

The purpose of this document is to provide the reader with an opportunity to consider factual content omitted and/or misrepresented in the 41 page Joint Technical Report on Learning Disabilities, Dyslexia, and Vision published in March of 2011. The technical report discussed herein supports the joint policy statement from the American Academy of Pediatrics, American Academy of Pediatric Ophthalmology and Strabismus, and American Association of Certified Orthoptists is titled "Learning Disabilities, Dyslexia and Vision" and was published in August of 2009. This document is for informational purposes only and is not intended to bias or impose the opinion of the author onto the reader.

Omission 1: The Role of the Optometrist

The technical report outlines the role of the pediatrician and primary care physician in regards to learning disability and dyslexia.

"Children who do not pass vision screening should be referred to an ophthalmologist who has experience with the care of children."... "Children with suspected learning disabilities in whom a vision problem is suspected by the child, parents, physicians, or educator should be seen by an ophthalmologist who has experience with the assessment and treatment of children, because some of these children may also have a treatable visual problem that accompanies or contributes to their primary reading or learning dysfunction. Treatable ocular conditions can include strabismus, amblyopia, convergence and/or focusing deficiencies, and refractive errors."

There is also an outline of the role of the ophthalmologist in regards to learning disability and dyslexia.

"Because routine pediatric vision screening is not designed to detect problems with near vision, children with suspected or diagnosed learning disabilities should undergo a comprehensive pediatric medical eye examination by an ophthalmologist who has experience with the assessment and treatment of children, because some children may also have a treatable visual problem along with their primary reading or learning dysfunction."

There is no mention of the role of the optometrist in this report. As defined by the American Optometric Association:

"Doctors of Optometry (O.D.s/optometrists) are the independent primary health care professionals for the eye. Optometrists examine, diagnose, treat, and manage diseases, injuries, and disorders of the visual system, the eye, and associated structures as well as identify related systemic conditions affecting the eye. Doctors of Optometry prescribe medications, low vision rehabilitation, vision therapy, spectacle lenses, contact lenses, and perform certain surgical procedures. Optometrists counsel their patients regarding surgical and non-surgical options that meet their visual needs related to their occupations, avocations, and lifestyle. An optometrist has completed pre-professional undergraduate education in a college or university and four years of professional education at a college of optometry, leading to the doctor of optometry (O.D.) degree. Some optometrists complete an optional residency in a specific area of practice. Optometrists are eye health care professionals state-licensed to diagnose and treat diseases and disorders of the eye and visual system."

The technical report includes specific tests and procedures to be performed by the ophthalmologist which all fall within the license of the optometrist. Therefore, optometrists are equally qualified to provide the care necessary to address the needs of this specific patient population.

Misrepresentation 1: Distortion of Directives

Per the College of Optometry in Vision Development,

“The purpose of vision therapy is to help patients develop or improve fundamental visual skills and abilities, improve visual comfort, ease, and efficiency, and/or change how a patient processes or interprets visual information. Optometrists who perform vision therapy are not trained to treat a patient’s dyslexia or learning disability. They are trained to diagnose and treat disorders of binocular vision based on the concepts of neuroplasticity.”

The authors of the technical report cite a 1997 approved joint statement of the College of Optometrists in Vision Development, the American Optometric Association, and the American Academy of Optometry,

*“Optometric intervention for people with learning related vision problems consists of lenses, prisms, and vision therapy. **Vision therapy does not directly treat learning disabilities or dyslexia.** Vision therapy is a treatment to improve visual efficiency and visual processing, thereby allowing the person to be more responsive to educational instruction.”*

Note: The statement in bold above was referenced from articles published in 1985 and 1988.

This technical reports references the inability of vision therapy to affect or treat dyslexia or learning disabilities a total of 61 times. With the optometric organizations above conceding the point, all of these citations are thus irrelevant with no basis to support the argument.

Misrepresentation 2: Direct Recommendations

The fine print alongside the opening statement of the technical report includes:

“The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.”

