ASSOCIATION BETWEEN VISION AND LEARNING

Poor Vision Could Lead to Poor School Performance

Small Steps for BIG VISION

PARENT STORY

‘‘She got an award...because she is one of the highest ranking children in her class in reading.

So I said wow.

And she said, ‘Yeah mom, I put on the glasses and I am reading!’’’

MAIN MESSAGE

This parent’s story shows what can happen in the classroom when a child received a vision screening, did not pass the vision screening, the parent/guardian received a referral from the vision screening for an eye examination by an eye doctor, the eye doctor examined the child’s vision and eyes, and prescribed treatment. In this story, the child received, and wore, prescription eyeglasses.

This process helped a child succeed in reading in the classroom.

WHY A VISION SCREENING FOR YOUR CHILD MATTERS

All children need a regular vision screening throughout childhood. If your child does not pass the vision screening, receiving a referral for an eye examination by an eye doctor, attending the eye examination, and following the eye doctor’s suggestions become important because undetected, undiagnosed, and uncorrected vision problems have been associated with poor school performance.

Several research studies show children with learning problems may also have vision problems. A vision screening can help find children who would benefit from further evaluation from an eye doctor to see if blurred vision is affecting classroom learning.

Let’s look at a personal story and recent studies showing an association between untreated vision problems and learning:

An Indiana Lions Club member shared a story about a child in the 5th grade who was making grades of Cs and Ds and was consistently disruptive in the classroom.

- After vision screening, an eye examination by an eye doctor, and prescription eyeglasses, this child’s disruptive behaviors started to stop almost immediately.
- Three months later, this child’s grades improved to Bs and were moving to As.
- This child’s aunt told the Lions Club member, “You saved my nephew”.

- A study[2] looking at children ages 3, 4, and 5 years from low-income families found that after not passing vision screening, having an eye examination by an eye doctor, and receiving treatment (prescription eyeglasses), children:
  - Improved their academic progress,
  - Had more confidence,
  - Had better classroom behavior,
  - Paid more attention during lessons, and
  - Improved their interaction in classroom activities.

- A study[3] of 317 second and third graders in 12 high-poverty schools in Baltimore City, Maryland, found that children with uncorrected hyperopia (farsightedness) did not perform as well on reading tests compared with children without hyperopia.
- A study[4] with more than 2,000 children ages 4 and 5 years in the city of Bradford, United Kingdom, found poor visual acuity (clearness of vision) when they entered school was associated with poor literacy (e.g., difficulty naming letters).
- A study[5] of 492 preschool and kindergarten children ages 4 and 5 years found that children with hyperopia (farsightedness) scored worse on an early literacy test than children with normal vision (e.g., print knowledge and identifying letters and written words).

Helping your child have the best vision possible now can help with school in later years. For example, one study[6] showed that some school-aged children with vision problems may read slower than other children.

Children who have difficulty with reading during early elementary years are at risk for difficulty with academic success in later school years.

- One study[7] showed that children's ability to read in first grade predicted how well they would do in 11th grade reading, such as understanding what they read, the amount of words in their vocabulary, and their overall general knowledge.
- Another study[8] found that the chances a child who was a poor reader at the end of first grade would remain a poor reader at the end of fourth grade was 88%.

These studies[7,8] about long-term results of early reading challenges may not be related to poor vision. Prescription eyeglasses may not resolve these early reading challenges. However, a vision screening and an eye examination by an eye doctor if a child does not pass vision screening will help to find out if vision problems are related to academic challenges.

COMMENT ABOUT VISION AND LEARNING:

"I always thought I was just sitting too far from the blackboard to read the words and numbers the teachers were writing. It wasn't until my 8th grade year (having repeated 6th grade) that I was vision tested. Geez, what a difference when I went back to school as a freshman in high school. I could read everything, and my learning was so much easier."

July 28, 2017, comment on "Vision problems can harm kids' development grades" website. https://medicalxpress.com/news/2017-07-vision-problems-kids-grades.html

MORE COMMENTS FROM PARENTS, STUDENTS, AND TEACHERS

Now let's look at a few more comments[1] from parents, teachers, and students about the benefits of vision screening, referrals for eye examinations with eye doctors when children did not pass vision screening, and treatment.

