UNIVERSITI TEKNOLOGI MARA

VISUAL ACUITY PERFORMANCE WITH COSMETIC CONTACT LENSES PRESCRIBED BY UNLICENSED VENDOR

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AUTHOR’S DECLARATION

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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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>TITLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTHOR’S DECLARATION</td>
<td>ii</td>
</tr>
<tr>
<td>SUPERVISOR SIGNATURE</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF SYMBOLS</td>
<td>ix</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>x</td>
</tr>
<tr>
<td>ABSTRAK</td>
<td>xi</td>
</tr>
</tbody>
</table>

## CHAPTER 1: INTRODUCTION

1.1 Background of the study                  | 1    |
1.2 Problem statement                        | 3    |
1.3 Objectives                               | 3    |
   1.3.1 General Objectives                   | 3    |
   1.3.2 Specific Objectives                  | 4    |
1.4 Hypothesis                               | 4    |

## CHAPTER 2: LITERATURE REVIEW

2.1 Functional Visual Acuity (FVA), Fitting and Higher-order Aberration (HOA) | 5    |
2.2 Visual Acuity (VA) and Types of Contact Lenses | 6    |
2.3 Visual Acuity and Manufacturing Process of Contact Lens | 7    |
2.4 Visual Acuity Material of Contact Lenses   | 8    |
2.5 Subjective Vision with Cosmetic Contact Lens
2.6 High and Low Contrast/luminance Visual Acuity
2.7 Pigmentation on Cosmetic Contact Lenses

CHAPTER 3: METHODOLOGY
3.1 Study Design
3.2 Setting
3.3 Sampling
  3.3.1 Sample Size Calculation
3.4 Criteria
  3.4.1 Inclusion Criteria
  3.4.2 Exclusion Criteria
3.5 Research Protocol
3.6 Research Instrument
  3.6.1 Slit Lamp Biomicroscopy
  3.6.2 Bailey Lovie Logmar Chart
3.7 Research Procedure
3.8 Ocular Parameters & Procedure
  3.8.1 Distance Visual Acuity
  3.8.2 Slit Lamp Biomicroscopy Examination
  3.8.3 Over Refraction
3.9 Ethical Approval
3.10 Data Analysis

CHAPTER 4: RESULT
4.1 Demographic Data
4.2 Comparison of Visual Acuity Measured under High &
  Low Contrast Visual Acuity between Cosmetic SCLs &
  Clear SCLs
4.3 Comparison of Mean Visual Acuity for High & Low
  Contrast Visual Acuity
**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.