CHAPTER ONE INTRODUCTION

1.1 BACKGROUND

Traffic regulations are rules or requirements and guidelines launched by the government sector in order to keep people who use vehicles on the road in order. The strategy of all traffic regulations is to provide safe vehicle use for vehicle drivers as well as for pedestrians.

Road traffic injuries were the second leading cause of death worldwide in 2002 and eighty per cent of the deaths occurred in low and middle-income countries (World Health Organization [WHO], 2002). According to the World Health Organization's record, almost three times (2.7) more males compared to females die from road traffic injuries globally (WHO, 2002, ¶ 2). In addition, WHO also reported that in 2000 the deaths from all causes in Thailand were about 213,742 for men and 151,841 for women. Of these, the death tolls from motor vehicle traffic accidents were 7,529 (3.52 per cent) for men and 1,870 (1.23 per cent) for women (WHO Statistical Information System, 2000). These numbers have been in line with the report of the Royal Thai Police that the road traffic injuries from all provinces in March, 2007 totalled 9,054 and the number of the deaths from those injuries were 956 (10.56 per cent) for men and 282 (3.11 per cent) for women (Royal Thai Police, 2007).

As we know that Bangkok, like many other big cities across the world, has had traffic problems for a long time. One of the reasons for the traffic congestion that leads to road accidents is the driving behavior of drivers. Some drivers who are patient with congested traffic may comply well with traffic regulations. On the other hand, those who want to get through the traffic to reach their planned destinations may not respect or be concerned with the traffic regulations much. This has resulted in traffic violations among both male and female populations and this has not only caused the deaths and injuries for many drivers but also pedestrians (Royal Thai Police, 2007). According to the research of the Department of Research and Development, Royal Thai police, in 1991, most people answering the questionnaires

thought that traffic violation was the most important factor causing the road accidents (เกษียร วรศิริ และคณะ, 2544).

From the reports of WHO and Royal Thai Police above, it seems that the death of males and females from road accident is quite different. There are differences in driving behaviors between male and female drivers involving car accidents on roads. Males are significantly more at risk than female drivers in terms of crash rates (The Social Issues Research Center, 2004). This is because psychologically men and women have differences in perception and recognition. Storie's study (as cited in Veevers, 1982, p. 177) reports that the accident patterns between them are somewhat different as women have more difficulty with perceiving hazards and also with right turns; on the other hand, men have more difficulty with excessive speed.

Besides, men and women also have some differences in their cognitive style. For example, a study in the United Kingdom revealed that men are likely to drive with one hand because they consider their cars as parts of themselves while women drive with both hands because they consider their cars as being more detached (Massey, 2007, ¶ 8-9). Additionally, some psychologists stated that "females are more global in the way they perceive and solve problems, whereas males are more analytical" (Tavris & Wade, 1984, p. 53). For instance, it is quite different when talking about the way men and women give directions. Steven Petersen, a Washington University researcher, said "My wife and I are completely different on this one. If we have to tell someone how to get to, say the library, she does landmarks-the furniture store, the gas station-whereas I say, go a mile or so on this street, turn west, like that." (Blum, 1997, p. 56).

These psychological differences are absolutely related with the driving behavior among men and women since the height of rule breaking behavior is significantly higher in men than in women. Men are considered more aggressive, and tend to violate traffic regulations, speed limits, drinking and driving restrictions, etc. (The Social Issues Research Center, 2004). According to the social role model of Eagly and Wood's study (as cited in Krahé, 2005, p. 540), the gender role socialization also derives from the individual's social learning experiences as men are

rewarded for being assertive and dominant and women for being caring and submissive which will certainly relate to the difference in aggression of both sexes.

In 1996, an analysis taken in Germany showed that 69 per cent of accidents causing more serious injuries and fatalities involved men. Moreover, men also violated traffic regulations more than women with the ratio of 5:1 (Krahé, 2005). The above reports have been in line with statistics from Royal Thai Police in the table below showing the deaths and injured victims as a result of traffic accidents in Bangkok from 2003-2006.