COMMENTS FROM PARENTS[1]:

"My son before he had the glasses, he would complain each time when they would start reading or write(ing). He would say that his head hurt. He didn't want to."

"And the teacher told me that now I don't have to try to keep Monica's focus, 'Do you understand? Do you understand?' Now she sees and tries and I don't have to be after her like before that she had to look hard to try to see what it was."

COMMENTS FROM STUDENTS[1]:

"I saw blurry. My teacher said that I had to move from my friends because I couldn't see."

"But when I didn't have glasses, I had bad grades and my mom and dad weren't happy."

"(With glasses) I would not get distracted as much and I would pay attention and get good grades too."

". . . when I didn't have my glasses, I couldn't pay attention to the board, or didn't know what to do."

"I could do my homework faster. I could do it."

COMMENTS FROM TEACHERS[1]:

"Well, I notice that they constantly have to get up and get closer to the board if they can't see well and . . they lose focus because they can't see."

". . . these are the kids that . . . when they had to work independently they were distracting other kids. . . . But when they got the glasses that kind of just changed. It went away."

"I noticed with one or two of the students that got their glasses, the accuracy rate (on their math work) went up. Probably because they could see the numbers better in the books."

"The fluency rate has increase(d) for those students. They can see the words so they are more apt to practice reading because it's not such a task for them."

"I think enthusiasm for learning just, I know one girl in particular that was struggling and she was so much more enthusiastic after she got the glasses and reading more."

"They (children) get lost – don't know what's going on. But it's not that they don't want to participate, they just can't see that well."

SUMMARY

If you think your child is struggling to learn, request a vision screening from the health person or school nurse at the program or school your child attends. If you receive a referral for an eye examination because your child did not pass the vision screening, schedule an eye examination appointment with an eye doctor trained and experienced in treating young children. Depending on your insurance plan, your child's primary health care provider may need to make the referral. The eye doctor can confirm the vision screening results and prescribe treatment if blurred vision is affecting your child's learning.

TO-DO LIST

- ❏ If your child is struggling with learning letters and words, or having other problems in the classroom, request a vision screening from the health person in the program your child attends. Or, request a vision screening from your child's primary health care provider.
- ❏ If your child does not pass vision screening and receives a referral for an eye examination, schedule an eye examination with an eye doctor, take your child to the eye doctor's office for the eye examination, and follow the eye doctor's suggestions.
- ❏ If you receive a referral from a vision screening at your child's Head Start program, school nurse, or other community vision screening, you may need a referral for an eye examination from your child's primary health care provider, depending on your child's insurance plan.
- ❏ If your child passes the vision screening and you still have concerns, talk to your child's primary health care provider about your concerns. Your child's primary health care provider might make a referral for an eye examination by an eye doctor.
- ❏ If you need help making an eye examination appointment, visit this link: https://preventblindness.org/getting-professional-eye-care/#1588222291068-6d909355-9b67. This link is for adults, but many of the suggestions also apply to your child.
- ❏ Visit Your Child's Sight – Taking Your Child to the Eye Doctor on the Prevent Blindness website. https://preventblindness.org/your-childs-eye-care/
- ❏ If your child's eye doctor recommends prescription glasses, buy the prescription glasses, and make sure your child wears the eyeglasses.
- ❏ If this is the first eye examination for your child, check out these two videos that show what will happen during your child's eye exam:
  - What to Expect at the Pediatric Ophthalmologist. Video from the American Association for Pediatric Ophthalmology and Strabismus (AAPOS) – https://www.youtube.com/watch?v=v7UCn6npC20&feature=youtu.be
  - Your Child's Eye Exam - Dr. Tracey Strombeck. Video from Prevent Blindness Wisconsin – https://www.youtube.com/watch?v=ebzOAI9mjug
- ❏ If dollars are tight and your budget does not have extra money for follow-up care with an eye doctor, financial resources are available to help you cover the cost of an eye exam and eyeglasses. Visit this Prevent Blindness link: https://preventblindness.org/vision-care-financial-assistance-information/

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