

UNIVERSITI TEKNOLOGI MARA

**VISUAL ACUITY PERFORMANCE WITH
COSMETIC CONTACT LENSES PRESCRIBED BY
UNLICENSED VENDOR**

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I declare that the work in this dissertation was carried out in accordance with the regulations of University Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non academic institution for any degree or qualification.

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ABSTRACT

Purpose: To measure the visual acuity performance under high and low contrast visual acuity with cosmetic soft contact lens prescribed by unlicensed vendors among UiTM students. **Materials and methods:** High and low contrast visual acuity was measured in eleven cosmetic soft contact lens wearers and eleven clear soft contact lens wearers. The participants were asked to read the logMAR chart at 4m under different contrast level of visual acuity which was high contrast visual acuity at 100% and low contrast visual acuity at 25% and 10%. **Results:** Cosmetic soft contact lens wearer had statistically significant reduced for both high and low contrast visual acuity ($P < 0.01$) than clear soft contact lens wearer. The visual acuity of cosmetic soft contact lens wearer for high contrast level 100% was 6/6 and low contrast level 25% and 10% were 6/7.5 and 6/9 respectively. Three lines of visual acuity was reduced at lower contrast level of visual acuity. The visual acuity for clear soft contact lens wearer for high contrast level 100% was 6/6 and low contrast level 25% and 10% was 6/7.5. **Conclusion:** Cosmetic soft contact lens wear appear to induce a reduction in visual acuity performance especially at low contrast of visual acuity in which 25% and 10%. Cosmetic soft contact lens wearer should be informed about the effects on optical quality and visual function.

Keywords: cosmetic soft contact lens, clear soft contact lens, high and low contrast visual acuity.

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