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**THE EFFECT OF CONTRIBUTORY FACTORS ON YOUNG
ROAD USERS' BEHAVIOUR IN MALAYSIA**

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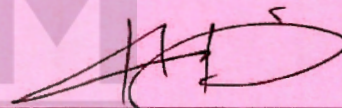
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ABSTRACT

Road accidents are one of the most serious risks to public safety worldwide, which includes Malaysia. 1.17 million death worldwide occur each year due to road accidents, 70% of which occur in developing countries in the world. Much research has been conducted in the past to try to figure out what factors contribute to the high incidence of road accidents among these high-risk drivers. However, this study is mostly focused on "irresponsible drivers who use cell phones while driving, drink and drive, break the traffic rules, and have vehicles in poor brake and tire conditions. Other than the environment—the rainy season, the dark environment that leads to road accidents. All these factors contribute to the high rate of road accidents in Malaysia. The purpose of this study was to examine the factors that influence road accidents among Malaysia's young drivers. An online survey form was used to collect the data from the respondents. It is mainly focused on three main factors: the human factor, the environment factor, and the vehicle factor. The study was based on a self-administered questionnaire survey of young Malaysian drivers. Results show that respondents aged 18 to 24 years old made up the largest age group (56.6%). The youngest age group had 32 respondents, or 10.4% of the sample, between the ages of 32 and 38. The frequency result then displays the gender of Malaysia's young drivers. The survey's results show that 205 respondents (66.8%) were female and 72 respondents (23.5%) were male. This study was mainly focused on young Malaysian drivers, between the ages of 18 to 38 years old.

KEYWORD: Road safety, driver behaviour, young driver, environment

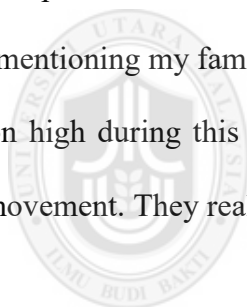
ABSTRAK

Kemalangan jalan raya merupakan salah satu risiko paling serius kepada keselamatan awam di seluruh dunia, termasuk di Malaysia. 1.17 juta kematian di seluruh dunia berlaku setiap tahun akibat kemalangan jalan raya manakala 70% daripadanya berlaku di negara membangun di dunia. Banyak penyelidikan telah dijalankan pada masa lalu untuk cuba memikirkan faktor yang menyumbang kepada insiden kemalangan jalan raya yang tinggi dalam kalangan pemandu berisiko tinggi ini. Walau bagaimanapun, kajian ini kebanyakannya tertumpu kepada "pemandu tidak bertanggungjawab yang menggunakan telefon bimbit semasa memandu, sikap ini membawa kepada kadar kemalangan jalan raya yang tinggi di Malaysia. Tujuan kajian ini adalah untuk mengkaji faktor-faktor yang mempengaruhi kemalangan jalan raya dalam kalangan pemandu muda Malaysia. Borang kaji selidik dalam talian telah digunakan untuk mengumpul data daripada responden. Ia terutamanya tertumpu kepada tiga faktor utama iaitu faktor manusia, faktor persekitaran dan faktor kenderaan. Kajian ini adalah berdasarkan kaji selidik soal selidik yang ditadbir sendiri ke atas pemandu muda Malaysia. Keputusan menunjukkan bahawa responden berumur 18 hingga 24 tahun merupakan kumpulan umur terbesar (56.6%) Kumpulan umur termuda mempunyai 32 responden, atau 10.4% daripada sampel, berumur 32 dan 38. Hasil kekerapan kemudian memaparkan jantina Pemandu muda Malaysia. Hasil tinjauan menunjukkan bahawa 205 responden (66.8%) adalah perempuan dan 72 responden (23.5%) adalah lelaki.

Kata kunci: Keselamatan jalan raya, tingkah laku pemandu, pemandu muda, persekitaran

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Universiti Utara Malaysia

ABBREVIATIONS

NHTSA = National Highway Traffic Safety Administration

WHO = World Health Organization

PDRM = Royal Malaysia Police

BAC = Blood Alcohol Content

US = United States

DWI = Driving while intoxicated

AUD = Alcohol use disorder

CDC = Centers for Disease Control



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CHAPTER 1:

INTRODUCTION

1.0 BACKGROUND OF THE STUDY

Across the globe, road accidents are a major concern. There has been an ever-increasing number of deaths around the world. It is imperative that this dangerous situation be curtailed in order to prevent the resulting enormous economic damage and to save lives. According to the World Health Organization (WHO), road traffic accidents are among the ten most common causes of death worldwide. The leading cause is the human factor, which is driving behavior (Special and Iv 2016).

At 369,319 and 521,466 incidents in 2007 and 2016, the Malaysian Ministry of Transportation reports that the total number of road accidents in Malaysia has increased by nearly 41% over the past decade, respectively. As a result, the overall death toll rose from 6,282 to 7,152. The overall number of vehicles involved in traffic accidents rose from 666,027 to 960,569 within the same time period (approximately 44 percent rise) (Of et al. 2020).

The figure 1 below shows the statistics of road accident cases in Malaysia from 2002 until 2021. There the high proved evidence. The percentage of car accidents has been increasing since 2002. In 2021, the percentage of road accidents in Malaysia has been identified as 43.9%. In 2002, the number of road accidents was less than 10%. So while Malaysia is developing, the accident issues are also becoming critical. Since 2007, the road accident caseload in Malaysia has grown. There have been no reductions in this issue until now.



