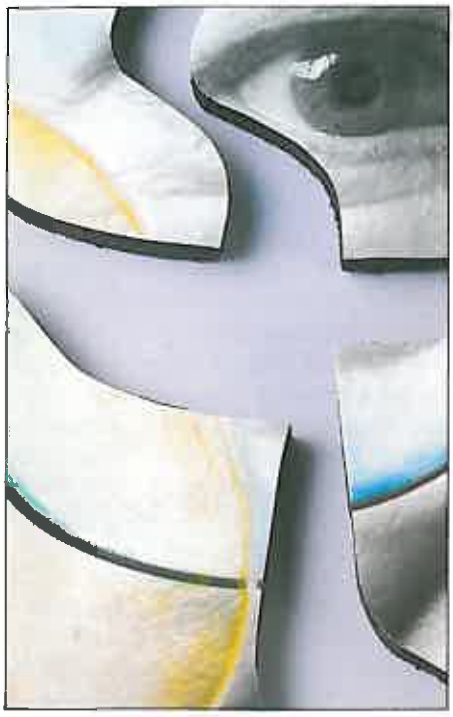

AN OVERVIEW OF THE IRLEN METHOD

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ABSTRACT

A new method claiming to relieve many symptoms of eyestrain and thereby improve reading efficiency has recently received much attention in the media. The method, introduced by Helen Irlen, advocates the use of colored filters when reading. It is claimed that the use of these filters relieves eyestrain and promotes more comfortable and more efficient reading. This article explores the theories, protocol and research related to the Irlen method.

KEY WORDS

Scotopic Sensitivity Syndrome, Irlen method, Irlen Differential Perceptual Schedule, Irlen lenses/filters, colored overlays/filters

Recently, there has been much interest generated by the media about a method of treating reading dysfunctions--the Irlen method. This method espouses the use of colored lenses or filters when reading. The use of these carefully selected filters is said to increase reading efficiency. There is some anecdotal documentation, but to date a minimal amount of research which support these claims has been published. Since the optometrist very often examines children and adults with learning and reading problems, it is important that he be familiar with all methods utilized to treat reading difficulties, including this new approach. It is the purpose of this article to inform the optometrist about the specific methods employed by the Irlen system, the testing protocol utilized, the training of the Irlen screeners and the general theory upon which the system is based.

Helen Irlen, M.A., a psychologist and coordinator of the Adult Learning Disabilities Clinic at California State University, Long Beach, noted that many adults manifesting reading problems exhibited a complex of symptoms which she described as Scotopic Sensitivity Syndrome (SSS).[1] According to Irlen, individuals with SSS exhibit problems in one or more of the following categories:

1. Photophobia--an inability to adjust to glare and other lighting conditions
2. Background Resolution--an inability to adjust to black/white contrast
3. Visual Resolution--an inability to see print clearly and free from distortion
4. Span of Focus--an inability to perceive a group of words at the same time
5. Sustained Focus--an inability to maintain focus without the use of energy and effort

Individuals manifesting some or all of the above symptoms, according to this theory, may need to exert increased effort when reading, see distortions on the printed page, manifest fatigue and discomfort or may not be able to sustain reading for prolonged periods of time. These problems may exist concurrently with other learning difficulties and treatment for SSS does not preclude the need for remediation in other areas. The Irlen Institute advises that SSS can only be identified by a specific screening, the Irlen Differential Perceptual Schedule (IDPS), and not through standard educational, psychological, visual or medical evaluations.[2]

In 1983, Helen Irlen presented a paper to the American Psychological Association in which she described SSS and the accompanying symptoms.[1] She said that the application of specifically selected tinted lenses on the adult subjects

manifesting SSS significantly decreased their symptoms when reading, according to their subjective reports. She found a significant increase in their ability to comprehend printed material as a result of their increased comfort. The authors of other research papers [3,4,5,6] report improvement in reading efficiency with the use of colored filters. Some of these studies, however, have flaws in research design, lack proper control groups, and are deficient in using standardized methods for measuring changes in reading efficiency. More rigorous research is necessary to investigate the effects of the application of tinted lenses on reading performance before conclusive claims can be made.

The Irlen screening, diagnostic and treatment methods are used extensively in Australia and other countries where many school districts require that each child be screened for SSS.[7,8] There are newspaper articles worldwide which relate individual accounts of the effectiveness of the Irlen method. Widespread interest in the United States was recently stimulated by two nationally televised airings of the CBS program "60 Minutes,"[9] which presented a segment on the Irlen method. Since that time many school districts have become interested in applying these methods and the Irlen Institute has trained educators to be "Irlen screeners" to test and identify individuals with SSS.

