



# Vision Problems Affect How Children Learn Math Skills

In the most recent issue of *Optometry & Vision Development*, two articles were published by German scientist and researcher, Dr. Burkhardt Fischer and his team which found that children with vision problems have a hard time learning basic mathematical skills and that if the appropriate vision therapy is given, math skills improve.

Dr. Fischer's work has been featured on several German television news programs which reported on his research in the area of deficits in vision and eye movement control, as well as his success using vision therapy and its ability to improve reading. It has been pointed out, that his results show the importance of brain research in the field of deficits in vision function, academic performance and eye movements.

Unfortunately, many individuals do not know about the importance of eye movements as an integral part of vision and learning. Children with learning problems at school can profit from these new methods of diagnosing and treating these learning related vision problems.

Dr. Fischer notes that, "My research shows that vision function and eye movement control can affect a child's development even into young adulthood. It is important for children to have a comprehensive assessment for the presence of teaming related vision disorders in order to know why they may be having difficulties in reading and spelling skills, as well as obtaining basic arithmetic ability at school."

He goes on to state, "Teachers, doctors, psychologists, therapists, and parents must be informed about these new facts in order to be able to help children overcome their deficits. It may make little sense to teach reading or math skills to someone who has deficits in basic sensory, visual and/or optomotor processing."

Dr. Burkhardt Fischer and his team conduct their research at the Center of Neuroscience, Optomotor Laboratory, University of Freiburg, Freiburg, Federal Republic of Germany.

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for parents, educators, and anyone who may know a child diagnosed with CI."

A 12-month follow-up study is being conducted to examine the long-term effects of these CI treatments. Further information about the reported trial, NCT 00338611, can be found at [www.clinicaltrials.gov](http://www.clinicaltrials.gov).

The National Eye Institute (NEI) a component of the National Institutes of Health is the federal government's lead agency for vision research that leads to sight-saving treatments and plays a key role in reducing visual impairment and blindness. For more information, visit the NEI Web site at

The National Institutes of Health (NIH)—The Nation's Medical Research Agency—includes 27 Institutes and Centers and is a component of the U.S. Department of Health and Human Services. It is the primary federal agency for conducting and supporting basic, clinical, and translational medical research, and it investigates the causes, treatments, and cures for both common and rare diseases. For more information about NIH and its programs, visit <http://www.nih.gov>.