Autism and Irlen Syndrome

Irlen Syndrome is a difficulty with visual perceptual processing and is not an ‘eye’ problem. It affects well over half of autistic people but also occurs in approximately 15% of the neurotypical population. It is caused by hypersensitivity to certain wave lengths in full spectrum light which provoke the brain to process visual information incorrectly.

Symptoms

- Sensory overload can be caused by bright and fluorescent lights, street lights and headlights. Patterns, stripes, black/white and colour contrast can also be stressful. This may lead to headaches, fatigue and anxiety.
- The environment may be perceived as a distorted world. Stationary objects can blur, move and change. For example: walls, stairs, paving and fencing are frighteningly inconsistent whilst faces can be incomplete.
- Reduced attention span and concentration difficulties,
- Problems with co-ordination, depth perception and/or poor social skills together with inability to read facial expressions can result.
- Print distortions make reading and written work inefficient, unpleasant and tiring.
- Trouble with reading comprehension, maths, sight reading text or music and computer usage can be experienced

In general, each autistic person has a varying and complex mix of perceptual differences which interact and influence the individual’s well-being and behaviours. Irlen Syndrome can be one of those layers of difficulty, much like the skins of an onion, but once identified, it can be remediated, thus reducing the overall severity and frequency of sensory difficulties, making it easier to manage interaction with others.

Diagnosis and treatment
Screening

A screening using Irlen methodology can give a diagnosis for those suffering from this condition and indicate the specific colour(s) which will help in differing environments. Determining the optimum coloured overlay for reading on white paper, the background tint for a computer screen, smart board or paper, but also pen colours can make a significant improvement. Greater comfort and confidence coupled with an increase in focus levels can result.

Modifications to the home environment, be they tinted light bulbs, specific coloured walls, furnishings, flooring, etc., may reduce stress and overload. White surfaces, bright patterns or stripes will exacerbate distortions and lead to severe discomfort, shutdown or meltdown.

The bathroom can be a major problem area. White, shiny surfaces, shower tray, bath, washbasin and toilet bowl may prove painfully disorientating. When coupled with the ongoing auditory, olfactory and tactile inputs the sensory system is bombarded. The transition in and out of the bath or shower can be eased by using a bath mat of the correct tint and coloured tape around the rim or edge for delineation. Similarly a plain table covering and crockery in the optimum tone will reduce anxiety at mealtimes.

Full Irlen assessment

All these suggestions can make significant improvements, but the most comprehensive, lasting and efficient way to treat Irlen Syndrome is carrying out a full Irlen assessment and includes wearing tinted spectral filters worn as glasses. The specific wave lengths of light which are causing the perceptual difficulties are determined and a filter devised to overcome these problems.

Each individual needs a personal colour combination and great care must be taken to establish the precise spectral filter requirements. The wrong colour is likely to increase perceptual difficulties and make life worse for the individual and their family.

Irlen spectral filter lenses do not change colour perception and should be worn all the time to provide continuous relief from an individual’s physical, emotional and behavioural symptoms.

As a professional with long-term experience working with individuals diagnosed with Irlen, I know that assessment is most successful when undertaken in the home environment or in the conditions where the autistic person routinely experiences problems. Evaluation should be adapted to individual needs and should not rely on verbal responses but rather should take into account changes in attention, expression, interaction and reaction to colour modifications.

Further information

www.irleneast.com
www.irlen.com

Further reading
Olga Bogdashina: Sensory Perceptual Issues in Autism and Asperger Syndrome

Paul Isaacs and James Billett: Life Through a Kaleidoscope

Helen Irlen: The Irlen Revolution

Helen Irlen: Reading by the Colours

J. B. Snow: Sensory Processing Disorders and Irlen Syndrome: Sensitivities to Lights, Sounds, Tastes, Touch, Smells and the Environment

Research articles