

John C. Ory's Statistical Study

Prepared by Dyslexia Institutes of America

This is to verify that I analyzed the student data provided by Dyslexia Institutes of America. I performed the work for hire as an external, independent consultant. I was not involved in data collection but can attest to the accuracy of the data analysis.

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I. Introduction

In 1997, Dr. Elaine Jett began to develop Dyslexia Institutes of America (DIA) in order to help children and adults who, because of dyslexia, were unable to read and spell correctly. These clients were of average to high intelligence and in good health and not responding to either conventional instruction or specific remedial instruction in reading, comprehension, vocabulary development, and spelling. Through research and working directly with clients, Dr. Jett developed a model therapeutic clinic for the treatment of dyslexia. By the summer of 2000, the test battery and therapy methods were in place. Already, comments by parents and clients alike had indicated that the methods used were having the desired results. However, it was now possible to gather statistical data regarding the progress of clients in the prototype clinics. The results of DIA's first statistical analysis are offered here.

II. Testing

The test battery used by Dyslexia Institutes of America is designed to detect dyslexia as well as to test current functioning levels in basic reading and cognitive functioning skills. Depending on his or her age, each client is assessed using the Dyslexia Determination Test, the Adult Dyslexia Test, the Dyslexia Screener for First Graders, the Pre-dyslexia Letter Coding Test, the Dyslexia Early Screening Test, and/or the Analysis of Dyseidnesia and Dysphonesia. In addition, some or all subtests from the following nationally normed standardized tests are used:

- Comprehensive Test of Phonological Processing - Phonological Awareness and Phonological Memory composites
- Woodcock Reading Mastery Tests - Revised - Word Attack subtest (Note: the Readiness Cluster is given to younger clients. These scores are not included in the data below.)
- Kaufman Test of Educational Achievement - Decoding and Spelling subtests
- Learning Efficiency Test II - Visual Memory and Auditory Memory
- Beery-Bucktenica Developmental Test of Visual-Motor Integration - VMI and Visual Perception subtests (Note: the Slosson Visual-Motor Performance Test is used for adult clients. These scores are not included in the data below.)

After each six months (48 hours) of in-clinic therapy, basic skills and cognitive functioning are re-tested. The client's therapy program is adjusted, if indicated, based on the results of these re-evaluations.

III. DIA Therapy

The Dyslexia Institutes of America's approach to dyslexia therapy has two parts: phonological and cognitive. Phonological therapy includes a structured, step-by-step program to enhance phonological awareness, and includes a phonic program that is multi-sensory, structured, and sequential for teaching reading and spelling. The second part of DIA's therapy addresses the cognitive processing needs of the clients, and includes phonological memory, auditory and visual memory, visual-motor integration, and visual perception.

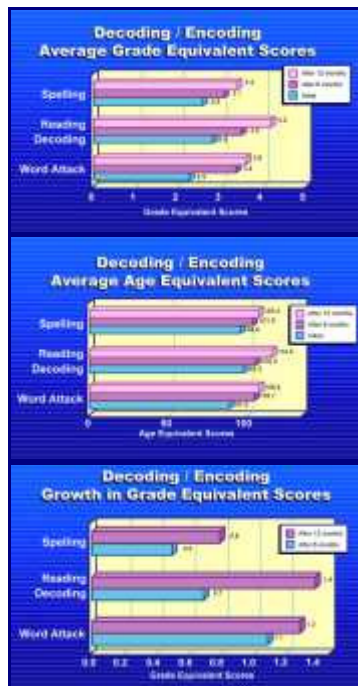
It is important to note that in-clinic therapy is only part of DIA's program. Each client is also expected to practice home therapy, provided by DIA, with a parent or other helper on a daily basis. Progress is greatly affected by how faithfully the home therapy is carried out.

IV. Results

Seventy clients completed six months of treatment (48 hours of in-clinic therapy). Their average scores after re-testing were compared to their average initial scores in the following areas: decoding and encoding, phonological processing, visual and auditory memory, and visual-motor integration. Thirty-three of the seventy were again re-tested after twelve months (96 hours of in-clinic therapy). Their average scores are also compared to the initial average scores.

