

What is Behavioural Optometry ?

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We all know what an optician does but few people appreciate the importance of behavioural optometry. Behavioural Optometry is a vision care system based on the understanding that vision is the dominant process in the human species and develops throughout one's life. Behavioural optometrists use lenses and vision training to facilitate the development of a more efficient and complete visual process. This enhanced visual process allows for improved performance in all areas of life in general movement and co-ordination, in school, the workplace, sports and other recreational activities.

Behavioural optometry defines vision as the ability to derive meaning and direct actions from what is seen as triggered by the process of light entering the eye and impinging on the retina. It explores and examines how the visual input at the eye is dealt with in the brain and how it integrates with other brain processes e.g. hearing, movement, touch etc.

Our ancestors had hunter's eyes for survival in the wilderness: their vision was designed for spotting game and enemies at a distance. In the last 100 years we have been forced to deal with sustained, near visual tasks and the resulting stress on the visual system has produced many symptoms and problems.

If you experience headaches, blurred vision, tired, itchy or watery eyes or other vision linked problems, you may already know how uncomfortable sustained visual stress can feel. Your discomfort may be related to the heavy vision load of working at near distances. If you are a student, you may read almost three times the number of textbooks your grandparents did.

If you are employed in an office, you probably use your visual system for hours of close work. If you work with computers you may spend much of your day looking at a computer screen. These tasks can all contribute to visual stress.

Even if you have 20/20 eyesight you may have difficulty working at close tasks. The term 20/20 means you see well at distances of 20 feet or more, it does not usually refer to how well you see at 12-16 inches, the distance at which you do most of your close work.

Vision is much more than simply seeing clearly. It is the entire process whereby an individual understands what he or she sees. Here the word "see" is used in a broad context. Not only is vision the understanding of what is seen, but it is also the ability to direct one's own actions and motor activities accurately and efficiently with a minimum expenditure of effort and energy.

For example, in driving a car, vision is much more than reading the number plate clearly at the legally required distance: it is the total process whereby the spatial relationships between the cars, trucks and other objects around are taken in and processed by the driver to guide the car properly to its destination without an accident and with minimum stress on the driver. Vision judges the relative speeds of the other cars and alerts the driver to pedestrians, other cars, junctions and other hazards. Vision is what directs the cricket player to swing the bat at exactly the right moment at exactly the right place in space to make contact with the ball. Vision is what is used by students to understand what they have read and to write things accurately on the line of a page.

It has been said that the most complex thing in the known universe is the brain and the most complex thing that the brain does is vision. 87% of all learning is done through vision, 6% through hearing and 7% from the rest of the body. Vision is therefore the dominant process in the human species. Fortunately, it is also the most accessible to change through the use of behavioural vision care with lenses and vision training.

Perhaps the biggest barrier in fully understanding this problem is not having a single study that effectively demonstrates the scope of the vision problems among children. Most authorities select a conservative figure of 10-15%. Some private studies put this figure as high as 85% in an average school classroom. Even if we take the very conservative figure of 10%, as many as 1,600,000 children in the United Kingdom suffer from undetected and untreated vision problems. It is reasonable to assume that similar results would come from other developed countries.

These figures give an idea of the extent of the problem in schools and learning in general. Parents and teachers are looking for solutions. It is felt that behavioural vision care is a major part of the answer for many of these children. The efficacy of behavioural vision care and vision therapy has been well researched and documented although it is appreciated that those who are not familiar with behavioural vision care will find this difficult to follow and understand and often, therefore, do not consider this as a partial solution to many of the learning problems that affect children worldwide.

If you or your child suffer from any of the following it is possible that you have visual stress and need to see a behavioural optometrist :

- blurring of words when reading
- blinks or rubs eyes a lot
- gets rapidly tired at school and often exhausted at end of school day
- headaches and/or aching eyes
- covers one eye when reading
- moves head when reading
- poor at ball skills and team games
- does not understand what has been read.