(Figure 1)

(SOURCE: Department of statistics Malaysia official portal)

A recent study by (Musa et al. 2020) despite massive government investments in road infrastructure, keeping track of traffic and making sure the roads are safe are still lacking in Malaysia. As a result, the current society's increased mobility has had a negative impact on road safety. Numerous road safety initiatives have been hurled in the past to help reduce the number of accidents. There are proactive measures like road audits to help prevent accidents, as well as reactive measures like making improvements to dangerous locations and building new infrastructure to help the most vulnerable road users, like motorists. There are also measures like cutting the grass and patching potholes, as well as building new roads.

Accidents on the road can be blamed on a wide range of factors counting human factors, such as driver skill or experience, age, and judgement; vehicle design and manufacture, and maintenance; and road environment factors such as traffic control devices and surface friction.

Injuries sustained in road accidents can range from minor whiplash to fatalities. Accidents are frequently the result of a confluence of factors rather than a single factor (Fatma et al 2018).

The WHO estimates that every year, 1.25 million people die in car accidents. An accident on a public roadway can be seen as a worldwide problem. Over the past five years, Malaysia has seen an increase in road accidents and fatalities.

Driver speed in Malaysia and Vietnam can be linked to a variety of external and internal factors. External factors such as road design, environment, timeliness, and vehicle occupancy. As opposed to the external variables, the internal variables include things like: personal characteristics; personal beliefs; and feelings. Road accidents are caused by a variety of factors, including human error, the environment, and the vehicles themselves (Musa et al. 2020).

An accident's likelihood and severity can be influenced by different environmental factors, like the weather and how bright it is at a certain time of day. Therefore, in this research I would to conduct main factors influence the use of mobile phone while driving among Malaysia young drivers (Ismail, Gan, and Mohd Zain 2015).

The National Highway Traffic Safety Administration (NHTSA) reports that 3,142 people died in car accidents in 2019 that were brought on by distracted drivers. Additionally, between the years 2012 and 2019, approximately 23,000 people lost their lives in distracted driving accidents (NHTSA, 2020). The top cause of traffic accidents and fatalities, according to the NHTSA, is using a cell phone while driving. This is one of the most common distracted driving behaviours (To and In 2016).

Traffic accidents are a major cause of fatalities and injuries for teenage drivers in Malaysia. According to data from the PDRM, there were 6,167 traffic fatalities in 2019. It was mostly the result of the negligence and, in some cases, mistakes of other drivers. According to studies, 43% of Malaysian drivers use cell phones while driving, which causes to young drivers to road accident

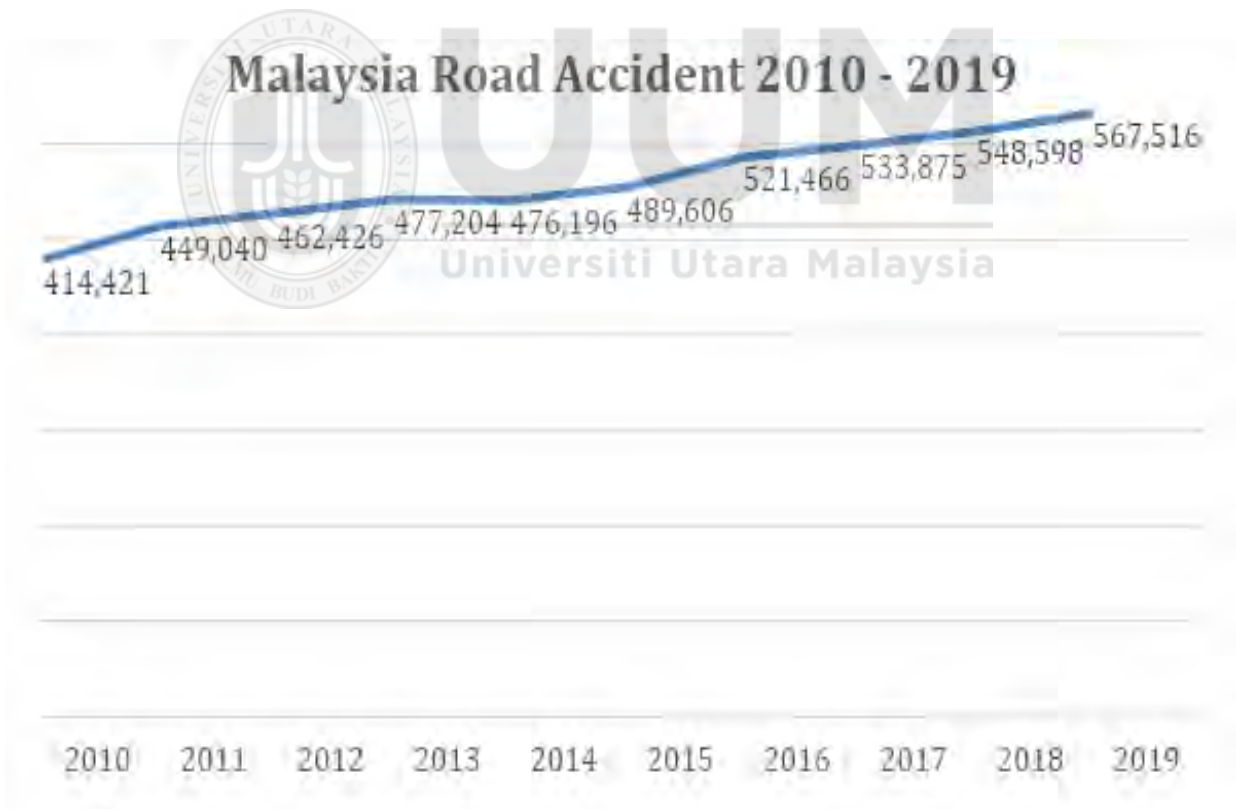
Mobile devices are frequently used today, both inside and outside of vehicles, and operators have developed a number of services that are very useful and practical for all users of the road. Therefore, within a few years, the overall amount of time and risk exposure associated with using a mobile device while driving will inevitably rise. According to studies, drivers who actively engage in cell phone conversations perform worse behind the wheel and are more distracted. According to researchers, using a mobile phone while driving is risky because it impairs a driver's ability and skills, slows their reaction times, increases the likelihood of a collision, and reduces their awareness of what is happening on the road around them, all of which increase the risk of an accident (Mei, Yi, and Hanan 2022b).