Seven separate times throughout the report, the authors recommend the medical community advise against a specialized mode of treatment known as vision therapy. Not only to parents and patients directly under their care but also to the public at large including school districts. It should be noted that the organizations supporting this report independently assume the authority for its members to make medical recommendations for those individuals not under their care. Individual circumstances cannot be taken into account when the individual is not an established patient of the medical professional making such a recommendation.

Misrepresentation 3: Scientific Evidence

The technical report references the lack of scientific evidence of the effectiveness of vision therapy a total of 27 times. For each of the peer reviewed, published studies that show the effectiveness of vision therapy within the report, there are editorials and commentary references rather than peer-reviewed studies in opposition to them. However, there are no studies that show vision therapy to be ineffective at improving fundamental visual skills and abilities. The authors cite the importance of diagnosing binocular vision disorders and treating them.

“...some of these children may also have a treatable visual problem that accompanies or contributes to their primary reading or learning dysfunction. Treatable ocular conditions can include strabismus, amblyopia, convergence and/or focusing deficiencies, and refractive errors. Missing these problems could cause long-term consequences from assigning these patients to incorrect treatment categories.”

“Difficulties in accommodation do not interfere with decoding but can interfere with the child’s ability to concentrate on print for a prolonged period of time.”

“Convergence insufficiency can interfere with a child’s ability to concentrate on print for a prolonged period of time but does not interfere with decoding.”

“Thus, treatment of these disorders can make reading more comfortable and may allow reading for longer periods of time but does not directly improve decoding or comprehension. If reading impairment is attributable solely to a visual problem, improvement in school performance should be observed once the problem is corrected.”

In reference to a specific binocular disorder (convergence insufficiency), “intensive in-office vision therapy is effective” as treatment.

Omission 2: Review of the Convergence Insufficiency Treatment Group studies

In 2005 and 2008, the CITG published studies funded by the National Eye Institute showing convergence insufficiency can be treated with office based vision therapy by a trained therapist along with at-home reinforcement. Both of these studies were published in the Archives of Ophthalmology now titled JAMA Ophthalmology. This publication’s acceptance rate is approximately 19% of the nearly 1,100 manuscripts submitted annually. The mission of JAMA Ophthalmology is to be the indispensable source of ophthalmic knowledge for the generalist, subspecialist, and trainee; to publish innovative, clinically relevant research for the vision scientist; to be the first choice for authors to submit their important manuscripts to; and to achieve this through authoritative peer review.

The authors cite a response to the 2005 study. This response includes the personal opinions and anecdotal experiences of an ophthalmologist Burton J. Kushner, MD. Kushner’s response includes a case review of his patients with convergence insufficiency and an outline of treatments done at home. The following statement of his was omitted from the technical report.

“One of the most interesting aspects of this study is the lack of improvement in the placebo treatment group. This should dispel the beliefs of those naysayers who believe that CI is not a real entity and that all perceived benefit of treatment is a result of a placebo effect. This study should convince them that both of those beliefs are incorrect.”

He also states his more substantial method of home treatment is equally as effective as the proven office based treatment of convergence insufficiency. The authors did not cite the reply of the CITG to Kushner which revealed his outline of treatment is not what is widely prescribed by pediatric ophthalmologists.

“To address Kushner’s criticism we recently surveyed a large group of pediatric ophthalmologists at a recent meeting of the PEDIG (Pediatric Eye Doctors Investigator Group) group. The response rate for this survey was high with a 72% response rate (72/100). The results of this survey indicated that 53% of the responding pediatric ophthalmologists usually or always recommended unsupplemented, home-based pencil push-ups as the sole treatment of convergence insufficiency in children. They prescribe this treatment 5 to 7 days per week for between 5 and 15 minutes per day. This is essentially the same

dosage we used in our study. Only 38% indicated that they supplement pencil push-ups with other treatment techniques. These results closely correspond with our previously published data and confirm our belief that unsupplemented, home-based pencil push-ups is the most commonly prescribed treatment for convergence insufficiency by both ophthalmologists and optometrists.”

