

# FACTORS AFFECTING THE SAFETY OF USING VAN : COLLAGE OF LOGISTICS AND SUPPLY CHAIN

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## ABSTRACT

This research the objective is to study the factors affecting the safety of using the van service within college of logistics and supply chain. Including studying the service behavior of van drivers and study recommendations to improve a safe and standardized service model. And to improve the safety of using the van service.

The representative samples in this research are 90 the user. Questionnaires are used as research tool which is evaluated with Statistical Package for the Social Sciences : SPSS Analyze the data using statistical methods, frequency distribution, percent, average and standard deviation (S.D.).

The research results were found that, survey information and opinions of the van users within college of logistics and supply chain in terms of behavior of the van driver poses a safety risk most of them are low. Represents the driver behaves well. Drive according to traffic rules, use the driving speed not exceeding the legal limit, have good driving manner.

Suggestions for improvement and improvement of vehicle service quality found that most of the van users think that the drivers are safe, according to traffic rules.

## INTRODUCTION

Land transport plays a very important role, especially in passenger transport. Due to the number of people using the bus service The proportion is higher than using other types of services. which is related to daily life including traveling to various places, working, studying, and social activities Department of Land Transport, (2010) If considering people's travel in Bangkok Can be divided into 2 types: traveling by private car. and traveling by public bus For example, public buses include public buses (BMTA), shared vans, and minibuses, etc. Non-regular buses include taxi, motorcycle taxi, and tuk tuk etc. Thai Publica, (2015)

From the travel safety survey of the Labor Statistics Group. The Bureau of Economic and Social Statistics (2010) found that the age group that had the most accidents was 18-24 years old, with motorcycles being the vehicle that caused the most accidents. Accounting for 88.3%, it is necessary to travel to work. travel visiting relatives Picking up and dropping off family members going to study and job applications, respectively. considering the causes of accidents, it was found that the main cause was the driver's lack of discipline. Second is the environment, such as rough roads and insufficient lighting. Poor visibility, etc.

Kawee Kuekasembun (2002) Factors that cause accidents are divided into 4 factors: Driver, Vehicle, Road, and Environmental Factors. The nature of the accident may occur from a single factor. or a combination of factors which can be summarized Details of the factors in each area are as follows (Krit Chetwanna and Supachai Horwimanporn, 2011)

Accidents that occur cause a great deal of loss of life and property. both to the victims and relatives of the victims Especially accidents that happened with buses. Because there are many passengers From a survey of the Thailand Development Research Institute (TDRI, pp. 6-7, 2013) on the effects of bus accident victims, it was found that the main effects occurred on the body and mind. which has a continuous impact on living and working as follows (Thailand Development Research Institute, 2013)

Physical and mental effects of the victims who are said to have been physically affected from an accident with victims accounting for 62 percent and relatives of victims 77 percent.

Impact on life Accident victims reported that they incurred increased costs for post-accident physical therapy. There were 15 percent of accident victims and 18 percent of victims' relatives, and victims had to leave work after having an accident. The victims accounted for 10 percent and relatives of the victims accounted for 11 percent.

It can be seen that 62 percent of the victims suffered physical effects, such as leg pain, hand pain, and abnormal walking, while 77 percent of the victims' relatives suffered psychological effects, such as poor mental health. Depressed And finally, there is grief until death. Besides the loss way of life and property Accidents also cause economic losses for the country. By Professor Dr. Suchatwee Suwansawat (2015) President of the Engineering Institute of Thailand under the Royal Patronage. (EIST) revealed that Results of a study of the value of accident damages in Thailand The value of economic losses each year is as high as 232,000 million baht or 2.8 percent of the country's gross product (Pattakarn Chiang Noi, 2015).

## **OBJECTIVE**

1) To study the factors affecting safety in using van services. College of Logistics and Supply Chain Suan Sunandha Rajabhat University.

2) To study the service behavior of van drivers. Logistics College and supply chain Suan Sunandha Rajabhat University.

3) Study suggestions to improve the service delivery model that is safe and standardized. and to raise the level of safety in using van services Within the College of Sustainable Logistics and Supply Chain.

## **RESEARCH METHODOLOGY**

In research on factors affecting safety in using van services within the College of Logistics and Supply Chain and Supply Chain. Suan Sunandha Rajabhat University The researcher used data from 2 sources: Primary Data and Secondary Data as follows. 1) Primary data collection The researcher has determined the target group as follows: the population and sample include service providers, professors, and staff of the College of Logistics and Supply Chain. Suan Sunandha Rajabhat University, fiscal year 2024, totaling 90 people. The researcher made a QR Code questionnaire on factors affecting safety in using van services within the College of Logistics. and collect information from users who request van service From October - December 2023, 2) Secondary data The researcher has studied research related to assessment in various areas. to bring information to conduct this research.

Data analysis In order to achieve the objectives set in this study. The researcher uses a statistical analysis method to analyze the data, which is Mean, Percentage and Standard Deviation.