According to studies, 43% of Malaysian drivers use a mobile phone while operating a vehicle. Therefore, these elements have also been identified as a major cause of the accident in Malaysia (Mei, Yi, and Hanan 2022b). Most people believe that they are able to multitask while driving. Although a brief distraction enables a driver to drive safely, this issue will result in less attention and a driver who is more sensitive to road hazards. Malaysia's transportation infrastructure continues to be a global concern for mobile phone distracted driving despite decades of education and enforcement initiatives. There are numerous variables that could affect a driver's cell phone use while driving.

In this case, all of these factors have a negative impact on the young generation. Malaysia's youth are well-versed in technology, smart phones, and smart devices. However, the younger generation does not adhere to the regulations imposed by the rulers. Malaysian teenagers who have reached the age of 18 can now apply for a motorcycle and a car license. However, they do not recognize that this is a serious issue. They just take this as fun and enjoy bell. So they drive carelessly at high

speed and break the traffic rules. Other than that, many Malaysian youths drink and drive. All of these issues are contributing to an increase in road accidents in our country.

The figure 2 below show the road accident issues in Malaysia from 2010 to 2019. The statistics show the accident percentage will keep increasing in our country. So for sure, the issue is getting worse. The road accident in Malaysia is the result of multiple factors. They are human, vehicle, and environmental factors. This study looked at drinking and driving, breaking traffic rules, and using a mobile phone as human factors. In the environment factor, climate change, rainy seasons, and dark environments affect the environment factors. Vehicle factors: tires and brake systems. It's the main cause of road accidents in Malaysia.



(Figure 2)

(SOURCE: Ministry of transport Malaysia, 2020)

1.2 PROBLEM STATEMENT

Previous studies, found that drivers who actively engaged in mobile phone conversations, their driving performance is decreased, and distraction level is high. Despite the dangers of crashes, the use of mobile phones while driving is rising alarmingly quickly (Zhang et al. 2019). Driving while using a phone while distracted is more common among young drivers, which is a serious safety problem. Research on mobile phone distracted driving and young drivers has found impairments which have the potential to cause road trauma (Gap Acceptance Behavior of Mobile Phone Distracted Drivers at Roundabouts 2016). According to a study by Mei, Yi, and Hanan (2022b) distracted driving caused by cell phone use slows down teenage drivers' responses to a nearby traffic incident (a pedestrian crossing a road at a zebra crossing from the sidewalk).

Talking on a cell phone while driving increases cognitive load, which can affect how well a driver controls their car longitudinally and laterally as well as how they interact with other vehicles and traffic control equipment. Mobile phone conversations are specifically linked to reduced speed, increased headway, aggressive braking, a lower propensity for running red lights, and miscalculation of headway distance, among many other things. The complexity of the structure is increased by using a phone while driving (Burnett and Stevens 2018). Even though temporary distraction makes possible for a driver to drive safely, this matter will lead to less attention and more susceptible driver to road hazard. Early research on mobile phone use while driving was mostly based on utilizing driving simulators to examine the effects on driving behavior. It was discovered that making and receiving hand-held calls or text messages while driving significantly reduced speed, making it challenging to keep a steady pace and headway distance its consider another problem in this study (Mei, Yi, and Hanan 2022b).

The National Highway Traffic Safety Administration (NHTSA) identified that mobile phone usage while driving has been recognized as one of the major forms and was the primary cause of road accidents and deaths as well as a significant cause of death and injury for young drivers in Malaysia.

Other than is, other human factor lead to road accident is drink and drive. One of the main issues that inspires a range of responses and viewpoints in the community is drunk driving. This occurs as a result of the rise in fatalities brought on by intoxicated drivers' reckless behaviour. The carelessness and recklessness of those who drive while impaired by alcohol or drugs have resulted in the loss of innocent lives. In Malaysia, drivers' attitudes, particularly drunk driving, cause the majority of fatal accidents.

Driving an unmaintained vehicle is another issue vehicle factor. This is more of a lack of vehicle maintenance, which could in turn cause an accident. Cars are machines that need to be maintained to ensure they're at their best. Drivers should replace their damaged tires on their vehicles. The brake function, tire quality, brake oil, and engine quality must all be monitored on a regular basis. But more of the irresponsible young drivers do not bother with this issue. As a result, the lead veil factor contributes to road accidents in Malaysia.

Other factors than the environment also contribute to road accidents. Most climate changes in our country have an indirect impact on road users. The sudden changes in climate make it difficult for some of the young drivers. During heavy rain, it's difficult to drive. More than heavy rain during the night. Some of the drivers do not have the ability to have clear vision. so it's difficult and dangerous for the drivers (Masuri et al. n.d.).

Road safety will be impacted by weather changes brought on by climate change. Recent patterns indicate that Malaysia's climate is already beginning to warm. The number of days with a lot of rain and the intensity of the rain have both greatly increased. Most Malaysian climate models also indicated that rainfall would significantly increase. There will be increased floods and waterlogging as a result of more intense rainfall occurrences. The percentage of accidents is higher during the rainy season than on normal days. So, without a doubt, the environment has a significant impact on our country's accident problem (Masuri et al. n.d.)

