



ABSTRACT: **3088**

## COLOR VISION PERCEPTION TESTED IN DENTAL STUDENTS

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### Abstract:

**Objectives:** This study aims to evaluate the color vision perception of dental school students. Dentists are asked to perform color matching tasks during their professional activity.

**Methods:** We examined two groups of students: first group of 51 students (second year Dentistry Faculty), the second one of 45 students (Dental technician School) age between 19-37. The color vision perception was tested using Ishihara Color Perception Test and Lanthony 15-Hue Desaturated Test. The Ishihara Color Perception Test points out the presence of congenital defects in chromatic perception while the Lanthony 15-Hue Desaturated Test emphasizes the mild color deficiencies (acquired or congenital) and the normal state.

**Results:** No major color perception deficiencies were revealed. Minor deficiencies were detected in both groups: 41,17% in the first, 42,22% in the second. The results were expressed quantitatively using Bowman's Color Confusion Index (CCI) and the Age Correlated Color Confusion Index (AC-CCI). The average CCI for the first group was 1,100373 and 1,122222 for the second group. The average AC-CCI for the first group was 1,042431 and 1,063511 for the second group. Statistically the results were processed using the Two Sample Assuming Unequal Variances Test and the Two Sample for Means Test. The results revealed no significant difference between the averages of the indexes of the two groups. In acquired dyschromatopsias the test helps to follow the evolution of the subjects by retesting them. No major dyschromatopsias were revealed after testing the selected groups.

**Conclusion:** For reliable results, non-subjectively, subjects must be retested once or twice at intertest interval of approximately 1 month. Color perception impairment is a problem for the clinician when performing shades selection and matching colors. Being aware of color perception deficiencies means applying professional techniques involving color selection in dentistry.

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[Back to the Prosthodontics Research Program](#)

[Back to Top](#)

Color vision perception tested in dental students R. Seceleanu, Andreea Seceleanu, S. Neamtu, R. Galatus	IADR, General Session, July 2-5 2008, Toronto, Canada, CD-ROM of Abstracts, Journal of Dental Research, Vol.87, Special Issue B	2008
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