

## **Coloured overlays lack the necessary scientific foundation to be considered an effective remediation for literacy difficulties associated with dyslexia.**

Dyslexia, a learning disorder affecting language processing and reading skills, has been a subject of ongoing research and academic scrutiny for decades. While various evidence based interventions such as explicit teaching and synthetic phonics have been proven to aid individuals with dyslexia, the use of coloured overlays has emerged as a popular unsupported approach. An examination of the evidence proves that coloured overlays lack the necessary scientific foundation to be considered an effective remediation for literacy difficulties associated with dyslexia. This fact sheet aims to critically evaluate the limitations of coloured overlays and advocate for evidence-based interventions that target the core challenges faced by dyslexic individuals.

### **Important Clarifications:**

- Dyslexia is a language-based learning difficulty, not a vision problem.
- Visual stress is not a symptom of dyslexia. They are distinct issues.
- Coloured overlays may reduce visual discomfort for some individuals but do not treat dyslexia or improve the underlying reading difficulties.
- Leading organisations including SPELD Victoria, AUSPELD, and RANZCO advise that evidence-based reading instruction, not visual therapies, is essential for dyslexia intervention.

"Due to a critical lack of scientific evidence that Irlen Syndrome exists or that treatment methods do anything to improve an individual's performance, RANZCO cannot endorse treatment of the condition. This is in accordance with a joint statement issued in 1984, and reaffirmed in 2014, by the American Academy of Ophthalmology, the American Academy of Pediatrics, the American Association for Pediatric Ophthalmology and Strabismus and the American Association of Certified Orthoptists." RANZCO.

### **The Complexity of Dyslexia:**

Dyslexia is a multifaceted condition, characterised by difficulties in phonological processing, word recognition, and spelling. Coloured overlays, focused primarily on addressing visual processing aspects, overlook the intricate cognitive and linguistic difficulties underlying dyslexia. For genuine progress, interventions must encompass a comprehensive understanding of the disorder and address its diverse manifestations.

### **Inconsistent and Inconclusive Research:**

The efficacy of coloured overlays in alleviating dyslexia-related literacy difficulties remains inconclusive, as various studies have produced conflicting results. While some studies reported modest improvements in reading performance with overlays, others found no significant effects. The lack of a cohesive body of evidence undermines the credibility of coloured overlays as a viable remediation option.

### **The Importance of Evidence-Based Interventions:**

To facilitate effective learning outcomes, dyslexia interventions must be rooted in rigorous scientific research. Evidence-based approaches, such as structured literacy programs, explicit phonics instruction, and multisensory teaching methods, have consistently demonstrated positive results in improving reading skills for dyslexic individuals. Investing in such evidence-based practices ensures a more substantial impact on literacy development.

### **Individual Variability:**

Dyslexia manifests uniquely in each individual, with varying degrees of severity and specific challenges. The one-size-fits-all approach of coloured overlays neglects the necessity for personalised interventions tailored to the specific needs of each learner. Individualised evidence-based programs can provide targeted support and foster greater success in overcoming literacy difficulties.

### **Short-Term Relief vs. Long-Term Growth:**

Coloured overlays may provide transient comfort by reducing visual stress for some individuals, research has proven that this may be a placebo response. However, this does not address the fundamental difficulties that impede reading development in dyslexia. Relying solely on overlays risks perpetuating a dependence on visual aids without promoting the acquisition of essential reading and language skills supported by evidence based practice for sustainable, long-term progress.

### **Mitigating Stigma and Misconceptions:**

The undue emphasis on coloured overlays as a dyslexia remedy contributes to the misconception that dyslexia is merely a visual processing issue. This oversimplification can perpetuate stigma and misunderstandings surrounding dyslexia, hindering efforts to promote inclusive educational practices and support for affected individuals.

**Research has demonstrated:**

Coloured overlays, while attractive as a simple and low-cost solution, do not stand up to academic scrutiny as an effective remediation for dyslexia-related literacy difficulties. The complex nature of dyslexia demands evidence-based interventions that target the underlying cognitive and linguistic challenges faced by dyslexic individuals. By embracing a scientific approach, investing in well-researched methodologies, and adopting a personalised strategy, we can pave the way for genuine progress and meaningful improvements in literacy outcomes for those with dyslexia. Parents and teachers must prioritise the pursuit of evidence-based interventions and move beyond the allure of temporary fixes to foster lasting success in dyslexia remediation.

**Parents and educators are encouraged to act early.**

If there are concerns about a child's reading development, early evidence-based intervention should be sought – without waiting for significant academic failure. Full cognitive assessments often require documentation of educational intervention attempts.

## References:

1. American Academy of Pediatrics. Joint Statement–Learning Disabilities, Dyslexia, and Vision. URL: <https://noh.dyslexiaida.org/wp-content/uploads/sites/17/2018/03/AAP-Policy-Vision-Problems-Do-Not-Cause-Dyslexia.pdf>
2. Bristol University. Dyslexia and sight: the wider view. URL: <http://www.bristol.ac.uk/news/2015/may/dyslexia-sight.html>
3. The Conversation. A rose-tinted cure: the myth of coloured overlays and dyslexia. URL: <https://theconversation.com/a-rose-tinted-cure-the-myth-of-coloured-overlays-and-dyslexia-120054>
4. Evans, B. J., Patel, R., & Wilkins, A. J. (2019). Irlen syndrome: systematic review and level of evidence analysis. *Ophthalmic and Physiological Optics*, 39(4), 128-142. doi:10.1111/opo.12621. Retrieved from [https://www.researchgate.net/publication/332205658\\_Irlen\\_syndrome\\_systematic\\_review\\_and\\_level\\_of\\_evidence\\_analysis](https://www.researchgate.net/publication/332205658_Irlen_syndrome_systematic_review_and_level_of_evidence_analysis)
5. Griffiths PG, Taylor RH, Henderson LM, Barrett BT. The effect of coloured overlays and lenses on reading: a systematic review of the literature. *Ophthalmic Physiol Opt*. 2016 Sep;36(5):519-44. doi: 10.1111/opo.12316. PMID: 27580753.
6. International Dyslexia Association. (n.d.). How to Counter Vision-Based Claims about Dyslexia “Cures”. Retrieved from <https://dyslexiaida.org/how-to-counter-vision-based-claims-about-dyslexia-cures/>
7. Nussy. Dyslexia and Coloured Overlays. URL: <https://www.nussy.com/en-gb/dyslexia-explained/understanding-dyslexia/dyslexia-and-vision>
8. RANZCO. Irlen Syndrome Position Statement. URL: <https://ranzco.edu/wp-content/uploads/2018/11/Irlen-Syndrome-Position-Statement-May-2018-2-1.pdf>
9. Spelfabet. Dyslexia is not a visual problem, or a gift. URL: <https://www.spelfabet.com.au/2021/10/dyslexia-is-not-a-visual-problem-or-a-gift/>
10. Spelfabet. Dyslexie font, coloured overlays and Irlen Syndrome. URL: <https://www.spelfabet.com.au/2018/06/dyslexie-font-coloured-overlays-and-irlen-syndrome/>