1.3 PURPOSE OF STUDY

This research aimed to investigate factors influencing road accidents among Malaysia's young drivers. The factors can be classified as human factors, environmental factors, and vehicle factors. This research would like to identify which factors are mainly affecting the Malaysian young generation. Collect the data through a questionnaire, and the findings could help identify the causal factors that played a major role in road accidents among Malaysia's younger generation.

1.4 RESEARCH QUESTIONS

- I. How are the contributing factors that could effect road accidents among young drivers?
- II. What are the solutions for a safe road in Malaysia?

1.5 RESEARCH OBJECTIVES

The objectives of the study are:

- I. To investigate the contributing factors that effect road accidents among young drivers.
- II. To propose a potential solutions for safe roads in Malaysia.

1.6 SIGNIFICANCE OF STUDY

Data produced from this study will be used to show this comparison and provide insight into the issue. To find out which factors are mainly affected by the Malaysia young drivers, In addition, it is hoped that this project will be the beginning of an ongoing body of research into the issue of road accidents in Malaysia. The findings of this study will be rewritten to the benefit of society, universities, and students. Through the findings, we hope to find some solutions for this country to overcome the major influencing factors. This research will be beneficial to respective agencies by reducing the number of road accidents in Malaysia.

1.7 SCOPE OF STUDY

The scope of this study is to investigate the effect of road users' behaviour on young road users in Malaysia. The factors are mainly focused on three major parts: the human factor, the environmental factor, and the vehicle and equipment factor. This research was mainly conducted among Malaysian young drivers. It covers the entire Malaysian data collection to become more clear and accountable in this case as well. Through this study, we were able to identify the main factor affecting Malaysia's young drivers.

CHAPTER TWO:

LITERATURE REVIEW

Introduction

Numerous causes are contributing to an increase in traffic accidents in Malaysia. Road safety can be viewed from a variety of perspectives. Keeping in mind that the aforementioned statement is the main objective of safety the three main factors focused on for this study were the person element, the environment factor, and the vehicle and equipment component that contribute to road accident among young road users. This covers the way young drivers drive, how automobiles are driven by Malaysia's young generation, and the conditions of the road. There have been numerous modifications made to automobiles in order to lower the number of traffic accidents. However, a human component that can affect driving behaviour is a contributing to high percentage of road accident (Asyraf et al. 2021). The author highlights that the human component is the most major cause of road accidents, especially among young drivers, based on prior studies. Because many young people nowadays are driving in a more complicated traffic situation than ever before, this study focuses on young drivers in Malaysia.

2.1 HUMAN FACTOR

2.1.1. UNRESPONSIVE DRIVER (USING THE CELL PHONE)

First most major issue caused by mobile texting and driving is “distraction in driving,” which makes it extremely dangerous. A security of both the motorist as well as the other riders may be at risk if they are distracted when travelling. Answering to something like a telephonic conversation while driving can cause you to lose focus and result in an incident. Using mobile while driving is the main factor in most auto accidents. Despite the fact that using a cell phone while driving is strictly prohibited in a number of nations, people continue to do so, endangering both themselves and other road users. The most

major problem with cell phones is that while driving, individuals start texting one another (Mei, Yi, and Hanan 2022b).

Young drivers have worst attitude it's messaging while driving the vehicle. It's really effect and increase the road accident issues among youngest. In Malaysia, there have been more accidents on the road over the past ten years. Overall fatality rate has significantly declined over the past ten years, peaking at 7,152 in 2016 and down to 6,167 in 2019. Another of the leading causes of mortality in the globe is road deaths, and the lot of the time, reckless driving is to blame. In today's technology age, cellphones are frequently utilized in automobiles. Cell phone providers develop a plethora of facilities that are helpful to motorists. As either a consequence, the danger of using a phone while driving is just now beginning to soar. One of the most typical forms of motorist disruptions has already been found as using a cellphone while driving. Mobile phone use is one of the most prevalent diversions on the highway in Malaysia, where reckless driving is the primary contributing factor in auto accidents. They endanger other drivers by taking their focus off the road while sending text messages, taking phone calls, surfing through social media, or watching videos online (Mei, Yi, and Hanan 2022b). Statistics show that talking on cell phones while driving results in about 1.6 million incidents annually (Mei, Yi, and Hanan 2022a).

The risk of texting and driving is six times greater than the risk of drinking. While using a cell phone while driving can be distracting in any case, texting has consistently been shown to be the most hazardous activity. Your eyes are taken off the road for about five seconds when you send a text message while driving, apart from that.

Even novice drivers, including teenagers, are aware of the risks associated with distracted driving. The majority of students—94%. That goes without saying that traveling while preoccupied is dangerous, but so many motorists continue to use mobile phones as they get in their vehicles (Mei, Yi, and Hanan

(2022b).

According to Polis Diraja Malaysia (PDRM) statistics, dangerous driving incidents claimed the lives of further than 23,000 persons during 2012 and 2019. The major reason of traffic accidents and fatalities, according to the National Highway Traffic Safety Administration (NHTSA), is using a phone whilst driving. This dangerous driving habit is among the most prevalent. In Malaysia, traffic deaths are the main cause of mortality and morbidity among juvenile drivers. The PDRM reports that 6,167 people died on the roads in 2019. In many situations, it was the result of neglect. Mistakes made by drivers. Statistics demonstrating that 43% of Malaysian drivers use cell phones while operating a vehicle corroborate this notion. Currently, smart phones are frequently used in and outside of cars, with providers creating a wide range of applications.