The authors of the technical report also cite a response to the 2008 CITG study. This response includes the personal opinions and anecdotal experiences of an ophthalmologist David K. Wallace, MD, MPH. Dr. Wallace stated,

“As a prospective, randomized clinical trial, this study had many strengths. By using randomization, the investigators controlled for known and unknown confounding variables and avoided biases like treatment assignment. The researchers included both ophthalmologists and optometrists when planning the study, and they performed a pilot study to test study procedures and obtain standard deviation estimates necessary for calculating a sample size for the larger clinical trial. There was outstanding follow-up, with 99% of patients completing the 12-week outcome examination.”

Both Kushner and Wallace make mention of the discrepancies between optometry and ophthalmology concerning vision therapy.

“The authors compared what they call “vision therapy” with a home-based orthoptic treatment program. The use of the moniker “vision therapy” reflects a difference in the cultures of optometry and ophthalmology. The 2 groups do not always speak the same language. The exercises listed in Table 21 are all forms of what ophthalmologists who specialize in strabismus would simply call “orthoptic treatment.” In my mind, the vision therapy program used by the authors differs from what I consider to be orthoptic treatment mainly with respect to the duration and variety of treatment (in other words, the “dose”) as well as the use of a weekly office-based treatment session with vision therapy. How much treatment, both with respect to variety and duration, is necessary before “orthoptic treatment” is called “vision therapy” seems arbitrary to my mind.” -Kushner

“Vision therapy has negative connotations for many ophthalmologists; this term includes many forms of office-based treatment for many different conditions. However, the type of vision therapy for convergence insufficiency evaluated in the current study could be considered equivalent to intensive orthoptics.” -Wallace

Misrepresentation 4: Contradictory statements

The authors of the technical report do not address the numerous conflicting statements within its pages. The very last statement made by the authors in the final summary, *“Because vision therapy is not evidence based, it cannot be advocated.”*, is false and unethical. It is contradictory to the review of published studies on vision therapy within the technical report itself. Below are additional examples of contradictory statements within the report:

“Reading comprises decoding, fluency, and comprehension and requires adequate memory and sustained attention.”

“Difficulties in accommodation (a visual function) ... can interfere with the child’s ability to concentrate on print for a prolonged period of time.”

“Convergence insufficiency (a visual dysfunction) can interfere with a child’s ability to concentrate on print for a prolonged period of time.”

“There is no proof of cause and effect between decreased binocular function and symptoms or between symptoms and poor reading.”

“Although it is important to have adequate eyesight and ocular motility to read with the greatest efficiency, subtle or severe eye defects do not cause decoding or comprehension difficulties.”

“Vision problems can interfere with the process of reading. Thus, treatment of these disorders can make reading more comfortable and may allow reading for longer periods of time. If reading impairment is attributable solely to a visual problem, improvement in school performance should be observed once the problem is corrected.”

“...some of these children (with suspected learning disabilities) may also have a treatable visual problem that accompanies or contributes to their primary reading or learning dysfunction.”

“Vision impairment, in itself, has not been shown to be a predictor of reading disability.”

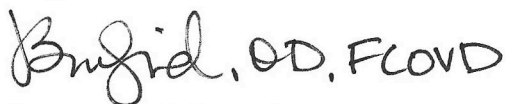
“Intensive in-office vision therapy is effective.”

“Aggressive marketing, dramatic presentations, loosely reviewed journal articles, and fervent anecdotal reports of cure may convince school personnel and parents that visual training is the answer. ... the pediatrician may be bypassed and considerable family and community resources may be diverted toward unsubstantiated interventions.”

“In addition, the primary care pediatrician and ophthalmologist should discuss the lack of proven efficacy of vision therapy and other alternative treatments with the parents. Finally, the public must learn to carefully evaluate the information that they receive in the face of aggressive promotion.”

Thank you for your time and interest. Full text reports, studies, editorials and responses references herein can be found at www.thevdcinc.com

Sincerely,



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Editor’s Note: The curriculum of all 22 schools of optometry in the United States and Puerto Rico include courses on vision therapy.

Editor’s Note: Currently the Convergence Insufficiency Treatment Trial - Attention and Reading Trial is underway. It is funded by the National Eye Institute to study the effectiveness of vision therapy for improving reading and attention after the treatment of convergence insufficiency in children 9 to 14 years of age.