Table 1. Number of Deaths and Injured Victims in Bangkok (กองบัญชาการตำรวจนครบาล)

Year	Dead		Gravely Injured		Slightly Injured		Total
	Male	Female	Male	Female	Male	Female	1000
2003	710	123	1,343	470	14,818	5,616	23,080
	(3.08%)	(0.53%)	(5.82%)	(2.04%)	(64.20%)	(24.33%)	(100%)
2004	680	135	1,497	470	15,556	5,784	24,122
	(2.82%)	(0.56%)	(6.20%)	(1.95%)	(64.5%)	(23.97%)	(100%)
2005	558	126	1,707	634	14,779	5,946	23,750
	(2.34%)	(0.53%)	(7.20%)	(2.67%)	(62.23%)	(25.03%)	(100%)
2006	569	86	1,613	577	14,601	5,673	23,119
	(2.46%)	(0.37%)	(6.98%)	(2.50%)	(63.15%)	(24.54%)	(100%)

Note. From The Number of Death and Victims in Bangkok (กองบัญชาการดำรวจนครบาล), by Royal Thai Police. Retrieved July 10, 2007, from http://ftp.police.go.th/statistic/traffic_main.htm

Besides, age is another important factor linked between the gender and aggressive driving. In 1994 in Germany, young drivers between 18-25 years were reportedly involved in 30 per cent of the accidents. In the United Kingdom, a study showed that at the age of 18, male drivers tended to be involved in accidents 2.4 times higher than female drivers. However, by the age of 38, the ratio had decreased to 1.8 (cited in Krahé, 2005, p. 539). According to a study by Lajunen and Parker (as cited in The Social Issues Research Center, 2004, p. 9), aggressive driving by men was significantly related with the lower age group while among women, age was a much less significant factor. Moreover, Stradling and Meadows's study (as cited in The Social Issues Research Center, 2004, 2004, p. 9) reported that "while aggressive

driving in males does, indeed, decline with age, the levels are greater than those for females in all age categories". The mentioned figure seems to be in line with the WHO Thailand report for the cause of death in 2000 detailing by the age of victims killed in traffic accidents. 2,232 (29.64 per cent) men aged between 15-24 years old were killed in compared with 362 (19.36 per cent) women, and the rate declined when they got older in both genders (WHO Statistical Information System, 2000).

In terms of violations of traffic regulations, a study in Islael by Yagil (as cited in The Social Issues Research Center, 2004, p. 11) conducted with university students showed that women had more concern about obeying traffic laws and that they evaluated them positively. They tended to view the content of traffic law as important, clear and reasonable which results in "a stronger sense of obligation to obey the traffic laws. Unlike women, men tended to "overestimate their driving ability and felt more confident in complying selectively with traffic laws". They also seemed to evaluate traffic laws negatively and to underestimate the risks associated with traffic violations (p. 12).

In Thailand, the Department of Land Transport is the only government sector providing driving licenses for new drivers. Although there are many driving schools operating now to train new drivers how to drive, the Department of Land Transport is still responsible for providing driving licenses to those new drivers. Currently, there is the first private driving school called UPD Guarantee Driving School, accredited by the Department of Land Transport, which runs driving courses, including, for instance, traffic regulations for the new drivers. The attendants who pass the written and driving tests, closely monitored by the government officers, will have their driving licenses provided by the school (จันทร์จิรา พี่จริริยะ, 2550). In the near future, this kind of school will certainly be established more and more across Thailand.

As there are gender differences in complying with many aspects of traffic laws such as driving behavior, psychological differences in perception and recognition, and cognitive style, this study will find out differences between men and women in complying with traffic regulations in Bangkok. The data will be randomly collected by focusing on single working male and female drivers who have different levels of driving experience. The data will be collected from subjects aged between 25-45

years old who usually drive to work. The result from this study can help the government sector and even private driving schools obtain more information about driving characteristics of men and women, which in turn will provide them with some insights to develop the relevant courses for new drivers, both men and women, on the traffic regulations.

1.2 STATEMENT OF THE PROBLEM

- 1.2.1 What are the different characteristics between men and women regarding knowledge about traffic regulations?
- 1.2.2 What are the differences between men and women regarding the degree of compliance with traffic regulations in Bangkok?

