

CASE STUDIES PROGRAM



Narrative case studies are a valuable resource for sharing best practices among providers. They also illustrate important concepts and methods for new providers in training. If you encounter a training situation that may be a good case study topic and you are interested in developing one, please email clinicaled@interactivemetronome.com with your idea at the earliest possible point in the individual's IM training.

To be useful, every case study should include ALL of the following elements:

1. Your case study must be submitted in paragraph form. The Example Case Study Write-Up (page 2-3) can be used as a general guide for your finished Case Study.
2. A brief description of the patient's history & diagnosis (i.e., 8 year old male with diagnosis of autism spectrum disorder at age 3)
3. Description of functional deficits in the areas of emotional, behavioral, social, cognitive, communicative, and motor functioning and settings in which they occur (i.e., home, school, work, etc)
4. Results of pre-IM objective evaluation(s) including any speech-language, cognitive, perceptual, sensory, psychological, or motor assessment scores and interpretation (Please include the name of the assessment batteries used.)
5. Results of initial IM assessment (pre-LFA, SF, Attend Over Time, including your behavioral observations)
6. Description of how IM settings and/or tasks were modified for the patient to achieve optimal outcomes (i.e., obstacles encountered along the way, how they were overcome, creative tasks you incorporated with IM/best practices)
7. Description of functional gains observed by you or reported by parents, caregivers, teachers, coworkers post-IM
8. Results of post-IM objective evaluation(s) including any speech-language, cognitive, perceptual, sensory, psychological, or motor assessment scores and interpretation (Please include the name of the assessment batteries used.)
9. Results of post-IM assessment (post-LFA, SF, Attend Over Time, including your behavioral observations)

To submit your case study idea, please email our Clinical Education Department via clinicaled@interactivemetronome.com. Accepted case studies will be awarded 30 IM hours (a \$300 value), or \$150 cash, or you can use your case studies toward obtaining an Advanced IM Designation (page 4). Case studies that do not include items #4 and #8, will be worth 15 hours (a \$150 value or \$75 cash). These cases will not count towards an Advanced IM Designation.*

*If you do not have access to test batteries and feel your case demonstrates credible functional gains, it may still be considered for RIMC/MIMC designation. Please submit them for consideration.

*All case studies submitted to IM will be made available to the public (published, placed on our website, or distributed through clinical education). You may opt to change the name of your patient or use his/her initials if you wish to conceal your patient's identity, in which case patient consent is not required. However, if the patient/legal guardian grants permission for use of real name and/or photo (photo must be high resolution), please use the Consent Form (page 5 of Case Study Submission Packet) and submit with your case study.

We look forward to your participation.

Asperger's Syndrome Case Study

N is a 9-year-old boy who was just recently diagnosed by a neurologist with a mild form of Asperger's Syndrome. He had no other medical issues or background. In fact, the neurologist told the parents that he really thought that N was just a very bright child, much like Albert Einstein and that he would be fine.

N came to Occupational Therapy due to "sloppy writing" and was evaluated in our clinic. He currently attended 4th grade at a public school where he reported that he had no friends. He also struggled to get along with the teacher, interrupting lessons and the other children in his class at one extreme, and the other extreme being that he would not participate and would remain silent throughout the school day. At home, it was noted by N's parents that he was extremely sedentary and that he had fears of balls being thrown to him (he thought it would hurt) so would not participate in any sports. N also had a great deal of difficulty falling asleep and sleeping through the night. He reported that he would wake up several times through the night and was unable to go back to sleep. He was also about 30lbs overweight and ate impulsively saying that he never felt full. In general, N had poor self confidence and was very impulsive. He could not stop talking about topics of his choice and would never ask others questions about themselves or what they were doing. He was the authority, and could not see another person's point of view or how what he said could impact others. He needed a lot of redirection socially about personal space and appropriate topics to talk about in the clinic setting (and school). Although eye contact was fair, N also had difficulty maintaining focus on things and his eyes would dart from one thing to another in the room.

Initially, N's most glaring deficits were in the gross motor realm. He was unable to get himself up off of the floor without support, assume a prone extension or supine flexion posture. He was very deconditioned and overweight, and really did not participate in physical activity. Parents reported that they had tried to get him involved in a soccer program, but after 1 session, he refused to return. N also scored below average on standardized testing on the Beery VMI, the WOLD Sentence Copy Test and the BOT-2.

N was very excited to be able to "play on the computer" and participate in the IM program as computers were something that he loved. We completed the IM Long Form Assessment and his unadjusted score was 251 MS; 83% of hits were early and 17% of hits were late. N had great difficulty with tasks requiring his lower extremities and also demonstrated a fairly significant right/left side difference. During the Attend over Time test (500 repetitions) he needed constant redirection to remain on task and earned a score of 197 MS.

