

UNIVERSITI TEKNOLOGI MARA

**PREVALENCE OF REFRACTIVE ERROR AND
ATTITUDE TOWARDS SPECTACLES WEAR
AMONG CAR DRIVERS IN UiTM PUNCAK
ALAM**

NAZIRUL HARIEZ BIN ABDUL WAHAB

**Project submitted in fulfilment of the requirement
for the Degree of
Bachelor of Optometry (Hons)
Faculty of Health Sciences**

July 2015

AUTHOR'S DECLARATION

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

In the event that my dissertation be found to violate the conditions mentioned above, I voluntarily waive the right of the conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

Name of candidate: Nazirul Hariez Bin Abdul Wahab

Candidate I.D. No.:2011610248

Programme: Bachelor of Optometry (Hons)

Faculty: Health Sciences

Research Title: Prevalence Of Refractive Error And Attitude Towards Spectacle Wearing Among Car Drivers In Uitm Puncak Alam

Signature of Candidate: *NW*,

Date: July 2015

ACKNOWLEDGEMENT

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

I also take this opportunity to express a deep sense of gratitude to my co-supervisor, Mr. Mohamad Ezzat Amir Abdul Latif for his cordial support, providing valuable information and guidance throughout the research which helped me in completing this thesis.

I am obliged to other lecturers in UiTM Puncak Alam, especially Mr. 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.

I thank almighty, both my parents, and my beloved course mates of Bachelor of Optometry in UiTM Puncak Alam for their constant encouragement without which this thesis would not be possible

Last but not least, I also would like to thank UiTM in providing Research Entity Initiative Grant 600-RM1/DANA 5/3/REI (12/2014) for financial support in this research. I hope this research able to give benefit either in clinical or for the future research.

TABLE OF CONTENTS

TITLE	PAGE
AUTHOR'S DECLARATION	ii
SUPERVISOR'S SIGNATURE	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vi
LIST OF FIGURES	vii
LIST OF ABBREVIATIONS	x
LIST OF SYMBOLS	xi
ABSTRACT	xii
ABSTRAK	xiii
CHAPTER 1 INTRODUCTION	
1.1 Background Of Study	1
1.2 Problem Statement	2
1.3 Research Objectives	2
1.4 Research Questions	3
1.5 Hypothesis	3
1.6 Significance Of Study	3
1.7 Concept Of Definition	3
CHAPTER 2 LITERATURE REVIEW	
2.1 Driving And Vision	5
2.2 Visual Impairment In Drivers	6
2.2.1 Visual Acuity	6
2.2.1.1 Uncorrected Refractive Error Across	7

ABSTRACT

Purpose: The study purpose was to find out the proportion of the car driver having the refractive error either fully corrected refractive error or uncorrected refractive error and also their attitude towards spectacles wearing while driving. **Methods:** Data was analysed and displayed in percentage and frequency using descriptive analysis. A Chi Square association test was also done to find the association between refractive error correction and visual difficulty at distance. **Results:** Almost half of the participants have reduced visual acuity at distance but are still driving. There was also positive association between refractive error correction and visual difficulty at distance with $p = 0.005$. Forty percent of these drivers did not wear spectacles while driving due to inconvenience of spectacles, uncomfortable of wearing spectacle and vision obstructed by the spectacles' frame. **Conclusion:** Car drivers with reduced habitual distance visual acuity were more likely to have visual difficulty at distance especially in myopic individuals. Some of these drivers were not wearing any spectacles despite having uncorrected refractive error, which most of them claimed of uncomfortable of wearing spectacles and obstructed vision due to spectacles frame.

Key Words: Refractive error, attitude, visual difficulty, distance visual acuity