1.3 OBJECTIVES OF THE STUDY

1.3.1 Main Objective

To describe differences between men and women in Bangkok in terms of traffic regulation compliance and knowledge of traffic regulations.

1.3.2 Sub Objective

To describe characteristics of men and women who drive vehicles on the road.

1.4 VARIABLES AND DEFINITIONS

This study was conducted to find the differences between men and women in complying with traffic regulations in Bangkok. Dependent and Independent variables are as follows:

1.4.1 Variables

Figure 1. Conceptual framework of differences between men and women in complying with traffic regulations in Bangkok.

Independent Variables - Sex (men or women) - Age - Education - Driving experiences Dependent Variables - Differences in characteristics of driving - Degree of compliance with traffic regulations

1.4.2 Definitions

The conceptual definition, operational definition, and indicators are as follows:

	Conceptual	Operational		
Variable	definition	definition	Indicator	
Independent Variable				
Men	Biological differentiation of sex that is opposite to women	A person who was born as a man	Indicated by a person or having shown an identity as a man.	
Women	Biological differentiation of sex that is opposite to men	A person who was born as a woman	Indicated by a person or having shown an identity as a woman.	
Age	The duration that one has been living starting from birth	Number of years a person has lived since that person was born	Stated by the respondents who are between 25-45 years old by their ID card or by themselves	
Education	Number of years of attending school	The level of education which the respondents earn	Stated by the respondents who hold Vocational Certificate to higher than Master's Degree or others	
Driving experience	The duration that one starts to drive until present	Number of years of driving	Stated by the respondents having driving experience from 1-30 year(s)	
Dependent Variable				
Difference in characteristics of driving	Characteristics differences of people when driving	Differences of knowledge of traffic regulations and traffic signs of both sexes	Indicated by the correct answer about knowledge of traffic regulations and traffic signs provided by the respondents of both sexes	
Degree of compliance with traffic regulations	The way that one follows the regulations	The characteristics that drivers have when they drive in line with the traffic regulations	Specified by the high score from the Likert scale the respondents gain after finishing the questionnaire	

1.4.3 Research Hypotheses

The hypotheses in this study are the following:

Hypothesis 1: Women are more likely to comply with traffic regulations than men.

Hypothesis 2: Men are more likely to have more knowledge about traffic regulations and traffic signs than women.

Hypothesis 3: Younger women are less likely to be good drivers.

1.5 SCOPE OF THE STUDY

This research focuses on single working men and women aged between 25-45 years old working in companies located on Rama I Road, Wireless Road, Silom Road, Sathorn Road, Rama III Road, Rama IV Road, Phaholyothin Road, and Bangna Road. This research does not cover all the knowledge of traffic regulations and traffic signs. Only basic traffic regulations and traffic signs are included in the study. Knowledge of traffic regulations, traffic signs, and the driving behavior of the participants are based on the theory only. Observational method is not included in this study.

1.6 SIGNIFICANCE OF THE STUDY

- 1.6.1 The results of the study will show the difference between men and women in terms of the level of knowledge about basic traffic regulations and traffic signs.
- 1.6.2 The results of the study will show the different characteristics between men and women when they drive their cars.
- 1.6.3 The results of the study will provide some insight to the government sector and even to private driving schools about the differences of driving characteristics of both sexes.
- 1.6.4 The results of the study will be useful to the government sector or private driving schools to concentrate more about those differences and generate more suitable driving courses for new drivers.

1.7 ORGANIZATION OF THE STUDY

The study is divided into five chapters as the following:

Chapter 1 is the introduction. It includes background of the study, statement of the problem, objectives of the study, variable and definitions, scope of the study, significance of the study, and organization of the study.

Chapter 2 includes review of the literature consisting of related theories, concepts, and relevant researches.

Chapter 3 is methodology. It describes details about subjects, materials, procedures, and data analysis.

Chapter 4 presents the results of data analysis.

Chapter 5 provides conclusions, discussions, and recommendations. It includes a summary of the study, a summary of the findings, discussions, conclusions, and recommendations for further research.