Poor drivers' attitude, fatigue and mobile phone use among top causes of road accidents in Malaysia – IGP

In Cars, Local News / By Matthew H Tong / 8 June 2018 12:19 pm / 23 comments



(Figure 2.1. Mobile phone use accidents)

(SOURCE: Times newspaper, 2018)

Every year, more individuals are fatally injured or died of texting and driving. Approximately 400 people per year lose their lives as a result of texting and driving. When distracted driving is considered overall, this figure grows to around 30,000, per the PDRM. There have been fewer incidences of texting while driving recently, there have been more fatal accidents brought on by dangerous driving. The figure 2.1.1 of texting and driving fatalities from 2013 to 2019 is shown in the picture below.

YEAR	TEXTING AND DRIVING DEATHS
2019	387
2018	356
2017	418
2016	453
2015	453
2014	387
2013	411

Figure 2.1.1 Table of Texting and Driving Death from 2013 -2019

(SOURCE: Department Of Transportation, 2020)

Recent statistics show that texting and driving-related fatalities started to rise in 2013, peaked in 2015 and 2016, and then started to fall in 2017. After a big decline in 2018, there was a slight gain in 2019. The performance of a car are delayed about 35% while the driver was texting, but only by 12% even though they had drank a legal drinking age. One study found that texting causes drivers to react 23 percent more slowly than drunk drivers. Sending texts is more risky than drinking and driving. The main risks about using a cell phones while driving are reduced peripheral attention, compromised judgement of distances and road conditions, and slower reaction times.

2.1.2. DRINK AND DRIVE

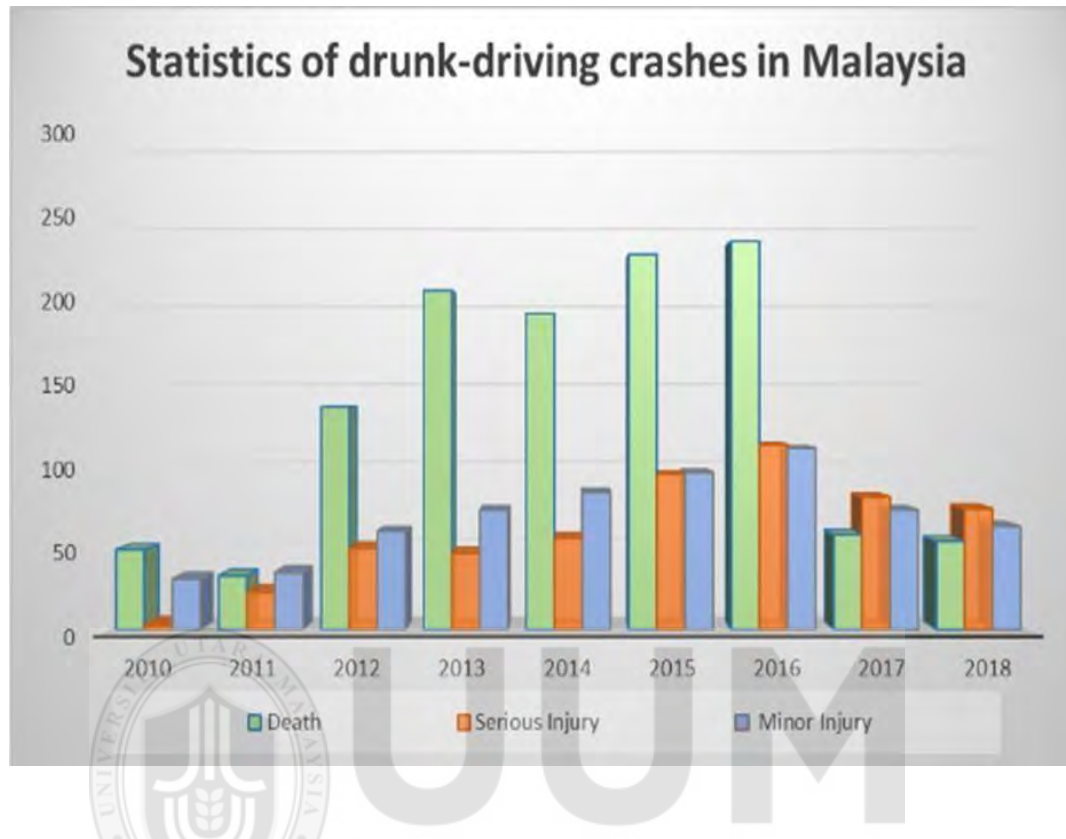


Figure 2.1.2 Statistics of Drunk-driving crashes in Malaysia

(SOURCE: The Mole newspaper, 2019)

Figure 2.1.2 shows road accidents statistics caused by drunk driver in Malaysia. The statistics of drunk driving incidents in Malaysia are shown in statistics. Drunk driving continues to be a severe problem in Malaysia. Annually, motorists are responsible for a large number of deaths. Our government done a lot more surveys to attended multiple talks involving various organizations, that all demonstrated strong support supporting stricter laws on impaired driving. Liquor consumption can drive some person to create stupid choices since it decreases barriers. The Malaysian Institute of Road Safety Research (MIROS) published research in 2015 showing that inebriated drivers are considerably more likely to cause a crash than careless drivers (Ismail, Gan, and Mohd Zain 2015)

Malaysia, along with Singapore and the United States, has a Blood Alcohol Content (BAC) standard of 0.08, giving it among the country's least lenient countries (US). Some nations, like Taiwan and Japan, consider blood alcohol concentrations of 0.05 and 0.03 to be legally drunk, accordingly. Consuming alcohol is a serious offence. Driving while intoxicated (DWI), also known as people under the influence (DUI), and is the practice of driving a motor vehicle while having a blood alcohol content (BAC) of at least 0.08 percent. But even a little alcohol can cause bad things to happen. Even if a motorist does not exhibit obvious signs of intoxication, the situation is nonetheless perilous (Selangor and Dengkil 2021). The much more likely people to drink and drive are those who binge drink or have an alcohol use disorder (AUD). It suggests that individuals consume a large amount of alcohol quickly, putting them at risk for bad outcomes. Between 30 minutes and two hours after consumption. Throughout this time, it's possible that you'll breathe more slowly and have trouble thinking clearly. Therefore, drinking alcohol is never safe.

