This file has been cleaned of potential threats.

If you confirm that the file is coming from a trusted source, you can send the following SHA-256 hash value to your admin for the original file.

e582d20ce28e783ec51ce937af3b71b03a2e980e67392aa242b6711c73733a75

To view the reconstructed contents, please SCROLL DOWN to next page.

# COGNITION AND BEHAVIOR OF MOTORCYCLING RELATE TO SAFETY MANAGEMENT AT COLLEGE OF ALLIED HEALTH SCIENCES, SUAN SUNANDHA RAJABHAT UNIVERSITY, SAMUT SONGKHRAM CAMPUS

## **ABSTRACT**

The research focuses on the knowledge, comprehension, and behavior of students' driving, specifically in relation to the management of driving safety among students. The objectives were to 1) study personal background factors, including motorcycle riding experience and accidents resulting from operating a motorcycle. 2) expertise in motorcycle driving and cognition; and 3) motorcycle driving behavior. The study included a total of 260 people. The data analysis employed descriptive statistics, including Chi-Square and Pearson correlation statistics. The research findings indicated that the majority of female respondents were aged between 20 and 21 years old in the 3rd year of study. They have had driving experience ranging from 1 to 3 years and have never been involved in a motorcycle accident. With a considerable amount of driving experience, they possess a high level of proficiency in operating a motorcycle. The proficiency in motorcycle operating and knowledge were determined to be significantly elevated. Upon analyzing the conduct and attitude of motorcycle drivers, it was discovered that the majority were cognizant of their carelessness while operating motorcycles.

**Keywords:** Cognition, Behavior of Motorcycling, Safety Management

#### INTRODUCTION

The educational institution and student accommodation at the Samut Songkhram campus are situated in different areas. Students live in student dormitories, situated at a distance from educational establishments While traveling from the educational institution to the accommodation The majority of individuals will commute by operating a motorcycle. Utilizing Rama II Road, the primary thoroughfare. Numerous vehicles utilize Rama II Road. The road is known as National Highway No. 35, namely the section between Dao Khanong and Wang Manao. The route traverses the provinces of Bangkok, Samut Sakhon, and Ratchaburi. It serves as the primary thoroughfare connecting to the southern part of Thailand. It is primarily utilized for transportation to the southern provinces. Intended for the transportation of diverse commodities. Besides trucks, there are various other categories of vehicles. It operates at high

velocity. Furthermore, accidents frequently occur. The majority of cars do not pay significant attention to motorcycles. Particularly, the entrances and exits of alleys or gas stations are prone to accidents involving students. [1].

To prevent accidents on the roadway in Samut Songkhram Province, measures have been implemented to establish checkpoints. Administer citations to individuals who fail to adhere to traffic regulations at community checkpoints. A collaborative command center has been developed with the aim of preventing and reducing land and water disasters during the upcoming 2023 New Year celebration. [2]. Including collaborative areas of inspection. Public service points are present in every location. During the strict monitoring period, there are officers stationed at various points to facilitate the convenience of citizens on their travels. Employing the marketing title "New Way of Life" Operate your vehicle with caution and adhere to all traffic regulations to ensure your safety and the safety of others. Zero incidents occurred [3].

In terms of driving a motorcycle, Accidents among students at the College of Allied Health Sciences Samut Songkhram Campus in the past 3 years found that there were students who had accidents while driving motorcycles. There is an upward trend with a total of 8 accidents occurring from 2015 - 2019. It is evident from the foregoing that the issue of traffic accidents leads to the loss of the nation's budget, particularly prevalent among adolescents and students who are pursuing their education. The working-age population is a major driving factor for the nation's future. This is due to the limited capacity of teenage drivers to evaluate hazardous traffic conditions. [4] Furthermore, individuals who have a strong belief in their own driving abilities are more likely to be at an increased risk of being involved in traffic accidents [5].

It is unavoidable for accidents to occur when using motorcycles for regular transportation. To promote awareness and caution while operating a motorcycle safely. To enhance the safety awareness of the motorbike riders described earlier. It is important to depend on effective administration that is thorough and specific to the needs of consumers. Hence, the objective of this researcher was to study a safety management model and tools for motorcycle driving among students in the College of Allied Health Sciences, a population that experiences a significant fatality rate due to motorcycle traffic accidents. [6] As a preventative measure to avoid motorcycle accidents [7].

#### **OBJECTIVE**

The objective was to 1) study personal background factors, including motorcycle riding experience and accidents resulting from operating a motorcycle. 2) To acquire expertise in motorcycle driving and cognition and to study motorcycle driving behavior.

# **METHODOLOGY**

This study is explanatory research on the population and sample. is a student at the College of Allied Health Sciences Suan Sunandha Rajabhat University Samut Songkhram Campus, with 740 people. Applying Taro Yamane's calculation algorithm for sampling, the method of proportional random sampling was employed. Randomly arranging ratios based on the area of specialization. and the random distribution of proportions based on the year level. There was partitioned into 2 sections, as outlined below:

## Sub-Section 1

Apply descriptive statistics, including measures including the mean, percentage, and standard deviation. Utilized for data analysis to clarify facts related to the personal background of students. Utilize a scale of estimation.

#### Sub-Section 2

The statistics utilized are as follows: Analyze the correlation between gender and age. Level of education and experience in motorcycle driving Motorcycle accidents and motorcycle safety management using Chi Square statistics. 2) Study the correlation between understanding and awareness of safe motorcycle driving and safety management in motorcycle riding using Chi-Square statistics. 3) Examine the correlation between motorcycle driving behavior and safety management in motorcycle riding. Using Pearson's Product Moment Correlation Coefficient.