## **RESULTS**

From the study, factors affecting safety in using van services within the College of Logistics and Supply Chain were analyzed. Suan Sunandha Rajabhat University Nakhon Pathom Campus, number of 90 people, the results are shown in the following table.

**Table 1 :** Number and percentage of van users within the College of Logistics and Supply Chain Suan Sunandha Rajabhat University Nakhon Pathom Campus

Personnal Information		Frequency	Percentage
Gender	Man	32	36.00
	Woman	58	64.00
<b>Total</b>		90	100.00
Position	Executive	-	-
	Lecturer	16	18.00
	Officer	74	82.00
<b>Total</b>		90	100.00
Frequency of using van service	Once in a while	22	25.00
	1-2 days a week	39	43.00
	3-4 days a week	29	32.00
	Use every day	-	-
<b>Total</b>		90	100.00

From Table 1, it is found that the majority of the sample were female, 58 people, accounting for 64 percent, male, 32 people, accounting for 36 percent. There are 16 personnel in teaching positions, accounting for 18 percent. There are 72 staff members, accounting for 82 percent. and the frequency of using the service: Rarely, 22 people accounted for 25 percent, 1-2 times a week, 39 people accounted for 43 percent, 3-4 times a week, 29 people accounted for 32 percent.

**Table 2 :** Show average and standard deviation of van users in terms of driving speed of the van driver Within the College of Logistics and Supply Chain Suan Sunandha Rajabhat University Nakhon Pathom Campus

Driving speed	Average	SD	Satisfaction
1) Frequent use of high speeds in driving	1.42	0.54	Low lever
2) Driving at high speeds in busy traffic	1.16	0.36	Low lever
3) Driving faster than the legal limit	1.00	0.00	Least level
4) Accelerating at an intersection with traffic lights	1.22	0.47	Low level
5) Acceleration increases when a car behind is about to overtake.	1.16	0.36	Low level
<b>Total</b>	1.19	0.25	Low level

From Table 2, it is found that the overall driving speed is at a low level. And when considering each aspect, it was found that it was at a low level in every aspect, except for driving faster than the speed specified by law. which is at a least level.

**Table 3 :** Show average and standard deviation of van users in terms of General driving behavior of the van driver Within the College of Logistics and Supply Chain Suan Sunandha Rajabhat University Nakhon Pathom Campus

General driving behavior	Average	SD	Satisfaction
1) Changing lanes frequently while driving	1.42	0.58	Low lever
2) Stopping or overtaking in close proximity	1.10	0.30	Low lever
3) Driving at the rear or frequent use of horn signals	1.01	0.10	Low level
4) Driving using the shoulder lane (left/right) while stuck in traffic.	1.02	0.15	Low level
5) Illegal driving or breaking traffic rules	1.00	0.00	Least level
<b>Total</b>	1.19	0.25	Low level

From Table 3, it is found that the overall General driving behavior is at a low level. And when considering each aspect, it was found that it was at a low level in every aspect, except for Illegal driving or breaking traffic rules which is at a least level.

**Table 4 :** Show average and standard deviation of van users in terms of personal behavior of the van driver Within the College of Logistics and Supply Chain Suan Sunandha Rajabhat University Nakhon Pathom Campus

<b>Personal behavior</b>	<b>Average</b>	<b>SD</b>	<b>Satisfaction</b>
1) Using communication devices such as telephones	1.37	0.48	Low lever
2) Lack of physical readiness	1.00	0.00	Least level
3) Have symptoms of intoxication It smells like alcohol.	1.00	0.00	Least level
	1.07	0.25	Low level
4) Using impolite words	1.18	0.38	Low level
5) Ignorance of the route			
<b>Total</b>	<b>1.19</b>	<b>0.25</b>	<b>Low level</b>

From Table 4, it is found that the overall Personal behavior is at a low level. And when considering each aspect, it was found that it was at a low level in every aspect, except for Lack of physical readiness and Have symtoms of intoxication It smells like alcohol which is at a least level.

**Table 5 :** Number and percentage of factors affecting road safety from van users within the College of Logistics and Supply Chain. Suan Sunandha Rajabhat University Nakhon Pathom Campus

Factors that cause risks to safety for use of cars uses the road the most.

<b>Factors that cause risks to safety for use of cars uses the road the most.</b>	<b>Number</b>	<b>Percentage</b>
1) Driving speed	38	42.00
2) General driving behavior	33	37.00
3) Personal behavior	-	-
4) Vehicle condition	1	1.00
5) Road conditions	18	20.00
<b>Total</b>	<b>100</b>	<b>100.00</b>

From Table 5, it was found that the factor that caused the greatest risk to road safety was driving speed for 38 people (42 percent), followed by general driving behavior for 33 people ( 37 percent), 3rd place is road condition, 18 people (20 percent), and last place is car condition, 1 person (1 percent).

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