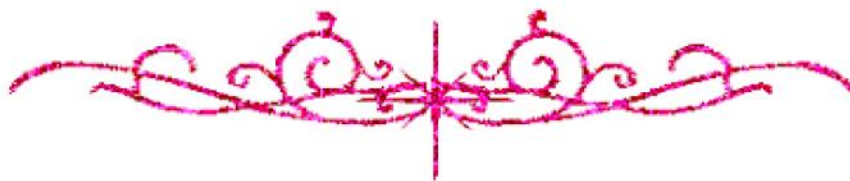


بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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Cairo University

CHARACTERIZING EGYPTIANS' DRIVING BEHAVIOR AND RISK PERCEPTION: A ROAD SAFETY PERSPECTIVE

By

Islam Sayed Aly Mohamad

A Thesis Submitted to the
Faculty of Engineering at Cairo University
in Partial Fulfillment of the
Requirements for the Degree of

MASTER of SCIENCE
in
CIVIL ENGINEERING – PUBLIC WORKS

FACULTY OF ENGINEERING, CAIRO UNIVERSITY
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Title of Thesis:

Characterizing Egyptians' Driving Behavior and Risk Perception: A Road Safety Perspective

Key Words:

Risk Perception, Drivers' Behavior, Traffic Safety, Driver Demographics, Roadway Crashes

Summary:

The goal of this research is to explore the relationship between drivers' behavior, risk perception, and roadway crashes. This research tackles the roadway crashes issues in an Egyptian context by addressing three groups: general drivers, truck drivers, and public transportation drivers to find a way to enhance the safety of the Egyptian roads and to improve Egyptian driving behaviors. Using the Driver Behavior Questionnaire (DBQ) that was developed and customized to capture information about drivers, their behavior, and the risk perception. The analyzed data was further used to predict expected crash frequency using negative binomial models. The DBQ technique combined with risk perception scenarios can be used to understand drivers' characteristics and behaviors. The technique is also useful in collecting information on the crashes they experience to provide valuable input for traffic safety enhancement.

Disclaimer

I hereby declare that this thesis is my original work and that no part of it has been submitted for a degree qualification at any other university or institute.

I further declare that I have appropriately acknowledged all sources used and have cited them in the references section.

Name: Islam Sayed Aly Mohamad

Date: / / 2021

Signature:

Dedication

I am dedicating this research to my Mother and my wife, who shared with me hard times to finish my thesis and did all the possibilities to provide for me a suitable environment to get my full-concentration during my studies.

I am also dedicating this work to my supervisors for continuous support along the masters' journey. I am very grateful for you, and I have to announce that without your support I would not get this final output.

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