

## AB103. Comparative study on the actual lighting assessment method and the use of a standardized tool (LuxIQ™)

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**Background:** With the arrival of a new standardized tool and considering the multiple disadvantages of the actual method used for assesses lighting needs, the goal of the study was to compare the actual lighting assessment method used by the clinicians working in a rehabilitation center with the use of the LuxIQ™. As reading is found to be the main difficulty mentioned by the majority of the clients at the rehabilitation centre and that past studies have shown the impact of lighting on improving reading speed and decreasing print size, the hypothesis stated that the use of the standardized tool would be statistically significantly superior than the use of the standard method on the variables on reading speed, print size, ocular fatigue, application of the recommendations and satisfaction of the length of time read.

**Methods:** Three clinicians proceeded to home lighting assessments for 28 participants aged from 19 to 100 years (mean =75, SD =27) old diagnosed with age-related macular degeneration or glaucoma. The study evaluated and compared pre and post results between the two methods.

**Results:** The intervention did not have a statistically significant impact on any of the variables mentioned. The lighting assessment itself, with either the standard method or using the LuxIQ, statistically significantly decreased print size for reading ( $P < 0.001$ ,  $\omega^2 = 0.47$ ).

**Conclusions:** Lighting has a significant impact on reading print size. Participants value the assessment but encounter various obstacles that prevent them from applying the lighting recommendations. Considering the positive impact of lighting, finding a solution so participants may profit from the benefits of this intervention is crucial.

**Keywords:** Lighting; LuxIQ; age-related macular degeneration (AMD); reading speed; print size

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