

Factors for Non-Compliance to Seat Belt and Helmet in UTM Skudai Campus

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ABSTRACT

Based on Malaysian Institute of Road Safety Research (Miros), the safety of road users can be improved by 60% by wearing a seat belt and helmet. So, a survey has been conducted to get the data of compliances for the rule of wearing seat belts and helmet in Universiti Teknologi Malaysia (UTM) Skudai campus. A survey was done on 31 respondents which include the staffs and students in UTM through a google form questionnaires. The purpose of doing this is to identify the main factor of non-compliance of wearing seat belt and helmet, to increase the safety awareness among UTM resident and to ensure all the UTM resident follow the rules. From the survey, the main factor the UTM resident for non-compliance of wearing a helmet and fasten seat back is due to the lack of safety awareness, especially when they go somewhere nearby. To reduce the problem of noncompliance of rule of wearing helmet and seat back, some action needs to be taken like fined for who do not obey the rule.

Keywords: *Helmet, Seat Belt, Accidents*

1. INTRODUCTION

An accident that leads to road traffic has become one of the main reasons which caused injuries and deaths in Malaysia. Malaysian Institute of Road Safety Research (Miros) director-general Prof Dr Wong Shaw Voon said that, a severe injury that may cause in deaths especially for the motorcyclists that who fail to wear helmets and who fail to fasten seat belts for a passenger in a car [1]. During the accidents, the road users are thrown out or knock into hard objects and cause critical injuries or death to them. Every year, there are up to 30 million people injured, and about 1.2 million people were deaths due to the road traffic accidents. Most of the traffic in Malaysia involved motorcycles, cars, lorries and buses. Over 100,000 people, it is estimated there will be 20 fatalities happen by the year 2020 in Malaysia [2].

Even when a motor rider or car driver take all possible precaution when they are driving but accidents which can be resulting in injury, which may cause deaths still have chances to occur. So, wearing a helmet and fasten a seat belt is essential when driving on a road. A motor rider without a helmet is in the risk of suffering a traumatic brain injury when an accident occurs [3].

Without the protection from the helmet, their head is vulnerable to a traumatic impact during the accident no matter how fast they are travelling. On the other hand, for

those who fail to fasten a seat belt in the car will increase the risk occurrence of head and spine injuries during an accident. The most case is the driver or passengers may throw out from the car in a serious accident [1].

So, people cannot ignore the safety rule when driving motorcycles or car, especially students in the university. Some of the student or even staff, they do not like to wear the helmet or fasten the seat belt when they are driving, and the same thing also applies to the passenger. One of the reasons is they feel like it is unnecessary when they go somewhere nearby. The second reason is due to laziness, especially students. This is because they feel like inside the university it is safe enough, and the distance they travel is short, so they feel like wearing a helmet or fasten a seat belt is unnecessary.

1.1. Literature Review

Among the ASEAN countries, Malaysia has the highest fatality risk among 100,000 population in Malaysia [4]. From the fatality risk in Malaysia, there are about more than 50% of the road accident fatalities involve with motorcyclists. Figure 1 shows the total kilometers for motorcycle travelled and motorcycle fatalities between 1998 and 2009.

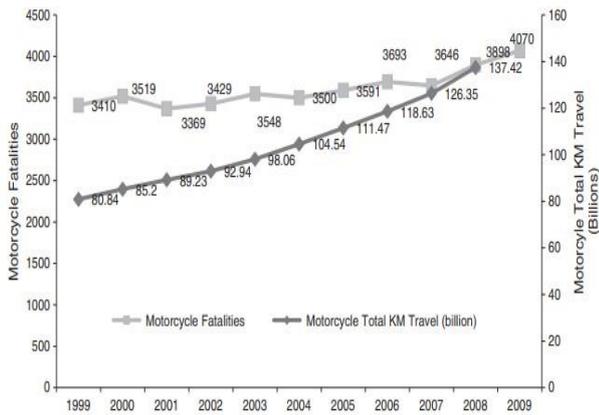


Figure 1 Total kilometers for motorcycle travelled and motorcycle fatalities between 1998 and 2009.

From the statistic shown in Figure 1 we can know that motorcycle is very famous in Malaysia because it is convenient and cheap compare with other transportation. On the other hand, we can see that the motorcycle fatalities slightly increased in every year. This is because the risk of injury or death of motorcyclist is higher than the car users. In 2006 US motorcyclists had a risk of the fatal crash that was 35 times greater than that of passenger in cars. Based on 390 motorcyclist deaths per billion vehicles miles and 11 car fatalities per billion vehicles miles [5]. Figure 2 shows the deaths per 100 million vehicle miles travelled.

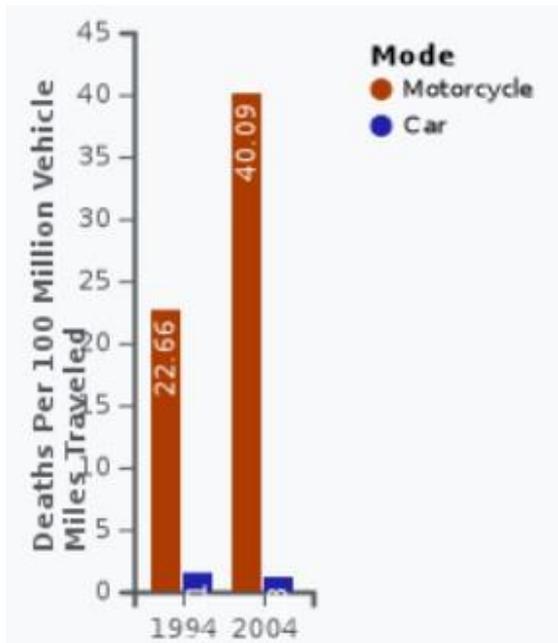


Figure 2 The deaths per 100 million vehicle miles travelled.

