

CLINICAL RESULTS

ADHD STUDY

A double-blind, placebo-controlled study of 9 to 12-year-old boys diagnosed with ADHD found those who completed the IM program showed significant patterns of improvement in attention, coordination, control of aggression/impulsivity, reading and language processing. This study was published in the American Journal of Occupational Therapy, March 2001.

MOTOR CONTROL STUDY

A comparison of IM-trained special education students to a control group found the IM-trained group improved significantly in both motor control and motor coordination as measured by independent assessments (Bruininks-Oseretsky and SIPT Motor Accuracy Test) compared to the control group. Parents of the IM-trained group also reported marked improvement in their children's ability to attend to tasks, read, write and general behavior.

(Stemmer, P.M. (1996) *"Improving Student Motor Integration by Use of an Interactive Metronome"* presented at the 1996 Annual Meeting of the American Educational Association in Chicago, IL.)

TIMING IN CHILD DEVELOPMENT STUDY

A correlation study of 585 children in a public school district found significant correlations between IM score and academic performance in reading, mathematics, language, science, social studies, and study skills. This suggests that timing and rhythmicity play a foundational role in the cognitive processes underlying performance in these academic areas. The results were published by the High/Scope Foundation, a prestigious, non-profit educational research institution.

ABOUT INTERACTIVE METRONOME, INC.

Interactive Metronome was developed in the early 1990s and immediately proved of great benefit to children diagnosed with learning and developmental disorders. Backed by years of clinical research and supported by prominent medical leaders in the industry, IM soon gained national attention as a breakthrough intervention to help those patients increase attention & concentration, motor control & coordination, language processing and control of impulsivity.

In recent years, innovative therapists have discovered the positive effects that IM can have on patients with acquired neurological and motor deficits. Rehabilitation hospitals and clinics now use IM in much the same way as their learning and developmental colleagues, to care for patients diagnosed with Stroke, Brain Injury, Balance Disorders and Parkinson's.

Interactive Metronome's application is so broad because it measures and improves motor planning and sequencing, a critical part of the central nervous system. IM's Rehabilitation Technologies Division (RTD) was formed to enhance traditional approaches to rehabilitation.

Today, there are more than 2,500 certified IM providers in over 1,700 clinics, hospitals and universities throughout the United States and Canada. Each day our community of providers continues to grow. IM has received an abundance of media recognition including the CBS Early Show, CNN News, US News and World Report, as well as various segments that have aired on hundreds of TV affiliates, radio stations and national publications.



**A REVOLUTION IN LEARNING AND
DEVELOPMENTAL REHABILITATION**

WHAT IS IM?

The Interactive Metronome (IM) is a brain-based rehabilitation assessment and training program developed to directly improve the processing abilities that affect attention, motor planning, and sequencing. This, in turn, strengthens motor skills, including mobility and gross motor function, and many fundamental cognitive capacities such as planning, organizing, and language.

HOW DOES IM WORK?



The IM program provides a structured, goal-oriented training process that challenges the patient to precisely match a computer generated beat. Participants are instructed to synchronize various hand and foot exercises to a reference tone heard through headphones. The patient attempts to match the rhythmic beat with repetitive motor actions such as tapping his/her toes on a floor sensor mat or hand clapping while

wearing an IM glove with palm trigger.

A patented audio or audio and visual guidance system provides immediate feedback. The difference between the patient's performance and the computer generated beat is measured in milliseconds. The score provided indicates timing accuracy.



BENEFITS

Motor planning and sequencing problems have been linked to a variety of developmental, behavioral, and learning challenges. More than a decade of clinical research on IM demonstrates gains in motor planning and sequencing lead to improvements in:

- Attention and Concentration
- Language Processing
- Behavior (Aggression and Impulsivity)
- Motor Control and Coordination
- Academic Performance

WHO CAN BENEFIT?

Individuals with motor planning and sequencing problems, speech and language delays, motor and sensory disorders, learning deficits, and various cognitive and physical difficulties may benefit from the IM program. Adult and pediatric patients who have benefited from IM include those with:

- Sensory Integration Disorder
- Asperger Syndrome
- Autism Spectrum Disorder
- ADD/ADHD
- Cerebral Palsy

WHY USE IM?

"I have found Interactive Metronome to be a useful modality to improve bilateral integration skills and to increase single limb stance time. The children displayed increased tolerance to engage in tasks which were longer in duration and more complex."

Tracy Cueli-Dutil, DPT,
Miami Children's Hospital/Dan Marino Center, Miami, FL

"I was particularly interested in IM because, like some of the other intensive modalities with which I work, IM can help to drive changes in the brain. The result is that children can make excellent progress in short periods of time."

Aditi Silverstein, M.A., CCC-SLP, President of Center for Rehabilitation and Development, Inc., Roanoke, VA

"We are applying IM in conjunction with traditional multidisciplinary treatment to inpatient and outpatient adults and children. IM training has expedited our clients' transition from intensive inpatient therapy to a less intensive outpatient program. We have seen significant improvements in gait and coordination as well as attention and mental processing."

Cheryl Miller-Scott, OTR/L, National Director of Clinical Services, HealthSouth Hospitals