

INTRODUCTION

The first wave of the Silver Tsunami has arrived with over 78 million baby-boomers 65 and over [2], many seeking new and innovative health care. Local, state, and federal agencies are anticipating an exponential need for services for older adults who have balance and cognitive processing concerns. [3,4] The Interactive Metronome may be one source of ongoing maintenance and restorative care [1].

METHODS

All Training and assessment were done using modified IMLF and IM training sessions. Clients elected to remain in a chair facing the IM activities were all Upper Extremity based. Initially clients were given the option of standing or sitting; all of them moved to a sitting position and therefore all interventions were done in this manner. Repetitions began at 120 per activity and lasted 30 min moving to 45 min for each training session. The maximum number of repetitions was 275 without changing activities. N=9, Ages 60 – 80

Training:
Pre-Assessment- 12 sessions over 2 months
Re-Assessment Break for 6 Weeks-
Re-Assessment 6 sessions over 1 month-
Re-Assessment Overall Post Assessment

REFERENCES

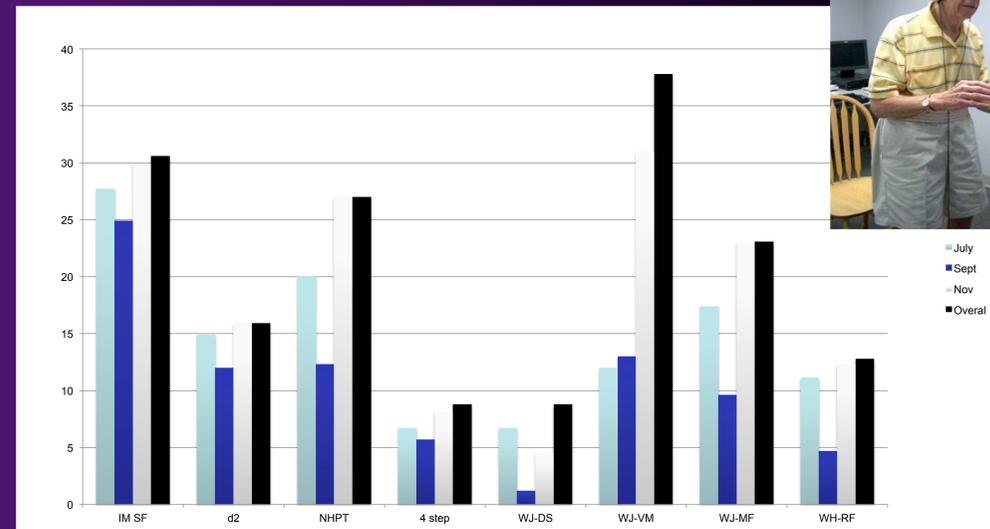
1. Interactive Metronome: Accelerate outcomes, exceed expectations. (2004) Retrieved from <http://www.interactivemetronome.com/IMPublic/Home.aspx>
- 2 Barry, P (2008). 'Silver Surge': Who will take care of aging boomers? AARP Bulletin May 2008.
- 3 Center for Disease Control and Prevention (2014). Costs of falls among older adults. Retrieved from: <http://www.cdc.gov/homeandrecreationalafety/falls/fallcost.html>

Standardized Assessment Tools

IM Long Form & Short Form evaluation
Woodcock Johnson II subtests on
Visual Matching and Decision Speed;
Reading and Math Fluency subtests.
The d2 Test of Attention and
two motor coordination tests the:
Four Step Square Test
The 9 Hole Peg Test



RESULTS



Maintained Change over time:



Interactive Metronome Protocols

Session	Task	Reps	Mins
Session 1	1: SF Both Hands 54 Reps No Guide	17	776
Session 2	1: SF Both Hands 54 Reps No Guide	9	1068
Session 3	1: SF Both Hands 54 Reps No Guide	7	758
Session 4	1: SF Both Hands 54 Reps No Guide	7	958
Session 5	1: SF Both Hands 54 Reps No Guide	9	1320
Session 6	1: SF Both Hands 54 Reps No Guide	8	1168
Session 7	1: SF Both Hands 54 Reps No Guide	8	1233
Session 8	1: SF Both Hands 54 Reps No Guide	9	1333
Session 9	1: SF Both Hands 54 Reps No Guide	9	1333

RESULTS: IM LF Assessment

IM July –Sept Change 78%
IM Nov. No Tx Change -8.3%
IM Nov – Dec Abr. Tx Change 7.2%
IM July – Dec Total Change 77%

Task	Reps	Mins
Task 1	54	54
Task 2	54	54
Task 3	54	54
Task 4	54	54
Task 5	54	54
Task 6	54	54
Task 7	54	54
Task 8	54	54
Task 9	54	54
Task 10	54	54
Task 11	54	54
Task 12	54	54
Task 13	54	54
Task 14	54	54
Task 15	54	54
Task 16	54	54
Task 17	54	54

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DISCUSSION

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The outcomes demonstrated 88% percent in overall gains for the participants; with an average of 8.3% loss of skill levels on the IM LF during the interim time between the first series of IM protocols and implementation of the second run of the abbreviated protocols. Upon completion of the second series, there was a quick return to the previous improved scores. Upon completion of the full second series of protocols there was an average of an 7.2% gain over the first series of scores using the IM. This is notably positive in regards to adult learning and retentions [5]. The range of percentage of change with the seven standardized tests given was 88% - 3.3% with the average falling a mere 6.07%. The highest percentage of change was on the 4 square balance test and the lowest was the 9 hole peg test. Clients gave anecdotal descriptions of small, but noticeable changes in daily life tasks.

CONCLUSIONS

The IM appears to be an effective intervention tool and strategy that should be considered by OT practitioners within their settings and viable modality to use within their practice.

Anecdotal Incidents

Individuals completing the full series of IM protocols provided anecdotal incidents of things that have improved in their daily life. Such incidents as: Enjoying riding the Segway with more zip and confidence; remembering appointments that had not been written down on the calendar; grocery shopping; being able to do price comparisons between items. Feeling they could select from the whole restaurant menu, because they could remember the different items presented.

