



## USING INTIME PROTOCOL A (SENSORY MOTOR)



Submitted by: Sue Khammar, OTR/L

Location: Fort Worth, TX

Date: 9/20/14

Name: Sheldon M.

Gender: Male

Chronological Age: 5 yr. 6 months

Clinical Diagnosis: ADHD

## SHELDON'S STORY

Sheldon was evaluated by OT on May 7, 2014. He was referred due to impulsiveness, tantrums, hyperactivity, and possible sensory processing problems. Sheldon had been diagnosed by a psychiatrist in December of 2013 with ADHD. He was given Quillivant XR 3mg/day. Despite medication, Sheldon's behavior at home and school was problematic. Parents were stressed out by Sheldon's tantrums and difficult behaviors. Mom is a preschool teacher where Sheldon attended school, so she knew how tough his behaviors were within the classroom setting. She worried that although very bright, (IQ 138) he may not be able to stay at the private school kindergarten if he couldn't better self-regulate.

Sheldon was given the SIPT (Sensory Integration and Praxis Tests) as well as structured/unstructured clinical observations. He scored as follows:

**Summary of Test and Major Scores**

Test	Number of Subscores	Brief Description of function(s) Measured	Major Score (SD)
SV	5	Motor-free visual perception; mental rotation	1.83
FG	2	Motor-free figure-ground perception	0.64
MFP	14	Recognition of forms held in hands; visualization	-3.00*
KIN	3	Somatic perception of arm position and movement	-3.00*
FI	3	Tactile perception of individual fingers	-0.11
GRA	3	Tactile perception of simple designs; praxis	0.82
LTS	3	Identification of place on arm or hand touched	-0.54
PrVC	2	Translation of verbal directions into action	0.07
DC	4	Visuopraxis; two-dimensional construction	-0.13
CPr	3	Three-dimensional visual space management	0.50
PPr	1	Planning and executing bodily movements	-0.06
OPr	1	Imitating tongue/lip/jaw movements; somatopraxis	0.69
SPr	3	Sequencing movements, bilateral integration	-0.01
BMC	3	Functional integration of the two sides of body	-0.85
SWB	5	CNS processing of muscle, joint, gravity input	-1.50
MAc	6	Eye-hand coordination; somatopraxis	-0.30
PRN	7	CNS processing of vestibular (cupular) input	-0.99

MFP (Manual Form Perception), a tactile recognition of forms held in hands; KIN (Kinesthesia) Somatic perception of arm position and movement; SWB (Standing Walking Balance) CNS processing of muscle, joint, gravity input, all scored below average. PRN the only non-developmental test here. It measures the vestibular-ocular reflex. Initially, on testing, Sheldon had NO reflex. He was spun 5 different times in order to elicit a reflex. He never showed signs of dizziness. This is an irregular neurological finding. Sheldon has difficulty being still. He has poor proprioceptive, tactile, and vestibular processing.

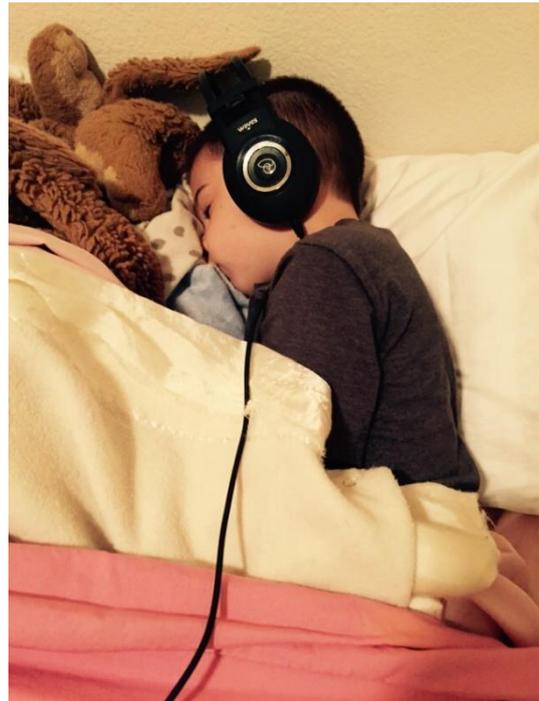
Sheldon’s mom and teacher were also given the Sensory Processing Measure- Preschool. Results below:

**SOCIAL:** Home=normal School= definite dysfunction  
**VISION:** Home= some problems; School= some problems  
**HEARING:** Home=some problems; School=normal  
**TOUCH:** Home=definite dysfunction; School=definite dysfunction  
**BODY AWARENESS:** Home=some problems; School=definite dysfunction  
**BALANCE:** Home=Definite dysfunction; School= some problems  
**PLANNING:** Home=some problems; School= some problems  
**TOTAL PROCESSING:** Home= definite dysfunction; School=some problems

Testing Observations included an intelligent, friendly child who was in constant motion. His eye contact was poor and he had mild articulation deficits. He fell off his chair numerous times and rolled, jumped and crashed around the room. He was also defensive to light touch. He had difficulty following directions due to distractibility. He was tested over 2 days due to his attention span. He required maximal verbal cueing to sustain attention to task. Mom also reported that due to Sheldon’ behaviors, he struggled with maintaining peer relationships.

He was determined to have a mild sensory integration deficit and a severe sensory modulation deficit which were impacting his play, work, and social skills at school and home. He was put on OT services 1x/week improve functioning through a sensory integrative approach. I also put him on inTime, Protocol A, base schedule, with Waves headphones. He started listening June 2, 2014. Mom's main goals were for Sheldon to improve attention/focus, improve ability to self-regulate, improve social skills, and improve ability to fall asleep.

Sheldon responded immediately to the very first listening session. He instantly became still and almost fell asleep while listening. He enjoyed the music and it was easy to establish a routine at home. On June 9th, I received a text message from mom that Sheldon just had a haircut without melting down. Apparently having his haircut was a huge struggle to tolerate the clippers on the back of the neck. Usually tears and screaming happened with each haircut. Mom texted me while crying happy tears to say that he sat there like a big boy and had NO issues. She was in complete shock!!! That was only one week into listening. She was hooked! By week 7, I noticed a remarkable change in his behaviors. He was less explosive, more calm overall. Balance and body awareness was improving well. Interestingly, during week 7 he began to stutter. This improved back to normal by week 9. On week 10 (July 28th), I decided to retest 2 of the SIPT tests because he seemed to have made improvements clinically. The KIN and the SWB now scored within normal limits! This indicates a huge leap in his processing of proprioceptive and vestibular processing abilities. By mid August, he was coming to his OT sessions able to participate in fine motor activities and display good self-regulation skills. His social interactions were appropriate and he was displaying less sensory seeking behaviors.



Sheldon is now on week 18. He has completed cycles 1 & 2. He is scheduled for a full 32 weeks. Sheldon has met all of his OT goals that were set for him. I just updated them last week to include more fine motor/sustaining attention to task and higher level balance activities. He is in kindergarten and still struggles to self-regulate in a classroom with 20 children. One on one, he is much better and can participate fully and easily in a one hour OT session. Mom still reports occasional tantrums, more so on weekends when he is not on his ADHD medications. She has added "listening to a blue" on Sundays if his behavior "is off".

Overall, Sheldon has made remarkable progress in a short amount of time. I believe the listening has helped him to integrate his underlying sensory integrative and modulation issues. He is now participating fully in school and home. He has friends at kindergarten, he is happy and his parents are better able to “parent” him. InTime has made such a difference in his life and has made my job easier as an OT! Thank you Advanced Brain Technologies.



Sue Khammar, OTR/

## PARENT FEEDBACK

From Darcy M., Sheldon’s mom

The inTime listening program has changed our lives. My son was the 5 year old that parent's didn't want at their play dates, and children didn't invite to anything. He was very aggressive in getting what he wanted and would do what he needed to, to get it. He threw tantrums, and had an exceptionally hard time controlling his impulses. We saw doctors and therapists alike and got zero results. We met an amazing OT who helped us understand Sheldon's sensory processing problems and suggested this program. After just one week of listening with this program we started to see major changes. He started to control himself, and ask for things before taking them. He stopped pushing as often to get what he wanted. Week after week we continued to see massive improvements in his daily life. We are on week 18 of a 32 week protocol and Sheldon is thriving in Kindergarten. He has friends and is invited to everything. This program gave us our son back and for that we will be eternally grateful!!!