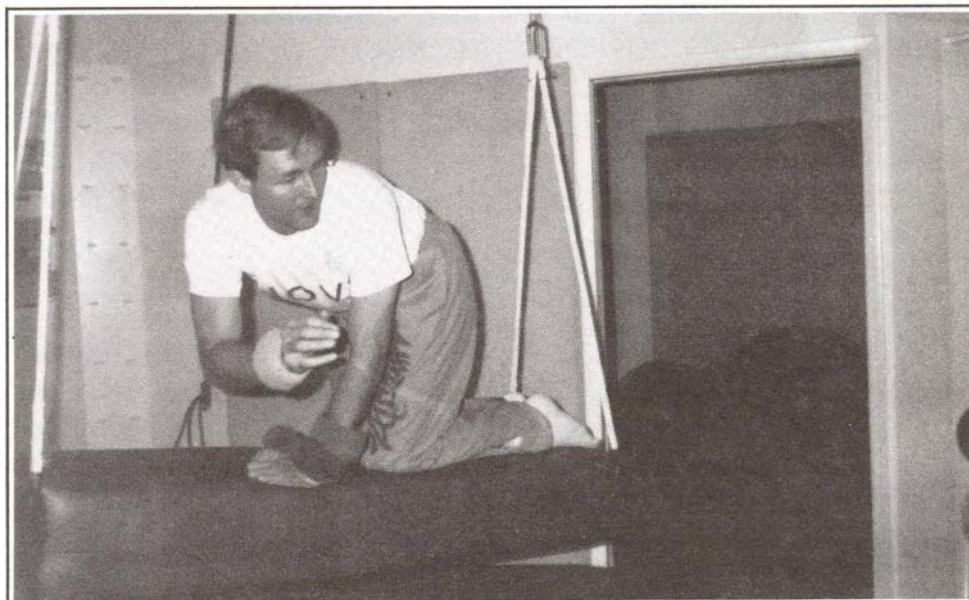
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Peter L. Christensen is an accountant in private practice.

References

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3. Fisher, A.G, Murray, EA, and Bundy, A.C. (1991). *Sensory Integration Theory and Practice*. Philadelphia: FA Davis Company.
4. Ayres, A.J. (1989). *Sensory Integrator and Praxis Tests*. Los Angeles: Western Psychological Services.

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Pete on glider crossing midline onto left side to throw koosh balls at target while on glider (made by Southpaw, Inc.)