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Key findings

The study found blocking blue light, by wearing amber lenses, two hours before bedtime improved sleep in patients suffering from insomnia.¹ The scale used in the study was the Pittsburgh Insomnia Rating Scale. The scale measured reported wake-time, total sleep time, overall quality, and soundness of sleep. The scores improved significantly in patients who wore amber lenses compared to those who wore clear lenses.



Objective

To determine whether wearing amber-tinted blue light-blocking lenses before bedtime improves sleep in individuals with insomnia.



Intervention

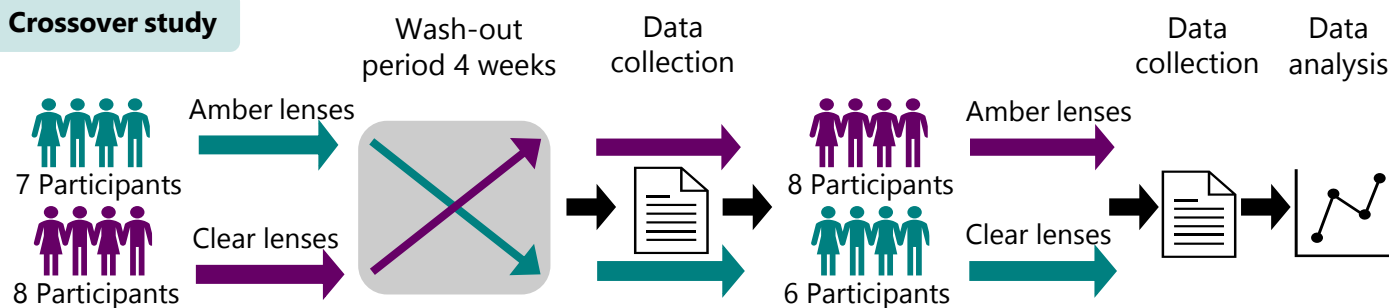
Blue light-blocking amber lenses in lightweight wraparound frames worn two hours before bedtime for seven days.

Comparator

Clear placebo lenses in lightweight wraparound frames worn two hours before bedtime for seven days.

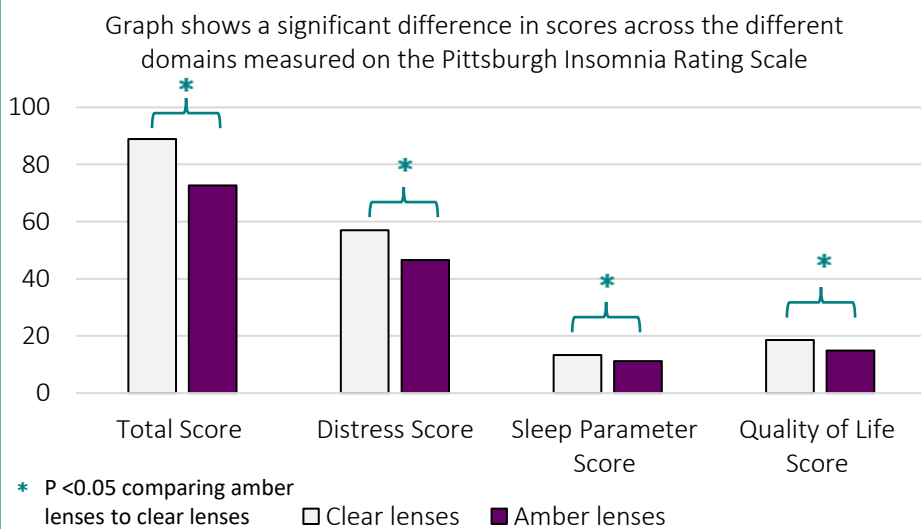


Crossover study



KEY RESULTS

The results found that wearing amber lenses for the two hours before bedtime resulted in significant improvements in sleep compared to clear lenses. The scores were reduced across the different domains in the amber lenses condition, indicating a reduction in insomnia severity.



The study suggests wearing amber-tinted blue light-blocking lenses before bedtime improves sleep in individuals with insomnia. However, there are several factors to consider:

- The sample size is small, increasing the risk of a false-positive result.
- The post-sleep questionnaire is subjective therefore open to interpretation.
- Participants reported they did not have any psychiatric disorders; however, this was self-reported and not based on clinical assessments

Based on the findings, this study warrants further investigation using a larger sample size to increase confidence. It would also be useful to see whether blocking blue light has an impact on patients with psychiatric disorders.

1. Shechter, A., Kim, E. W., St-Onge, M. P., & Westwood, A. J. (2018). Blocking nocturnal blue light for insomnia: A randomized controlled trial. *Journal of psychiatric research*, 96, 196–202. <https://doi.org/10.1016/j.jpsychires.2017.10.015>