

TABLE OF CONTENT

APPROVAL PAGE	ii
PLAGIARISM FREE STATEMENT	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENT	vi
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF APPENDIX	x
LIST OF ABBREVIATION	xi
ABSTRACT	xii
INTISARI.....	xiii
CHAPTER I	1
INTRODUCTION	1
A. Study Background	1
B. Problem Formulation.....	3
C. Objective	3
D. Research Authenticity	4
E. Benefit of the Study.....	5
CHAPTER II.....	6
LITERATURE REVIEW.....	6
A. Literature Review	6
1. Anatomy and Physiology of the Eye.....	6
2. Visual Acuity Development	9
3. Refraction Status of the Eye.....	10
4. Contrast Sensitivity	11
B. Theoretical Framework	14
C. Conceptual Framework	15
D. Hypothesis	15
CHAPTER III	16
RESEARCH METHODOLOGY	16

A. Study Design	16
B. Subjects of the study	16
C. Number of Minimal Participant	17
D. Study Variables and Operational Definitions.....	17
E. Measurement Tools and Method.....	18
F. Data Analysis & Statistical test.....	20
G. Ethical Consideration	20
CHAPTER IV	21
RESULT & DISCUSSION	21
1. Characteristics of Subject.....	21
2. The Association between Objective Refraction and Gabor Patch Contrast Sensitivity Testing in Preschool Children.....	29
3. Limitations.....	32
CHAPTER V.....	33
CONCLUSION & SUGGESTIONS.....	33
A. Conclusion.....	33
B. Suggestions.....	33
REFERENCES.....	34
APPENDIX.....	38

LIST OF TABLES

Table 1. Review of Research Authenticity	4
Table 2. Frequency of Subjects by Sex	21
Table 3. Association between Objective Refraction and Contrast Sensitivity.....	29

LIST OF FIGURES

Figure 1. Anatomy of Human Eye	6
Figure 2. Schematic review of factors affecting contrast sensitivity function	14
Figure 3. Schematic review of study concept	15
Figure 4. Visual Acuity (logMAR) within age groups..	22
Figure 5. Contrast Sensitivity within age groups.	24
Figure 6. Spherical Equivalent within age groups.	27
Figure 7. Correlation between Spherical and Contrast Sensitivity	31
Figure 8. Contrast Sensitivity in normal and non normal Spherical Equivalent...	32

LIST OF APPENDIX

Appendix 1. Inform Consent Form	38
Appendix 2. Snellen to logMAR Conversion	42
Appendix 3. Ethical Clearance.....	43

LIST OF ABBREVIATION

Abbreviation Details

cpd	cycles per degree
CSF	contrast sensitivity function
D	diopter
logMAR	logarithm of the minimum angle of resolution
OD/OS	oculus dextrus/oculus sinister
SE	spherical equivalent
UCVA	uncorrected visual acuity