

UNIVERSITI TEKNOLOGI MARA

**EFFECT OF COSMETIC CONTACT LENS ON
CONTRAST SENSITIVITY**

ABDUL HAFIZ BIN ABDUL MUHIMIM

Bachelor of Optometry (Hons)

Faculty of Health Science

JULY 2015

ACKNOWLEDGEMENT

I would like to take this opportunity to express my profound gratitude and deep regards to my supervisor Wan Elhami Wan Omar for her exemplary guidance, monitoring and constant encouragement throughout the course of this thesis. The blessing, help and guidance given by her time to time shall carry me a long way in the journey of life on which I am about to embark.

I am obliged to other lecturers in UiTM PuncakAlam, especially Sir Khairil Anuar bin Md Isa and Dr. Ajau Danis for the valuable information provided by them in their respective fields. I am grateful for their cooperation during the period of my thesis writing.

Lastly, I thank almighty, both my parents Abdul Muhimim Bin Abdul Karim and JalilahBintiArsom, and my beloved course mates of Bachelor of Optometry in UiTMPuncakAlam for their constant encouragement without which this thesis would not be possible.

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ABSTRACT

In the recent decades, the number of cosmetic contact lens wearers had increased drastically, the number of complications was directly proportional to the number of the cosmetic contact lens wearers. The objective of this study was to determine how the cosmetic contact lens affects the contrast sensitivity among the contact lens wearers especially cosmetic contact lens wearers. In this study, 24 subjects were recruited. In 24 subjects consisted of 12 clear contact lens wearers and 12 cosmetic contact lens wearers. Contrast sensitivity of each subject was evaluated by using Pelli-Robson and Functional Acuity Contrast Test chart at 3, 6, 12, and 18 cycles per degree. The data was analyzed using SPSS version 22.0. The independent t-test analysis was used to compare the log contrast sensitivity findings between cosmetic and clear contact lenses. The mean contrast sensitivity scores with clear and cosmetic contact lenses measured using F.A.C.T were $p=0.048$ for 3 c/d, $p=0.042$ for 6 c/d, $p=0.040$ for 12 c/d and $p=0.008$ for 18 c/d ($p<0.05$) and measured using Pelli-Robson was $p=0.020$ ($p<0.05$). In conclusion cosmetic contact lens causes reduction in contrast sensitivity as tested using FACT chart and Pelli-Robson chart.

Keyword: Contrast sensitivity, clear contact lens, Cosmetic contact lens, F.A.C.T chart, Pelli-Robson chart.