1040-5488/99/7611-0739/0 VOL. 76, NO. 11, PP. 739–740
OPTOMETRY AND VISION SCIENCE

JOINT STATEMENT

Vision Therapy: Information for Health Care and Other Allied Professionals

American Academy of Optometry
American Optometric Association

Society places a premium on efficient vision. Schools and most occupations require increasing amounts of printed and computer information to be handled accurately and in shorter periods of time. Vision is also a major factor in sports, crafts, and other pastimes. The efficiency of our visual system influences how we collect and process information. Repetitive demands on the visual system tend to create problems in susceptible people. Inefficient vision may cause people to slow down, be less accurate, experience excessive fatigue, or make errors. When these types of signs and symptoms appear, the person's conscious attention to the visual process is required. This, in turn, may interfere with speed, accuracy, and comprehension of visual tasks. Many of these visual dysfunctions are effectively treated with vision therapy.

PERTINENT ISSUES

Vision is a product of our inherited potentials, our past experiences, and current information. Efficient visual functioning enables us to understand the world around us better and to guide our actions accurately and quickly. Age is not a deterrent to the achievement of successful vision therapy outcomes.

Vision is the dominant sense and is composed of three areas of function:

- Visual pathway integrity, including eye health, visual acuity, and refractive status.
- Visual skills, including accommodation (eye focusing), binocular vision (eye teaming), and eye movements (eye tracking).
- Visual information processing, including identification, discrimination, spatial awareness, and integration with other senses.

Learning to read and reading for information require efficient visual abilities. The eyes must team precisely, focus clearly, and track quickly and accurately across the page. These processes must be coordinated with the perceptual and memory aspects of vision, which in turn must combine with linguistic processing for comprehension. To provide reliable information, this must occur with precise timing. Inefficient or poorly developed vision requires people to divide their attention between the task and the involved visual abilities. Some people have symptoms such as headaches, fatigue, eyestrain, errors, loss of place, and difficulty sustaining attention. Others may have an absence of symptoms because they avoid visually demanding tasks.

VISION THERAPY

The human visual system is complex. The problems that can develop in our visual system require a variety of treatment options. Many visual conditions can be treated effectively with spectacles or contact lenses alone; however, some are most effectively treated with vision therapy.

Vision therapy is a sequence of activities individually prescribed and monitored by the doctor to develop efficient visual skills and processing. It is prescribed after a comprehensive eye examination has been performed and has indicated that vision therapy is an appropriate treatment option. The vision therapy program is based on the results of standardized tests, the needs of the patient, and the patient's signs and symptoms. The use of lenses, prisms, filters, occluders, specialized instruments, and computer programs is an integral part of vision therapy. Vision therapy is administered in the office under the guidance of the doctor. It requires a number of office visits and depending on the severity of the diagnosed conditions, the length of the program typically ranges from several weeks to several months. Activities paralleling in-office techniques are typically taught to the patient to be practiced at home to reinforce the developing visual skills.

Research has demonstrated that vision therapy can be an effective treatment option for:

- Ocular motility dysfunctions (eye movement disorders)
- Nonstrabismic binocular disorders (inefficient eye teaming)
- Strabismus (misalignment of the eyes)
- Amblyopia (poorly developed vision)
- Accommodative disorders (focusing problems)
- Visual information processing disorders, including visual-motor integration and integration with other sensory modalities

SUMMARY

Vision therapy is prescribed to treat diagnosed conditions of the visual system. Effective therapy requires visual skills to be developed until they are integrated with other systems and become automatic, enabling people to achieve their full potential. The goals of a prescribed vision therapy treatment regimen are to achieve desired visual outcomes, alleviate the signs and symptoms, meet the patient's needs, and improve the patient's quality of life.

ACKNOWLEDGMENT

This Policy Statement was formulated by a working group representing the American Academy of Optometry, American Optometric Association, the College of Optometrists in Vision Development, and the Optometric Extension Program Foundation. The following people are acknowledged for their contributions:

Gary J. Williams, O.D., Chair
Susan A. Cotter, O.D.
Kelly A. Frantz, O.D.
Louis G. Hoffman, O.D., M.S.
Stephen C. Miller, O.D.
Glen T. Steele, O.D.
Jeffrey L. Weaver, O.D., M.S.

Approved by:

American Academy of Optometry, May 14, 1999
American Optometric Association, June 22, 1999
College of Optometrists in Vision Development, June 25, 1999
Optometric Extension Program Foundation, June 25, 1999

BIBLIOGRAPHY

American Optometric Association. Position statement on vision therapy. J Am Optom Assoc 1985;56:782–3.

Caloroso EE, Rouse MW, Cotter SA. Clinical management of strabismus. Boston: Butterworth-Heinemann; 1993.

Ciuffreda KJ Levi DM, Selenow A. Amblyopia: basic and clinical aspects. Boston: Butterworth-Heinemann; 1991.

Coffey B, Wick B, Cotter S, Scharre J Horner D. Treatment options in intermittent exotropia: a critical appraisal. Optom Vis Sci 1992;69: 386–404.

Cooper J, Medow N. Intermittent exotropia: basic and divergence excess type. Binocul Vis Eye Muscle Surg Q 1993;8:185–216.

Cooper J, Selenow A, Ciuffreda KJ, Feldman J Faverty J Hokoda SC, et al. Reduction of asthenopia in patients with convergence insufficiency after fusional vergence training. Am J Optom Physiol Opt 1983;60: 982–9.

Daum KM. The course and effect of visual training on the vergence system. Am J Optom Physiol Opt 1982;59:223–7.

Flax N, Duckman RH. Orhoptic treatment of strabismus. J Am Optom Assoc 1978;49:1353–61.

Garzia RP. Efficacy of vision therapy in amblyopia: a literature review. Am J Optom Physiol Opt 1987;64:393–404.

Griffin JR. Efficacy of vision therapy for nonstrabismic vergence anomalies. Am J Optom Physiol Opt 1987;64:411–4.

Grisham JD, Bowman MC, Owyang LA, Chan CL. Vergence orthoptics: validity and persistence of the training effect. Optom Vis Sci 1991;68: 441–51.

Liu JS, Lee M, Jang J, Ciuffreda KJ, Wong JH, Grisham D, et al. Objective assessment of accommodation orthoptics. I. Dynamic insufficiency. Am J Optom Physiol Opt 1979;56:285–94.

The 1986/87 Future of Visual Development/Performance Task Force. The efficacy of optometric vision therapy. J Am Optom Assoc 1988; 59:95–105.

Optometric clinical practice guideline: care of the patient with accommodative and vergence dysfunction. St Louis: American Optometric Association; 1998.

Press LJ. Applied Concepts in Vision Therapy. St Louis: Mosby; 1997.

Rouse MW. Management of binocular anomalies: efficacy of vision therapy in the treatment of accommodative deficiencies. Am J Optom Physiol Opt 1987;64:415–20.

Scheiman M, Wick B. Clinical Management of Binocular Vision: Heterophoric, Accommodative, and Eye Movement Disorders. Philadelphia: Lippincott; 1994.

Suchoff IB, Petito GT. The efficacy of visual therapy: accommodative disorders and non-strabismic anomalies of binocular vision. J Am Optom Assoc 1986;57:119–25.

Wick B. Accommodative esotropia: efficacy of therapy. J Am Optom Assoc 1987;58:562–6.

Wick B, Wingard M, Cotter S, Scheiman M. Anisometropic amblyopia: is the patient ever too old to treat? Optom Vis Sci 1992;69:866–78.