

Case Study 1

Melanie Smith is a 14 year old client who was diagnosed as mildly mentally retarded by the public school she attended in Southern California. Her father and step-mother heard about my program from another parent who sent their child to me with symptoms similar to Melanie's.

Melanie came into the world weighing 1.5 ounces. Her mother died of toxemia and Melanie was taken by a C-section procedure and spent the first three and a half months of her life in an incubator. (The specialists informed Melanie's father that they did not expect Melanie to survive and that she may never walk, be mentally retarded and be facing scores of medical and health issues.) Melanie left the hospital and continued to thrive with the love of her father and extended friends and family.

Melanie developed physically in a normal child way. She crawled, she creped and learned to walk at a normal developmental rate. Melanie developed an allergy to dairy products and had BPD--she was treated with Tivist and Nebulizer Treatments for 7 years. Her father commented that Melanie had the soul of an old lady and worried about everything. She was afraid of heights, elevators, doctors, and any change in routine--especially starting school. Melanie started school at 6 years of age and was petrified. School was always difficult for Melanie and she was very shy and talked in a whisper. Her teachers loved her because, while she had learning problems, she was a well-behaved girl and remained quiet and did her work as best as she could. She moved through school continuing to struggling and getting assistance as needed.

Melanie came to Northern California for an evaluation as a freshman in a small private Christian school--where again, her teachers and classmates love her and she loves them and she continued to struggle academically with following directions, reading comprehension, and memory (She could not remember her phone number or address.) Her father and new mother were worried about what someone as fragile as Melanie would be able to do in a world that can be so cruel.

When Melanie arrived at my office she thought she was going to a doctor's office and was scared to death. She sat in the corner and cried for over an hour--after a long discussion with her parents, I went over and sat next to her, held her hand and let her know that what we were going to do was totally safe and that I too had struggled in school and that I understood and could help--she cried another thirty minutes. She confessed that she was afraid of going to the doctor--and when I told her that I wasn't a doctor--she relaxed and went over to the table and we began to work together.

The Structure of Intellect Assessment form CR was done with Melanie assessing up to 27 abilities. Melanie completed 22 of those subtests. A Balance Screening and Sensory Integration Assessment were completed. Melanie's auditory digit span was 5 and her visual digit span was 6. (By most standards this is considered low.) A Sensory Screening based on the late Dr. A. Jean Ayres, an occupational therapist and the first person to describe sensory integration dysfunction, was completed by Melanie's father.

Melanie was able to cross her physical midline with ease and was able to balance well walking backwards and forwards on the Balametrics variable rocking beam. Her spatial awareness was off dramatically on the left side that corresponded with a left eye not able to follow Melanie's hand in a smooth manner. When assessing further, I discovered that Melanie's eyes did not track well, jumping consistently on the left side, center and right side. This would obviously create a great deal of stress when trying to read. Melanie's eyes did not follow moving object smoothly and when doing a pencil push-up exercise, (pencil directly to nose forcing eyes to cross) her left eye was not working with her right eye. I assessed in a variety of ways for mental midline processing issues and Melanie had all of the "classic" symptoms for mental midline processing disorder. It is important to note that Melanie's father completed a checklist on the above mentioned Sensory Screening under the "reasoning" section he checked all but one box. All of the following are related to a mental midline processing dysfunction:

- Does not move easily from one idea to another - becomes confused
- Veers off from the subject at hand to follow some minor detail
- Has difficulty adjusting to changes in content, format, and mode of response
- Have no decision making capabilities and takes too long to solve relatively simple problems
- Is inconsistent in thinking and makes illogical arguments
- Has difficulty learning abstract concepts (i.e., freedom, pronoun, nation)
- Has problems validating ideas
- Generalizes with difficulty
- Does not see cause-effect relationships
- Has poor short term retention for subject-matter facts
- Nonexistent problem-solving and learning strategies
- Does not generate relevant ideas of appropriate depth
- Cannot organize ideas into a cohesive plan of action
- Jumps to premature conclusions

The only item that was not checked on our "reasoning" screening was *has difficulty organizing, grouping and forming concepts*. When I ask Melanie's father if he overlooked this item, he shared with me that Melanie is very good in this area. (This is usually one of the first concerns expressed from clients.)

This means her left and right hemispheres were not communicating with each other due to a weakness at the corpus callosum area between the left and right hemisphere. Weakness in the corpus callosum or mental midline can affect memory, focus, comprehension, vision tracking, auditory processing, and verbal sequencing needed for reading comprehension. It is important to note that while Melanie's memory was incredibly low her word recognition score was perfect but she would not remember anything that she had read.

I also assessed Melanie's vestibular processing while doing activities on a Balametric's balance board and severe vestibular imbalance was noted. This would explain her intense fear of crowds, elevators, and her overall gravitational insecurity.

Melanie is a very determined hard worker and we spent an intense 6 hours together--without stopping for a break for lunch. Melanie wanted to "just get through it." So she ate little snacks as we plugged on through the day to complete the work. The majority of the assessments were done in this manner. Many times sensory integration issues do not show up until an individual becomes fatigued--that may explain the lack of cooperation many parents get when it is time to do homework at the end of the school day. In many cases within the first few hours of assessment individuals demonstrate no sensory integration. As the testing continues, other sensory symptoms begin to show up. Melanie's sensory integration dysfunction issues demonstrated themselves continually throughout testing. Some of these sensory integration issues may demonstrate themselves by extreme movement in the chair, spinning from side to side, or rocking back in the chair on the back legs, head tilted forward until it is inches from the paper, or just wanting to continually walk away from the current task.

The following morning we came together once again--this time with a plan to correct Melanie's Sensory Integration Dysfunction at the mental midline. Using a series of pressure points, starting at the Achilles area behind Melanie's ankle bone, up to the hamstring muscle at the back of Melanie's knee, and then to a secondary neuron connection and then up to a primary neuron connection at the joint capsule between the shoulder bone and upper arm. This was then followed by a series of vision exercises and movements that enabled the eyes to

start working together and correct vision tracking. A slight weakness in tracking was still present in the left eye. Additional work on the balance board corrected this left eye movement issue. Work was done on the Balametrics balance board to develop exercises to strengthen the vestibular weakness that caused so many of the processing issues listed above. It is important to note that the vestibular correction is a 15 minute session on the balance board that needs to repeat daily for a period of time, in Melanie's case for at least a year.

Using a series of pressure points starting in the frontal cortex area at the midline moving to the back of the midline I reinforced and strengthened communication connections between the left and right hemisphere. After this work Melanie was very tired and fell asleep with her head on the table for at least twenty minutes.

Melanie's program continued at home with a customized personal Structure of Intellect Workbook to develop low abilities, such as memory and verbal sequencing that we discussed earlier. In addition to the personalized workbook, Melanie used Critical Thinking Press books, *Building Thinking Skills*, books 1, 2, & 3. Additional programs were done in conjunction with Melanie's SOI workbook to include SOI Memory Matrix program and Brain Builder 3.0 by Advanced Brain Technologies to develop Melanie's memory to a gifted level.

With continued monitoring of Melanie's home based program over the following year, Melanie made dramatic progress. She visited Northern California for a follow up visit a year later, and a beaming, happy Melanie bounced into the office. I was so happy to see the progress that she had made in just one year. Recently a friend of the families came to visit and reported that Melanie is now in college and is academically and emotionally doing exceptionally well.