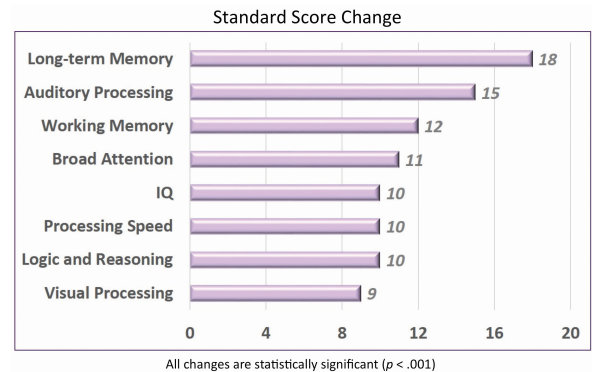
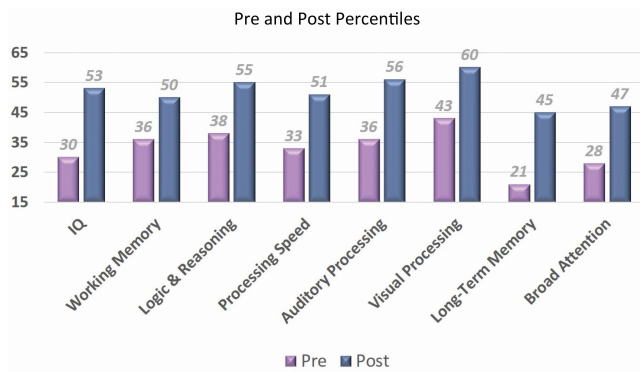


Traumatic Brain Injury

Number of Clients: 273

Mean Age: 25.6

Results: The following charts show the improvements in cognitive skills for clients who came to LearningRx with a diagnosis of TBI 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, auditory processing, and long-term memory, followed by broad attention and processing speed. The average pre-test IQ score was 92 and the average post-test IQ score was 102.



Improvements based on 273 independently diagnosed TBI clients:

- IQ scores improved by an average of 10 standard points
- Long-term memory improved 24 percentile points
- Lowest pre-test skills included broad attention, processing speed, and long-term memory
- Post- training percentiles were within the normal range of functioning

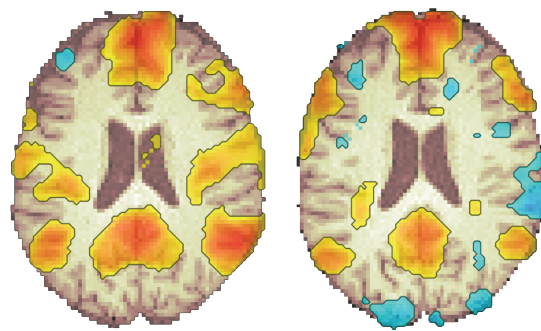
For a comprehensive report on LearningRx research and client outcomes please visit: www.learningrx.com/results

Traumatic Brain Injury

Cognitive and MRI Outcomes in a Severe Traumatic Brain Injury Case Study

Moore, A.L., & Ledbetter, C. (2018). *MRI, qEEG, & neuropsychological outcomes following cognitive rehabilitation training for severe traumatic brain injury: A clinical case study. Presentation at Brain Injury Summit, Jan 2018, Vail, CO.*

58 year old male with severe brain injury started LearningRx training 8 years after his accident. The scans show his DMN before and after 60 hours of LearningRx one on one brain training. Results from the Woodcock Johnson IV -Tests of Cognitive Abilities showed increases in IQ score of 22 points, from 111 to 132. He also noted the following improvements: problem-solving & focus, staying on task is easier, motivation for life is back, no longer on Aricept for memory, returned to high-level career field.



Before
LearningRx

After
LearningRx

MRI images of the Default Mode Network (DMN)

Cognitive and Real-Life Improvements for Soldiers with TBI following LearningRx Brain Training

Ledbetter, C., Moore, A.L., Mitchell, T. (2017). *Cognitive effects of ThinkRx cognitive rehabilitation training for eleven soldiers with brain injury: A retrospective chart review. Frontiers in Psychology, 8(825). doi: 10.3389/fpsyg.2017.00825*

The study examined the cognitive outcomes following ThinkRx, a clinician-delivered cognitive rehabilitation training program for soldiers recovering from traumatic brain injury (TBI) and acquired brain injury (ABI). We examined outcomes of 11 cases who had completed an average of 80 hours of ThinkRx cognitive rehabilitation training delivered by clinicians and supplemented with digital training exercises. Outcome measures included scores from six cognitive skill batteries on the Woodcock Johnson – III Tests of Cognitive Abilities. Participants achieved gains in all cognitive skills tested and achieved statistically significant changes in long-term memory, processing speed, auditory processing, and fluid reasoning with very large effect sizes. Clinically significant changes in multiple cognitive skills were also noted across cases.

Real-Life Improvements

- Confidence & perseverance
- Tolerance and patience
- Concentration, attention & focus
- Memory
- Social skills
- Interest in learning
- Organizational skills
- Math and language skills