



UNIVERSITI TEKNOLOGI MARA

**THE SAFETY OF WOMEN COMMUTERS:
A CASE STUDY IN PENANG**

ROHANA BINTI SHAM

**Thesis submitted in fulfillment of the requirements
for the degree of Master of Science**

Faculty of Business Management

August 2007

Candidate's Declaration

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

In the event that my thesis be found to violate the condition mentioned above, I voluntary waive the right of conferment of my degree be subjected to the disciplinary rules and regulation of Universiti Teknologi MARA.

Name of Candidate	:Rohana Bt Sham
Candidate's ID No	:2004316866
Program	:MSc
Faculty	:Business Management
Thesis Title	:The Safety of Women Commuters :A Case Study in Penang

Signature of Candidate	:.....
Date	:...03/09/07.....

Abstract

Women who commute to work using current bus services tend to rate a higher level of unsafe or fear when they indicate a high level of dissatisfaction towards the current service and infrastructure provision. Added with different time of travelling and different age group of women commuters who depend on different type of bus services (stage bus and work bus) to commute to work, it is also of interest to look at these factors and the effect on the level of safety indication. This study compares the level of safety indication for women traveling in three different urban areas in Penang Island namely Pulau Tikus, Ayer Itam and Jelutong with different transport service and infrastructure provisions. The aim of the study is to gauge a better understanding of the relationships between the satisfaction of the existing transport service characteristics and women travel pattern towards the level of safety indication while travelling at different satisfactory level of infrastructure provision. A key question in this study is whether bus service characteristics, and women travel pattern play a role as a factor affecting the level of safety indication when controlling for the infrastructure provision in their respective areas.

Finding from the correlation and partial correlation analysis indicated that different types of bus service possess different service characteristics that affect their level of safety. However for women travel pattern characteristics like 'time' and 'age' of women traveling, both of the factors had been identified as significant factors that affect level of safety even after controlling for the infrastructure provision for both the stage bus and work bus users. Further comparison on the service, infrastructure and level of safety for different location studied were being carried out through one-way Analysis of Variance.

A passenger survey underpin the methodology employed, where the sample came from the three major areas to identify the real factors contributing towards their fear level. The data collected were analyzed by means of a statistical package, SPSS. The study concludes with a discussion of results and suggestions for future research. The study is a contribution to a relatively urban area scenario in the geography of crime and public transport supply with women as a dominant traveller.

Acknowledgement

Many people have been of great assistance to me while I was pursuing my Masters Degree. I would like to first acknowledge Universiti Teknologi Mara for sponsoring my studies. Also, I am appreciative of the invaluable input, encouragement and support throughout the process provided to me by my main supervisor, Associate Professor Sabariah Mohamad. I have also been very fortunate to have a co-supervisor from the Statistics Department, Faculty Of Information Technology and Quantitative Sciences, Uitm, Associate Professor Dr. Puzziawati Ab Ghani who withstood my lack of academic preparedness and provided the perfect mix of constructive criticisms from other points of view with an ongoing encouragement that helped improved my research, interest, and writing. Special thanks also goes to lecturer of Business Management, Associate Professor Dr. Haji Mohd Faudzi Mohd Yusoff and Associate Professor Norlida Abdul Hamid who have graciously given their time, wisdom, and support to me during my endeavor. Special recognition also goes to Pn Rosena Mohd Ali, Associate Professor Dr. Maznah Ghazali and Associate Professor Normah Dali who have given me a thoughtful feedback and support for my educational growth.

No thesis or educational foundation would be complete without the time commitment and support from family and friends. Thank you to my beloved mother Pn]

], and sisters Suriati and Mashita for the support and sacrifices made for me. Not to forget my aunty, Barakatunisa from Penang Island who have helped me through the data collection session. Not to forget mamu Karim and mami Nahar who have spent their precious time to make my research a meaningful. I would also like to thank individuals who have since graduated for their help, advice, and friendship along the way who made the process even more bearable. Most notably these individuals include Norlida Abd Manab from Universiti Utara Malaysia who has provided me with lots of encouragement that planted a seed to continue with my educational growth. Thank you to my beloved and caring friends, Syamsul, Parsyah, Balqis and Jeyasri who have been my number one cheerleaders during my first tender month and years of life. Special thanks also goes to Mohd Amin for the slide guidance. Last but not least, I would also like to thank the editor, Pn Nor Azah from Language Centre Uitm, for being part of the process in my research.

Table of Contents

Abstract	ii
Acknowledgement	iii
Table of Contents	iv
List of Tables	x
List of Figures	xii
List of Plates	xiii
List of Abbreviations	xiv

CHAPTER ONE: INTRODUCTION

1.0	Background of the Study	1
1.1	Problem Statement	3
1.2	Objectives of the Research	5
1.3	Research Questions	6
1.4	Justification of the Research	6
1.4.1	Why Women?	6
1.4.2	Why Bus?	9
1.4.3	Why Urban Area?	11
1.4.4	Why Penang Island?	12
1.5	Significance of the Study	16
1.5.1	Contribution to The Body of Knowledge	16
1.5.2	Contribution Towards The Transport Industry	17
1.5.3	Benefit to The Government	17
1.5.4	Benefit to The Planners	18
1.5.5	Benefit to The Police Department	18
1.5.6	Benefit to The Society	19
1.6	Scope and Limitation	20
1.7	Definition of Key Term	21