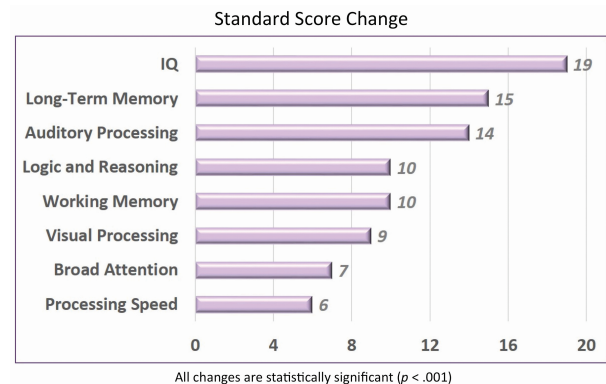
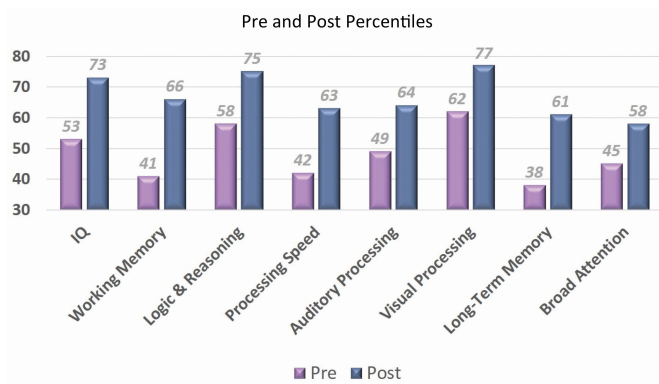


Age-Related Cognitive Decline

Number of Clients: 262

Mean Age: 60.1

Results: The following charts show the improvements in cognitive skills for clients who came to LearningRx with subjective cognitive complaints between 2010 and 2015. The changes in standard scores on the Woodcock-Johnson III – Tests of Cognitive Abilities were statistically significant for all skills ($p < .001$) assessed. Overall, the largest gains were seen in IQ, working memory, and long-term memory, followed by reasoning and processing speed. The average pre-test IQ score was 95 and the average post-test IQ score was 114.



Improvements based on 262 clients with subjective cognitive decline:

- IQ scores improved by an average of 19 standard points
- Long-term memory improved 23 percentile points
- Lowest pre-test skills included working memory, processing speed, and long-term memory
- Post- training percentiles were within the normal range of functioning

For a comprehensive report on LearningRx research and client outcomes please visit: www.learningrx.com/results

Age-Related Cognitive Decline

Cognitive and Real-Life Outcomes for 292 Older Adults with Subjective Attention and Memory Complaints

Moore, A.L., Carpenter, D., Miller, T., & Ledbetter, C. (2018). *ThinkRx Cognitive Training for Adults over Age 50: Clinician-Caregiver Partners in Delivery as Effective as Clinician-Only Delivery*. Manuscript in peer review

The study evaluated differences in cognitive outcomes and self-reported real-life improvements between two methods of delivering the ThinkRx cognitive training intervention: professional delivery solely by a clinician versus a partnership model where a caregiver or spouse delivers half of the intervention at home. The sample included records from 292 participants ranging in age from 51 to 95 (mean = 60.77, SD = 9.04). Both delivery methods resulted in significant pretest to post-test gains across all six cognitive skills measured including working memory, long-term memory, processing speed, visual processing, auditory processing, and fluid reasoning.

Real-Life Improvements:

- Mood
- Life skills
- Attention
- Memory
- Focus
- Cognitive efficiency

Outcomes for Mild Cognitive Impairment: Clinical Trial NCT#02943187

James, R., Moore, A.L., Carpenter, D., Miller, T., & Ledbetter, C. (2018). *Multidisciplinary intervention for treating mild cognitive impairment (MCI)*. Manuscript in peer review.

The study evaluated cognitive, MRI, and functional outcomes for five cases of varying severity of MCI using a multidisciplinary intervention with 72 hours of LearningRx cognitive training, low grain/low-sugar diet, exercise, sleep optimization, and nutritional supplements. Results showed no cognitive decline over the one-year period as measured by the MoCA and DRS-2. fMRI results revealed improved connectivity in all cases. Four of five cases noted clinical improvement and the fifth noted no functional decline. In the charts below, Time 1 is before any intervention, Time 2 is after 3 months of diet/exercise/supplement/sleep changes but before cognitive training, and Time 3 is after cognitive training.