Findings demonstrate a connection between a higher BAC and a slower reaction time. The Malaysian current limit for blood alcohol concentration, 0.08, is associated with a shorter reaction time of 120 milliseconds, or just over a hundredth of a minute. As little more than a consequence, an intoxicated driver travelling at 70 mph would advance 12 feet before noticing a danger on the road. Based on the Centers for Disease Control and Prevention, women are less able to focus, lose control of their pace, have trouble with vision and identity, but may have difficulties recall (CDC)(Selangor and Dengkil 2021).

Drinking continuously can cause a person to have poor reaction rate. The quantity of alcohol in your blood has an impact on the how fast you can react to diverse circumstances. Alcohol lowers your response time, which can make accidents more likely. It means that because the car across from you abruptly stops or a person drives past, this should take a little longer for your brain to assess the

circumstances and prevent a catastrophe. Additionally, heavy drinking affects your ability to coordinate your hands, feet, and eyes. Lacking essential synchronization abilities, you might not be capable of preventing a dangerous situation from occurring.

An inability to stand up straight, difficulty walking, and swaying are some warning symptoms of poor coordination. Alcohol abuse might also make it difficult to start your automobile and get inside. Alcohol use lowers a person's ability to concentrate while driving. It might affect your focus whether there is a lot or a little. The many factors that demand your complete attention when driving include remaining in your lane, your speed, other vehicles on the road, and traffic signals.

Drinking severely shortens the focus and concentration, which dramatically enhances the risk of an event. On either hand, dry eyes might make it hard to see well while driving, which is crucial after consuming far too much liquor. Liquor may impair vision or cause excessive eyelid movement. You might start to have trouble controlling your head movements. Your ability to judge the distance between your car and other cars and other things upon that route could be limited by such eye problems. That much worse, you run the risk of losing your peripheral vision, which is crucial for safe driving. Typically, more and more alcohol you've consumed, the worse your eyesight.

After just a drinking session, if you discover your eyesight is fuzzy, hazy, or you have any other eye-related issues, you will not get your vision examined. Furthermore, driving after drinking might lead to poor judgement and judgement. You're making how you evaluate various situations. Your decision-making abilities are extremely vital when operating a motorized vehicle. As you may have already heard, drinking significantly contributes to impaired judgement. Alcohol can affect your judgement so negatively that you end up making poor choices that you would regret the next day or after you sober up. Alcohol consumption while driving can make you more prone to distraction and poor decision-making. Alcohol will considerably enhance your risks of getting hit by a car because it can substantially

shorten your focus and concentration. Maintaining your mind sharp will perk you up and conscious of your surroundings, which will improve your decision. Additionally, there is a lack of communication and a poor reaction speed. Your body reacts to several situations more gradually while liquor is present in the circulation. Your reaction rate would be slower since you won't be capable of reacting toward something occurring as quickly as you would if you were sober, which raises the likelihood of fatalities. For example, you might not be proactive enough to stop and prevent an accident if someone cuts you off or falls short in front of you. The same goes for a creature racing onto the highway or, better, a human. You might not be able to react in time.

Alcohol's effects make it more difficult for the brain to process events and respond appropriately. Alcohol makes you more susceptible to inattentive driving, which makes the situation worse. In addition to slowing down your reflexes, drinking alcohol impairs your ability to coordinate your hands, eyes, and feet, among other motor skills. Such cognitive abilities are absolutely necessary because of being able to ride securely, and if they are compromised, you will be endangering both yourself and others. All of the facts demonstrate that intoxicated drivers are considerably more likely to cause accidents than sober drivers, even though the sober motorist may end up getting caught in the drunk driver's disaster. The study also demonstrates that your risk of being in an accident increases with the amount of alcohol in your system.

A driver is seven times more likely to be involved in a fatal car collision if their blood alcohol content (BAC) is 0.10 percent than if they are sober. A motorist who has a BAC of 0.15 As a result, this 0.08 percentage recommended limit for intoxication is problematic since it conveys the Negative signal that you should be safe to drive even if you are inebriated. Some people, unfortunately, find that this is not the case, and whether or not you are able to drive safely relies on a variety of personal circumstance.

As a result, the 0.08 percent permissible age for driving drunk is problematic because it conveys the false message that you are safe to drive even if you are inebriated. Many people, however, find that this is not the case, and whether or not you are able to drive safely relies on a variety of personal circumstances.



2.1.3 BREAK TRAFFIC RULES

Breaking the rules among the road users is also one of the contributions to road accidents in Malaysia. There are many rules that are not obeyed by the road users while driving. For instances, they are speeding when driving (Vidwana ,2019). Speeding is very dangerous especially when suddenly the emergency brake broke up. Based on the research by National Highway Traffic Safety Administration (NHTSA, 2022), in 2020, there is 29% of traffic fatalities are coming from the speeding.

The other breaking rules is turning off the headlight in the dark. This matter affects both driver and other road users. This situation is very bad since it affects other road users who always are careful along using the road. On the other side, jumping the traffic light also lead to road accident. Some peoples tend to ignore the red traffic light in order sometimes to show their brave in breaking the rules. This matter normally happened among the youth of the road users. It also not only affected that road users only, but also surely will affected others blameless road users (Mohamad, Abdullah, and Karim 2018). So that may be one of the reasons for the road accidents among young drivers.