TRAINING OF "IRLEN SCREENERS"

The "Irlen screeners" attend a two-day training session at which they learn how to administer the Irlen Differential Perceptual Schedule. The first segment of this screening protocol is comprised of obtaining an in-depth history of reading problems and symptoms. Part of the intake process includes questions about visual history to be sure that the client has had a recent visual examination. Following the interview the client is asked to perform specific tasks such as counting lines of X's, counting the numbers of squares in a three dimensional cube figure, in addition to other visual and perceptual tasks. The screener questions the clients to determine whether the tasks were easy or difficult to perform and if any distortions, movement and/or eyestrain were noted. The client is then shown a page of black print on a white background. Half of the page is covered with one colored transparent acetate overlay and the other half of the page with a different colored acetate overlay. A choice is made to determine which colored overlay makes reading easier and more comfortable.

Six different overlays are compared, as well as the overlapping combinations of these colors. Each overlay has a shiny or matte finish and a preference for these is determined as well. At the conclusion of this screening it is determined whether the individual can be assisted by the colored filters. The scoring depends upon the responses to the interview, performance on the visual tasks, as well as the subjective reactions to the colored overlays. The client is classified as low, moderate or highly "scotopic." This screening takes 60-90 minutes to complete. The average fee charged to the client for this screening is approximately $125.

POST SCREENING CLIENT MANAGEMENT

If the screener's assessment indicates that the client can be assisted by the use of a colored overlay, she is given the filter(s) to be used whenever she reads black print on a white background. The colored overlay is placed on the reading material during the course of the work or school day. After using the overlay for several weeks, the client is asked to report her reactions. If reading performance is improved, she is referred to the nearest Irlen Institute, where another evaluation is administered to determine the exact color of the lens to be worn to replace the colored overlay. Over 150 lens color combinations are presented as the client reports the preference. This color is incorporated in the individual's prescription eyeglasses.

If no prescription is present, Plano CR-39 tinted lenses are provided. The tinting process is performed by opticians at the institute. These lenses are called "photopic transmittance lenses." Recently, the Irlen Institute has changed terminology from using the word "lenses" to "filters." Though semantically different, they are physically exactly the same. The fee to the client is approximately $250 for this evaluation and the tinting of the lenses. The total fee, beginning with the screening and concluding with provision of the tinted lenses, could cost the client approximately $400.[8]

According to Irlen, Scoptic Sensitivity Syndrome is a sensitivity to specific frequencies and wavelengths of the white light spectrum which cause distortions in the visual field, rapid fatigue and inefficiency when performing reading and other perceptual activities.[10] The function of the overlays and filters is to screen out the interfering wavelengths and thereby promote more comfortable visual performance and efficiency. It should be noted that the color of the overlay chosen by the client at the time of the screening and the color of the lens selected at the time of the comprehensive evaluation are very often not the same, according to the Irlen Institute.[11] The color of the lenses are more carefully refined than the overlays and the exact spectral transmission and color of the lenses is considered crucial by Irlen. Irlen emphasizes that an incorrectly chosen color can be detrimental to the client.

During many interviews, Helen Irlen has been very specific in qualifying the possible benefits of tinted lenses and overlays.[9,12] She states that the filtering of light increases comfort and efficiency but is not a cure for dyslexia and other cognitive and information processing problems. She is careful to specify that the utilization of tinted lenses does not eliminate the need for educational therapy or other modes of remediation. The media and lay public, however, usually do not appreciate the subtle nuances in terminology and have associated the Irlen system with a panacea and a "quick fix" for learning problems. Moreover, the Irlen overlays and filters were first noted to be effective when used with adults who were already readers and had likely successfully compensated for more significant learning problems which may have been present earlier in life. Applying this method to children, who, in addition to having symptoms of discomfort, may also have other significant perceptual, visual or educational dysfunctions, may not be appropriate or at least not as dramatically effective as it is claimed to be with adults. The same Irlen Differential Perceptual Schedule is administered to adults or children. It relies heavily on the individual's subjective responses of symptoms and critical choices. It is likely that many children cannot make these fine distinctions with the same ease and sophistication of adults. This can lead to confusion and questionable results.

FINAL THOUGHTS

The media exposure that the Irlen method has received has caused a significant number of optometrists to be questioned by their patients regarding the efficacy of this regimen. The recent reports in the optometric literature have been negative.[13,14,15] Until there is additional research validating the claims, the practitioner can at best be guarded in giving advice as to whether this is a viable intervention. Consequently, at this point, the best one can do is to understand the theory and process and hope that if this method can offer help to patients, that the proper research be done to substantiate the claims.

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