As a result, to avoid this case happen, as a motorcycle rider, a lot of precaution need to be taken, especially the wearing helmet rule. This precaution can reduce the risk of serious injury during the accident [6-7].

The research by Fernandes [2] systematically inspected a range of relevant personality, demographic and attitudinal factors in the assumption of drink-driving, speeding, driving while fatigued and not wearing seat belts for a student sample of young driver. From the research, 40% of all fatal crashed that happened in 2006 involved in speeding and 25% involved with alcoholics and 18% involved in driver fatigue [8]. Although only 17% of fatal crashed involved with not wearing a seat belt, people also need to focus on it to reduce the risk of deadly crashes which may be causing death in a car accident [9-10]. So, the younger people mainly student nowadays must do all the precautions without any excuses to avoid them get injured or dead in an accident.

2. METHODOLOGY

In this study, to identify the main factor for non-compliance to seat belt and helmet in UTM Skudai campus, a set of questionnaire was prepared. This set of questionnaire consists of the factors for students in UTM for non-compliance to seat belt and helmet. Besides, this questionnaire also includes of the reason for them to follow the rules and regulations. We analyze the data from the respondent, and some Pie Chart is generated from the respondents. Next, the discussion and conclusion are made from the analysis result. Figure 3 shows the flow chart for this study.

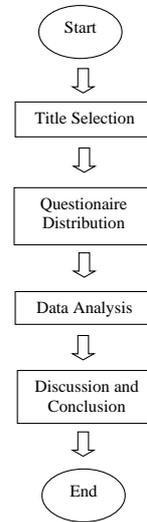


Figure 3 Flow Chart

3. RESULT AND FINDINGS

This analysis is made based on the distributed questionnaire among UTM students. We have collected total of 31 responses through Google Form. All the

response from students is through online, and we analysed the results. From 31 respondents, 17 of them are female, and 14 of them are male. These 31 respondents included first year until final year students.

Table 1 Number of Student at Specific Year

Year of Study	Number of Students
1	5
2	7
3	7
4	12

Among 31 respondents, 17 of them do not have transport in the UTM campus while left of them have own transportation such as motorcycle and car. Within the 14 respondents that have their own transport, 4 of them have their motorcycle whereas 10 of them have a car.

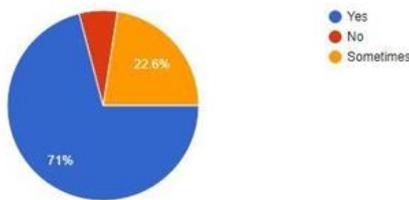


Figure 4 Analysis percentages of respondent who fasten the seat back

From Figure 4, the number of students that have to fasten seat belt and wearing helmet inside the UTM campus is 71% which is 22 out of 31. From the responses, only 2 out of 31 do not fasten the seat belt or wearing a helmet inside UTM while 7 of them (22.6%) sometimes follow these rules.

Table 2 Factors for Non-Compliance to Seat Belt and Helmet in UTM Skudai Campus

Factor	Number of Students
No seat belt alarm	8
Lazy	10
No security check	1
Going somewhere nearby	12

From the analysis, we can see that most of the students wanted to follow the traffic rules and concern their safety inside the UTM campus. Some of the students said that the seat belt alarm is annoying.

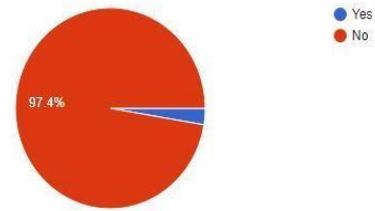


Figure 5 Analysis of the number of students have been fined because of did not fasten seat belt or wearing a helmet

From Figure 5, only one student had been fined by UTM administer/security cause of did not fasten seat belt or wearing a helmet. From here, we can figure out that UTM students always follow the rules and regulation.

From the results from the questionnaire, we can conclude that the main factor for non-compliance to seat belt and helmet in UTM campus is going somewhere nearby. This is because the UTM campus is a big area. Students need transport like a motorcycle, car, bus or others to move from one place to another. Thus, students will go somewhere nearby without a helmet cause of convenient. To solve this issue, we can enforce the rules that fined driver if their passenger does not fasten the seat belt or wearing helmet. This solution would be work because driver do not want to pay the cash penalty caused by their passenger. Thus, driver will ask their passenger to fasten seat belt or wear a helmet. From the questionnaire, only 65.8% of respondents that will ask their passenger to do so, as shown in Figure 6.

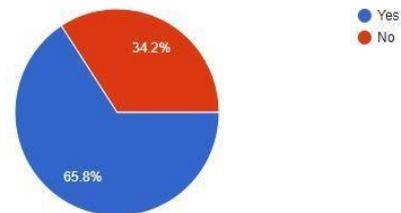


Figure 6 Analysis of driver's willingness to ask their passenger fasten seat belt

4. CONCLUSION

The main factor student non-compliance to seat belt and helmet in UTM campus is they are going somewhere nearby from the analysis above. There is some suggestion to solve this problem, such as increase the number of patrols from traffic security inside the campus. Besides, the driver is responsible for asking their passenger to fasten the seat belt or wearing a helmet for safety purpose.

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