

## Introduction

Vision therapy or VT is that part of optometric care devoted to developing, improving and enhancing people's visual performance.

Over several decades, behavioural optometrists have developed and used visual therapy in combination with appropriate, judiciously selected lenses to:

- Prevent vision and eye problems
- Develop the visual skills needed to achieve more effectively at work or in sport
- Enhance functioning on tasks demanding sustained visual effort
- Remedy or compensate for vision and eye problems, which have already developed
- Through vision therapy, people are able to develop more efficient visual performance.

### Vision: A Set of Abilities

Nearly all humans are born with the potential for good eyesight, but vision - the ability to identify, interpret and understand what is seen - is learned and developed from birth.

In learning to walk, a child begins by crawling, standing, walking with assistance, and finally: walking unaided. A similar process from gross to fine motor control takes place in the development of vision.

One visual skill builds on another, step-by-step as we grow. But many people miss a step, do not complete a step or must begin to perform visually demanding tasks before an acceptable foundation of basic visual skills is in place.

Science indicates that we do not "see" with our eyes or our brain: rather, vision is the reception and processing of visual information. Since two thirds of all information we receive is visual, it is clear that efficient visual skills are a critical part of learning, working and even recreation. Athletes, for example, use visual training for improved performance in sport.

Further Reading / Information [www.babo.co.uk](http://www.babo.co.uk) & [www.covd.org](http://www.covd.org)

## What is Vision Therapy?

Vision therapy, usually combined with appropriate lenses, may remedy, improve or prevent these conditions.

Vision therapy and lenses are intended to alleviate the symptoms and eliminate the underlying cause of inadequate visual skills and visual stress.

Studies show that success in vision therapy depends on an appropriate programme pre-scribed by your optometrist, and on an individual patient's co-operation, participation and motivation.

## What is Behavioral Optometry?

An international branch of optometry that specialises in the practice of vision therapy. Behavioural optometrists (also called developmental optometrists) will sometimes consider how environmental, nutritional and/or behavioural factors affect visual health. The discipline is important in rehabilitation of poorly functioning eyes.

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# Vision Therapy For Adults

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**VisionCareOptometry**  
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Developing visual skills includes learning to use both eyes together efficiently. Having both eyes move, align, fixate and focus as a team enhances your ability to interpret and understand the potential visual information that is available to you.

## Visual stress

### Near Point Stress

Do you suffer from some or all of the symptoms listed below?

### Headaches

Especially near the eyes or forehead or occasionally at the back of the head.

### Double Vision

Two objects are seen when only one exists.

### Discomfort, fatigue

Body tension, stress or pain, weariness at the end of a working day.

### Reduced Performance

Losing your place while reading, re-reading words or lines, difficulty with understanding or recalling what you've read, reading slowly.

### Near point visual stress

The result of sustained visual activities done at less than arm's length, may produce most of the problems listed above.

The term is used when close work is causing the individual unacceptable stress. This is often seen when the relationship between accommodation and convergence is maintained only by excessive effort. The response to this is either a tendency to avoid close work (known as evasion) or alternatively, to use progressively more and more effort. This is typified by a tendency to get closer and closer to the work and then to suffer slower work rates, headaches and eye discomfort. Writing often becomes laboured and difficult, showing a tight pen grip and excessive pressure. You may complain of blurred vision, print getting smaller, coloured fringes around text which

sometimes moves on the page and possibly double vision. There is often a generalised ocular discomfort and there can be complaints of feeling 'washed out' after prolonged concentration. Symptoms can vary from day to day.

## What are the visual skills?

### Tracking

The ability to follow a moving object smoothly and accurately with/both eyes, such as a ball in flight or moving vehicles in traffic.

### Fixation

The ability to quickly and accurately locate and inspect with both eyes a series of stationary objects, one after another, such as moving from word to word while reading .

### Accommodation (also known as focussing)

The ability to adjust focus on objects at varying distances. Behavioural theory suggests that focussing is closely related to the identification mechanism, which ensures that the object under scrutiny is the most clearly seen ensuring it remains the centre of attention.

### Convergence

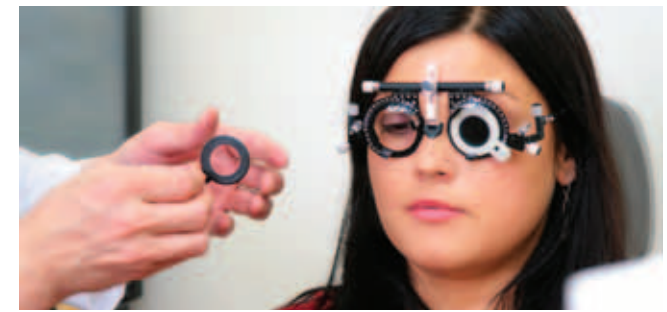
The ability of both eyes to turn inwards together. This enables both eyes to be looking at the same point. This skill is essential to be able to read. Not only is convergence essential to maintaining attention and single vision (as opposed to double), it is vital to be able to maintain convergence comfortably for long periods of time. For good binocular skills it is also necessary to be able to see further away. This is called divergence.

### Depth Perception

The ability to judge relative distances of objects and to see and move accurately in three-dimensional space, such as when hitting a ball or parking a car.

### Peripheral Vision

The ability to monitor and interpret what is happening around you while you are attending to a specific central visual task and the ability to use visual information from a large area.



### Binocularity

The ability to use both eyes together, smoothly, equally, simultaneously and accurately.

### Maintaining Attention

The ability to keep doing any particular skill or activity with ease and without interfering with the performance of other skills.

### Near Vision Acuity

The ability to clearly see, inspect, identify and understand objects within the distance of arms length.

### Distance Acuity

The ability to clearly see, inspect, identify and, understand objects at a distance. People with 6/6, (20/20) distance sight still may have visual problems.

### Visualisation

The ability to form mental images in your "mind's eye," retain them for future recall, or for synthesis into new mental images beyond your current or past direct experiences.

### Fusional Reserves

A series of measures to probe how much stress the convergence and divergence mechanisms are able to cope with when placed under stress. This is linked to the ability to maintain good clear comfortable single vision while keeping control of the focussing mechanism. Analysis of the results of this test are complicated. If results are low it can be expected that difficulty in concentrating for long periods will be experienced. Headaches can often result with prolonged periods of close work. Children in particular, but also adults, often show a tendency to avoid prolonged close work when fusional reserves are low.