2.2 ENVIRONMENT FACTOR

2.2.1 ENVIRONMENT

According to (Masuri et al. n.d.) Malaysia's climate is already showing signs of warming, according to recent trends. Rainfall extremes such as the number of heavy rain days and the intensity of rainfall have also increased significantly. A significant increase in rainfall was also predicted by the majority of the climate models in Malaysia. Due to more extreme rainfall events, there will be more flooding or water logging. Sea level rise will have a greater impact on coastal and inland cities in the near future, increasing the risk of flooding during heavy rainstorms. As a result, the most immediate effects of climate change in Malaysia can be attributed to an increase in temperature, rainfall, and weather extremes related to rainfall.

Therefore, the effects of climate change on Malaysia's roads will be exacerbated by rising temperatures, rainfall and other extremes. Humidity and other weather factors, such as wind, fogging, and so on, could be affected by climate change. Wet roads are a major factor in many types of car accidents throughout the year and around the world. Despite this, the impact of rainfall on road accidents varies greatly from country to country.

The climate changes in Malaysia are also one of the factors that contribute to road accidents in Malaysia. During the rainy season, the percentage of road accidents is higher than on normal days. During rainy days, the road will be wet, which will affect poor tires and brake systems. So that can contribute to the accident as well (To and In 2016).

Night may also be a factor in the environment. When driving at night, the driver's vision is impaired more than during the day. As a result, the dark environment may also contribute to Malaysian road accidents. The dark environment with the curving road is more dangerous. Without a clear lighting

system during the night, it can cause accidents. The bad environment also causes visibility issues for drivers. It affects not only elderly drivers but also young drivers. Drivers frequently experience vision problems at night. Some of the drivers have glare problems, low vision, and night blindness. All of these factors can contribute to road accidents during bad weather or at night (To and In 2016).

Other than there being a chance to see the animal cross the road during the night, it can also affect the drivers and create accident issues. For instance, Karak Highway. Karak Highway does not have road lights, and the road is too dark. There is also the possibility of an animal crossing at night or during the day. The roads have a high level of accident issues. So for sure, the dark environment will be one of the main reasons for accidents in Malaysia.



(Figure 2.2.1 Dark road)

(SOURCE: ACTIONLINE , 2017)

2.2.2 ROAD CONDITION

According to Samsuddin & Mohd Masirin, (2016), when developing a country like Malaysia, it's important to keep in mind that, the primary component of the country's road transportation system is its road infrastructure. It can be cleared as the essential facilities, services, and installations that are required for the proper operation of transportation highways, roads, and public streets. The influence of road geometry, roadside installations like barriers, posts and road markings.

The road infrastructure in Singapore, which is much needed and well developed. If the road or equipment has been damaged, the situation will be changed immediately to avoid a road accident. But in Malaysia, the action on the damages will take a couple of weeks. During that time, there were numerous accidents on the damaged road. The picture below shows one of the damaged roads in Malaysia (Musa et al. 2020).



(Figure 2.2.2 Road potholes)

(SOURCE: Spicy Malaysia, 2016)

Associated risk as a result of inadequate infrastructure, such as insufficient roadside protection, insufficient road design, insufficient management of access, insufficient safety in the work/construction zone, insufficient pavement management, insufficient traffic management, and insufficient road hierarchy discipline

The layout and environment of the road are the first external factors that have an effect on driver speed. The number and width of lanes, as well as the presence of parked cars along its edge and vertical elements on its side, are all factors that go into the design of a road (Mohamad et al., 2018). Drivers' propensity to speed may be influenced by factors such as road width and the number of lanes.

It has been demonstrated yet again how different road characteristics such as Barriers in the middle of the road, shoulders, lane widths, flat or right-angle turns, access points, and pavement conditions are all important influence the likelihood or severity of car accidents.

As cited by Samsuddin and Mohd Masirin (2016), every level of activity may play a role in creating and maintaining a safe road infrastructure. Elements of the road infrastructure were built and equipped to the proper standard, proper management is required. Much time and money could be saved by using best practices in safety engineering to manage road infrastructure. Road users must be able to understand what is expected of them if they are to have a positive experience on the road.

2.3 VEHICLES CONDITION (TYRE OR BRAKE)

Vehicle condition also one of the factors of the road accident in Malaysia. This is because the road users sometimes do not notice the how bad of the condition of vehicles can be. It might come from the tires of the car itself. According to studies conducted in numerous nations, only a small percentage of accidents on the road are the result of car defects, lack of maintenance, or poorly designed roads. The majority of accidents are caused by human mistake (Mad Isa, Masuria, & Tahir (2018)).The poor brake also one of the bad vehicles condition. The poor brake is very dangerous moreover when the drivers are speeding in curve or crossroad. Sometimes at the forest hill road, Speeding car with a poor brake might be accident alone and disappear besides will be not founded. Other vehicles condition might be comes from the poor engine of the car itself. The car should be having a good maintenance moreover when a long travel. The old vehicles tend to have a poor condition their engine and this matter should have a regular maintain. The picture below shows the unmaintained tires on the vehicle. So it's also be one of the main reason road accident issues in Malaysia.



