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Why People with Reading and Attention Difficulties Benefit from PATH to Reading

Normally auditory and visual processing skills work in synchrony and without much effort when reading. When you have difficulty learning to read or paying attention, research shows that you have slow visual timing, causing focusing attention, reading, remembering and multitasking to be impaired. PATH to Reading (PATH) works by speeding up your brain, improving the functioning of the motion, attention, and executive control networks in the brain.

What is the underlying problem?

Research has found that the visual timing of cells in the motion pathways are too slow. What this means is that the motion ('where') and pattern ('what') pathways of the brain are not working together in those with reading and attention problems. When reading, the motion cells signal the location, and overall shape and form of a word to gate the information going to the pattern cells. This is used as the starting point for deciphering individual letters.

How does PATH neurotraining improve vision and cognitive skills?

PATH training improves the timing and sensitivity of motion discrimination in the brain, so that the motion and pattern pathways work together effectively while reading. Data proves that reading speed, phonological processing, attention, and working memory improve significantly when *PATH* motion training precede guided reading, math, or science.

Standardized tests found that PATH training significantly improved each dyslexic's reading and cognitive skills, aged 5 to 28 years old. All studies found significant improvements.

- Reading Speed: up to 1050 words/minute, reading over 11 times faster.
- Reading Comprehension: From 1.5 up to 7 grade levels in only 3 months.
- Focused Attention: up to 82%.
- Short-Term Memory, both visual and auditory: up to 95%.
- Not only visually-based improvements, but also phonologically-based: up to 73%.

What is PATH?

PATH is a mobile app that works on all platforms and only takes 10-15 minutes three times a week for 12-16 weeks. After every session of PATH, you will follow it with a simple task like reading. To see a demo and view how to do the PATH training program and how it works, Go To: https://pathtoreading.com/demos-research/.

Research has proven that PATH neurotraining:

- 1) changes the visual timing in the brain;
- 2) improves cognitive skills at any age; and
- 3) improves selective and sustained attention, cognitive flexibility, phonological processing, reading speed and comprehension, multitasking, and short-term and long-term memory.

Who Has PATH Helped – from voices of School Principals, Teachers, and Parents

- **1.** "We found almost immediate and substantial success with *PATH to Reading training*. After 6-8 weeks, the results were astonishing. These students' academic performance, subsequent confidence, and excitement for learning skyrocketed. We found *PATH to Reading* an invaluable tool."
- Dr. Cy Cole, Great Valley Academy, Modesto, CA.
- 2. "After training on PATH all my students improved their attention span, paying more attention to class instructions, completing classroom assignments, being less prone to distractions, writing with less mistakes and more efficiency, more comfortable writing their own ideas on paper, improving both their level of concentration, understanding of concepts, and reading comprehension."
- Ximena Vidales-Zamosc, 2nd Grade Teacher, Walker Elementary School, San Diego, CA.
- **3.** "After only 1-2 months of PATH training, a remarkable difference was noticed in Kyle's ability to read. Kyle has not only improved his spelling and writing skills, but we also have seen a dramatic improvement in his willingness to pick up a book, understand and remember what he had just read." *Kerrie Vargas, Ventura, CA*.
- **4.** "I saw a 3rd grader who was reading at a 4th grade level whose eyes would tire too easily. After 3 months of PATH training his eyes no longer tire and he is reading at an 11th grade level. I am convinced it is one of the greatest tools to help improve multiple methods of learning, and have long-term effects." Dr. Eldon Rosenow, Great Valley Academy, Modesto, CA.
- 5. "This is the only treatment that directly addresses disordered magnocellular/parvocellular interactions. I firmly believe that this product has the potential to help a large number of reading disabled individuals, as well as normal readers, to read effortlessly." Professor John Shelley-Tremblay, University South Alabama, Mobile, AL.

Where can I find more information? Online at: https://pathtoreading.com

Publications:

- Lawton T. (2016) Improving dorsal stream function in dyslexics by training figure/ground motion discrimination improves attention, reading fluency, and working memory. *Front Hum Neurosci 397*. doi:10.3389/fnhum.2016.00397.
- Lawton, T., Shelley-Tremblay, J. (2017) Training on movement figure-ground discrimination remediates low-level visual timing deficits in the dorsal stream, improving high-level cognitive functioning, including attention, reading fluency, and memory, *Frontiers in Human Neurosci*ence https://www.frontiersin.org/articles/10.3389/fnhum.2017.00236/full.
- Lawton, T., Shelley-Tremblay, J., Stein, J. (2022) Visual Neural Timing Problems May Interfere with Reading, Attention, and Memory: Looking Beyond 20/20 Acuity. Optom Vis Perform, 10(1): 9-23.