## **RESULTS**

The first study about personal background factors, including motorcycle riding experience and accidents resulting from operating a motorcycle, found that 67.69% of the people participating in the study were female, aged between 20 and 21, with 50.77% being juniors. 32.31% had driving experience of 70–77%, and 73.84% had never been in a motorcycle accident.

The second objective was expertise in motorcycle driving and cognition. The results showed that 92% of individuals with knowledge and understanding of driving a motorcycle wear safety helmets, 73% follow road safety inspections, and fewer individuals follow traffic laws. Refer to Table 1 for more detail.

**Table 1** Knowledge and understanding of driving a motorcycle (n=260)

Knowledge and understanding of-driving a motorcycle	Know	Don't know	Percent
Wearing a safety helmet	239	21	92
Following traffic rules	208	52	80
road safety inspections	190	70	73

So, the third objective was to study motorcycle driving behavior. The study on motorcycle driving behavior revealed that safe driving scored an average of 3.43, whereas carelessness in driving a motorcycle scored 1.80 on average, and going faster than the legal limit scored 2.14. Refer to Table 2 for additional information.

**Table 2** Motorcycle driving behavior level (n=260)

Motorcycle driving behavior	$\overline{x}$	S.D	Interpret results
Driving faster than the legal limit.	2.14	0.692	Low
Carelessness in driving a motorcycle	1.80	0.618	Very low
Driving safely	3.43	1.361	High

The study on motorcycle safety management found that driver and motorcycle preparation scored moderately, while knowledge of traffic laws scored quite low. Reference the below table 3 for further details.

**Table 3** Safety management when driving a motorcycle (n=260)

Safety management when driving a motorcycle	Yes	No	Interpret results
Preparation of drivers and motorcycles	216	44	Moderate
Knowledge about traffic laws	182	78	Low

Proficiency in motorcycle driving directly impacts safety management while driving. Significantly, in a statistical context, the Pearson correlation coefficient (r) is 0.358, indicating a weak positive link. If the level of understanding and knowledge of motorcycle driving increases, it will enhance driving safety management. Refer to the following table 6 for additional detail.

**Table 4** The relationship between knowledge and understanding of motorcycle operation directly impacts the management of driving safety. (n=260)

Description	Level of knowledge and understanding of motorcycle	Driving safety management		
	driving	management		
- Level of knowledge and	1	0.358**		
understanding of motorcycle				
driving				
- Driving safety management		1		

Remark \* means that there is statistical significance at the level 0.05

# **CONCLUSION AND FUTURE WORK**

The research results showed that personal background had more driving experience and have never been in a motorcycle accident. They have extensive driving experience and are highly skilled at riding motorcycles. The skill in motorcycle operation and knowledge were shown to be greatly improved. After examining the behavior and mentality of motorcycle drivers, it was found that most were aware of their impulsivity when riding motorcycles, which directly impacts safety management while driving. The analysis of the relationship between motorcycle driving behavior and driving safety management found that the behavior of driving a motorcycle has a relationship with driving safety management.

Proficiency in motorcycle driving directly impacts safety management while driving. Significantly, in a statistical context, the Pearson correlation coefficient (r) is 0.358, indicating a weak positive link. If the level of understanding and knowledge of motorcycle driving increases, it will enhance driving safety management.

So, the next study should analyze more factors influencing the safety management of motorcycle driving behavior and their relationship with driving safety management. Due to the study analysis, the relationships should do more for motorcycling accident history relating to personal background.

## **ACKNOWLEDGEMENTS**

I wish to express my sincere thanks, big gratitude and deeply appreciation to both the Language Institution and the Research Institution, Suan Sunandha Rajabhat University for many good policy, Financial and aids, and manpower support. Many thanks to the director of the Language Institution, Suan Sunandha Rajabhat University, for his generous time to support me in writing this paper from the beginning to the end.

#### REFERENCES

- [1] Thaipbs, "Get to know Rama 2 Road, the main road to the southern region, and the problem of "repair-build," https://www.thaipbs.or.th/news/content/318027, 2022.
- [2] Samut Songkhram Province, "Opening a joint operations center to prevent and reduce land and water accidents during the New Year Festival 2023," https://samutsongkhram.prd.go.th/ th/content/category/ detail/ id/9/iid/146351, 2023.
- [3] Prueksaritanon, S., Chaikunplume, N., Phlirak, N. and Wongsutthilert, A. "Driving prototype Intelligent safety for preventing head injuries from road accidents Motorcycles in Saen Suk Municipality," http://dspace.lib.buu.ac.th/xmlui/handle/1234567890/4475, 2021.
- [4] Suwanklang, N. "Motorcycling behavior for accident prevention of Suan Sunandha Rajabhat University Student," Journal of Public Administration and Social Management, vol 30;2(1): pp 49-57, May 2020.
- [5] Deery, H. A, "Hazard and risk perception among young novice drivers. Journal of Safety Research," vol. 30(4), pp. 225–236, December 1999.
- [6] Chen, S., Mulgrew, B. and Grant, P. "A clustering technique for digital communications channel equalization using radial basis function networks," IEEE Trans. on Neural Networks, vol. 4, pp. 570-578, July 1993.
- [7] Rojanabenjakun, P., Ounprasertsuk, J., Phuksue, W., Sillabutra J., Sawetsenee, K. and Khonraengdee, P. "The Effectiveness Using Management Tools To Develop Public Relations Of Medical And Public Health Secretary Of College Of Allied Health Sciences, Suan Sunandha Rajabhat University" Journal of Namibian Studies: History Politics Culture, vol. 33, pp.1420-1435, May 2023.