Many "best practices" were utilized to help N with his functional deficits and using "bursts" as a motivator in the clinic with a reward at the end of the program from his parents helped him to continue with the program. N had so much difficulty getting "greens" or "super right on's" that the burst threshold was lowered to 2. We called this "level 2" and then progressed to "level 3" later in the program (to appeal to the "video game" interest). Since bursts were used as a motivating factor for N, we never went beyond a burst threshold of 3 as N felt that he would do poorly and would lose interest. I knew I needed to keep the "just" right challenge for him or he would "lose it". We did however decrease the difficulty level over time from 300 initially to 100 by his Interim LFA (8th visit) to auto difficulty by his 10th visit. He did feel that this challenged him, and he rose to the occasion. We performed some exercises that are listed in the program such as clapping (exercise 1), both toes (exercise 4), both heels (exercise 7), alternating hand/toe (exercises 10 & 11) and balancing on one foot while tapping with the other (exercises 12 & 13). The other exercises were activities such as sitting on a therapy ball and tapping his knee and then rotating his trunk to tap the ball on the other side or tapping switches placed on the wall while in a half kneeling position. We also had him sit on a therapy ball facing our Velcro wall with a switch place on each side of him just out of his reach. He had to do a "bounce and reach" to get to each switch. He made so much progress by the Interim that we were able to place the foot switch on an aerobics bench for him to do "both toes" which really gave him an aerobic workout! We also did some exercises in a half kneel, on a rocker board and standing on a "Disc-o-sit" cushion to challenge his balance and stability.

After 15 sessions of IM, N began to listen to others when they spoke to him. It was reported in school that he did get himself into trouble one day. Another child was teasing him and took his hat. N grabbed the other child and told him that he was not a “push over” anymore and he wanted his hat back. This was the first time N had ever stuck up for himself. His self-confidence soared. At a Boy scout camping trip (when we were about 12 sessions into our therapy) other Scout leaders were wondering what had happened to N and how come he had so much more energy and participated in activities compared to when they had a camp out 4 months ago. N’s father told me that N was always the kid in the back who when on hikes would ask “Can you go get the truck and pick me up? I’m not walking that far!”. This year he led the boys down to the lake and back up again. N’s fear of balls also disappeared (he had been afraid of catching, throwing etc.). He will now play catch without flinching, and will even ask his Dad to play with him. He will sit on a therapy ball while watching TV or even when playing video games. We have come up with different exercises for him to do on the ball, and he does them independently. Although N still isn’t graceful when getting up off of the floor, he does it much more smoothly and quickly.

On our last day, we readministered the LFA and AOT with N’s unadjusted score of 34.1 MS; 50.3% of his hits were early, and 49.7% of his hits were late. His Attend Over Time Test was 21 MS! He was much more coordinated in all of his movements, and strength and endurance were greatly improved. After just 15 sessions, of IM over 6 weeks, he went from 8.2 years to 9.0 years on the VMI and his writing on the WOLD Sentence Copy Test was 2 seconds quicker and much more legible. When studying both his writing and drawing, you could see that he put less pressure on the pencil and had better spacing. One remarkable drawing was a triangle inside another triangle. Prior to IM, you could tell that N saw this as 4 separate triangles and drew it that way. But, post IM, he drew a nice triangle on the outside, and then a beautiful one on the inside that touched 2/3 sides (he needed to touch 3/3 sides with in 1/16th of an inch to get credit). Lines were smoother, and there was less undershooting and overshooting of starting and stopping points.

At this point in time, N needed a break from the intensive IM therapy sessions, and due to insurance issues (he only gets 20 OT sessions/year) we are finishing out his sessions with more traditional OT sessions. Overall, N is much less impulsive, much more active (he had lost 17 lbs after starting IM), will “give and take” in a conversation instead of monopolizing it. He has more endurance and self-confidence and is much less negative about himself and his skills. Helping N to re calibrate his internal timing clock seemed to be a key factor in his acquisition of skills and his improved outlook on himself! I was very excited that N told me that they were in the middle of planning his 10th birthday party – a Pool Party!!! He also had some friends to invite this year for the first time.

IM CERTIFICATION REQUIREMENTS & DESIGNATIONS



Those qualified for certification as Interactive Metronome Providers include individuals who are licensed, degreed or certified in the healthcare, rehabilitation services, education, athletic training, performing arts instruction and other related disciplines.

IM CERTIFICATION DESIGNATIONS

IMC - Interactive Metronome Certified

IMC Providers are professionals who have successfully completed their IM certification to administer IM training in both individual and group modes (group mode requires the ownership of more than one IM Station).

Advanced Designations:

RIMC

Interactive Metronome assigns the Registered Interactive Metronome Certified (RIMC) provider designation when he/she has been a provider for a minimum of 6 months and submits 5 case studies (following protocol) with corresponding IM files.

Status is contingent upon verification of the aforementioned requirements and the acceptance of case studies submitted.

MIMC

Interactive Metronome assigns the Master Interactive Metronome Certified (MIMC) provider designation when he/she has been a provider for a minimum 1 year and submits 10 case studies (following protocol) with corresponding IM files.

Status is contingent upon verification of the aforementioned requirement and the acceptance of case studies submitted.

CONSENT FORM



AUTHORIZATION

I authorize Interactive Metronome to use my photograph and/or the following statement for any legal or marketing purpose including editorial, advertising, display, and exhibition without compensation or reservation.

Signature: _____

Print Name: _____

Address: _____

Date: _____