A. Decoding and Encoding

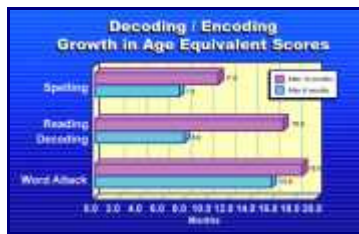
Dyslexia, simply put, is a difference in brain function that results in a reduced ability to read and spell single words efficiently. Spelling skills and single word reading skills were measured using the Reading-Decoding and Spelling subtests of the Kaufmann Test of Educational Achievement. Word attack skills, referring to the process of sounding out unknown words using phonetics, were measured using the Word Attack subtest of the Woodcock Reading Mastery Tests - Revised. Growth was observed in all three areas.



Average Grade Equivalent Scores

Average Grade Equivalent Scores

Average Grade Equivalent Scores



Average Grade Equivalent Scores

B. Phonological Processing

Phonological awareness and phonological memory were measured using the Comprehensive Test of Phonological Processing (CTOPP). Phonological awareness refers to the ability to perceive and use the sounds of the language. The phonological awareness composite of the CTOPP indicated growth in the composite percentile score as well as both the Elision and Blending Words subtests.

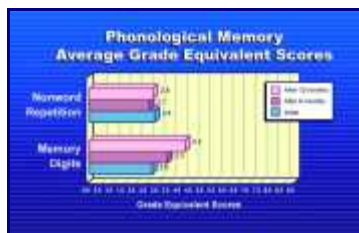


Average Grade Equivalent Scores



Average Grade Equivalent Scores

Phonological memory refers to the ability to store auditory information in working memory for a very short period of time and to refresh that information for longer storage. The Phonological Memory composite of the CTOPP showed no significant change in composite percentile scores. The Memory for Digits subtest showed some growth, but there was no significant change in the Nonword Repetition Subtest.



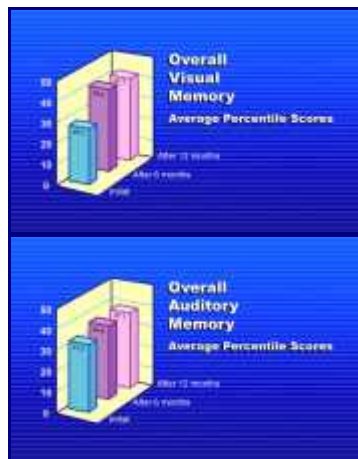
Average Grade Equivalent Scores



Average Grade Equivalent Scores

C. Visual and Auditory Memory

Overall visual memory as measured by the Learning Efficiency Test II (LET-II) showed some improvement from the 26th percentile to the 39th percentile in the first 6 months of treatment. After twelve months, the average percentile score for overall visual memory was 41.7. Overall auditory memory as measured by the same test did not show significant change.

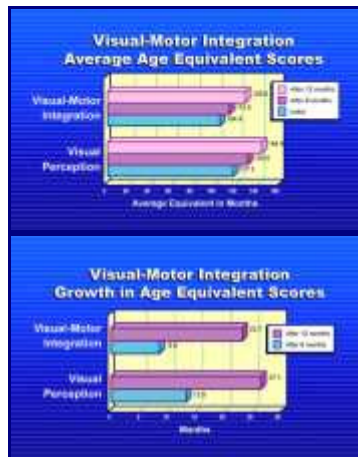


Average Grade Equivalent Scores

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D. Visual-Motor Integration

Visual-motor integration and visual perception were measured using the Beery-Buktenica Developmental Test of Visual-Motor Integration. The Visual-Motor Integration test measures the ability to reproduce visual information. The Visual Perception subtest measures how accurately the brain perceives what the eyes see. Significant growth occurred on both the Visual-Motor Integration test and the Visual Perception subtest.



Average Grade Equivalent Scores

Average Grade Equivalent Scores

V. Summary

Average scores showed growth in all areas tested except for the related areas of auditory memory and phonological memory. In these two areas, some clients did demonstrate growth while others did not. Along with improvement in test scores, clients and their families have reported increased self-confidence and satisfaction with school performance.