(Figure 2.3 Bald tire)

(SOURCE: Tyre right)

CHAPTER THREE:

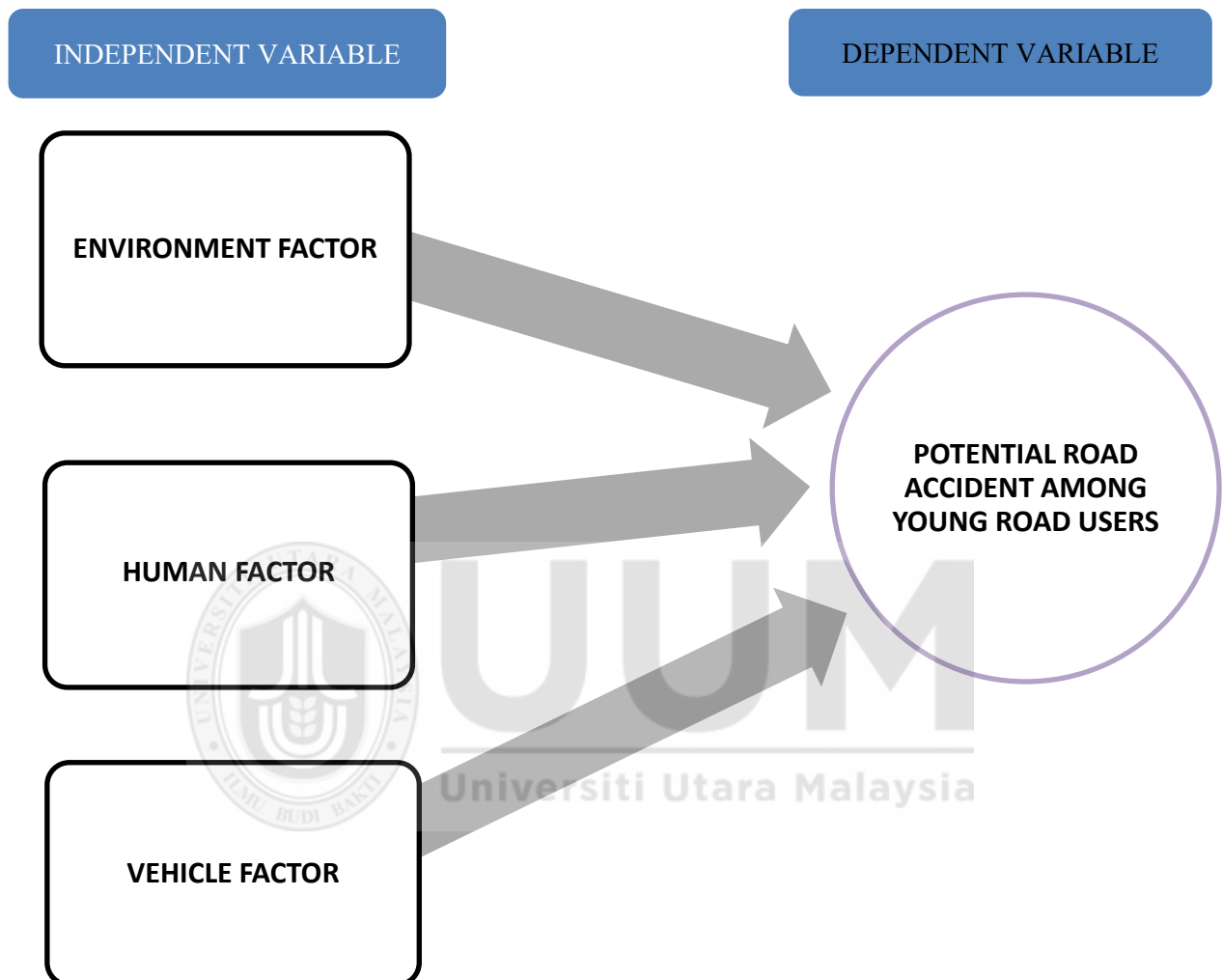
METHDOLOGY

This study uses secondary sources as part of its methodology, with questions also coming from original sources. The questionnaires are distributed via a Google Form. The information gathered from Facebook groups, WhatsApp groups, and any other social media apps. The sample size for the surveys people who have a driver's license and experience.

The survey was adapted from work by (Kaa 2014). The questionnaire is broken into two sections: Section 1 asks about the respondent's demographics, including their gender, age. Section two deals with the human, environment and vehicle factor question. In this study, we have developed 30 questions. Each factor has ten questions. So three factors come out with thirteen questions in this study.

It was created primarily to identify the factors that primarily affect Malaysia's young drivers. Its human factor, environment, or vehicle factor. Google Forms was used to collect the data. The Google form will be distributed to all lecturers, friends, and family members around Malaysia. The reason to disrupt around Malaysia is to get a huge number of respondents. For the data analysis in this case, use correlation, reliability coefficients, regression and multiple regression to find out the result.

3.1 RESEARCH FRAMEWORK / THEORETICAL FRAMEWORK



3.2 HYPOTHESES

In detail, the aims of this study were to investigate the direct effects of young drivers from different backgrounds on the drivers, the young drivers' human factors, the environment and vehicle factor on their relationship behaviour toward young road users in Malaysia. Numerous causes are contributing to an increase in traffic accidents in Malaysia. This comprises one's driving style, the state of the vehicle, and the traffic situation and environment. There have been significant advancements made in car maintenance to lower the rate of traffic accidents. However, a human aspect that can affect a traffic collision is driver behaviour (Liana et al., 2012). The author highlights that the human component is the most major cause of road accidents, especially among young drivers, based on prior studies (Ambak et al., 2014). Because many young people nowadays are driving in a more complicated traffic situation than ever before, this study focuses on young drivers in Malaysia. The hypotheses were developed based on the road accident factor, which is highly significant in this study. The main factors related to this hypothesis are the human factor, the environment, and the vehicle factor. The hypotheses clearly determine the effect of the road accident factor among young road users in this case. The hypotheses that will be analysed are:

H1: The human factor contribute to road accident among young road users.

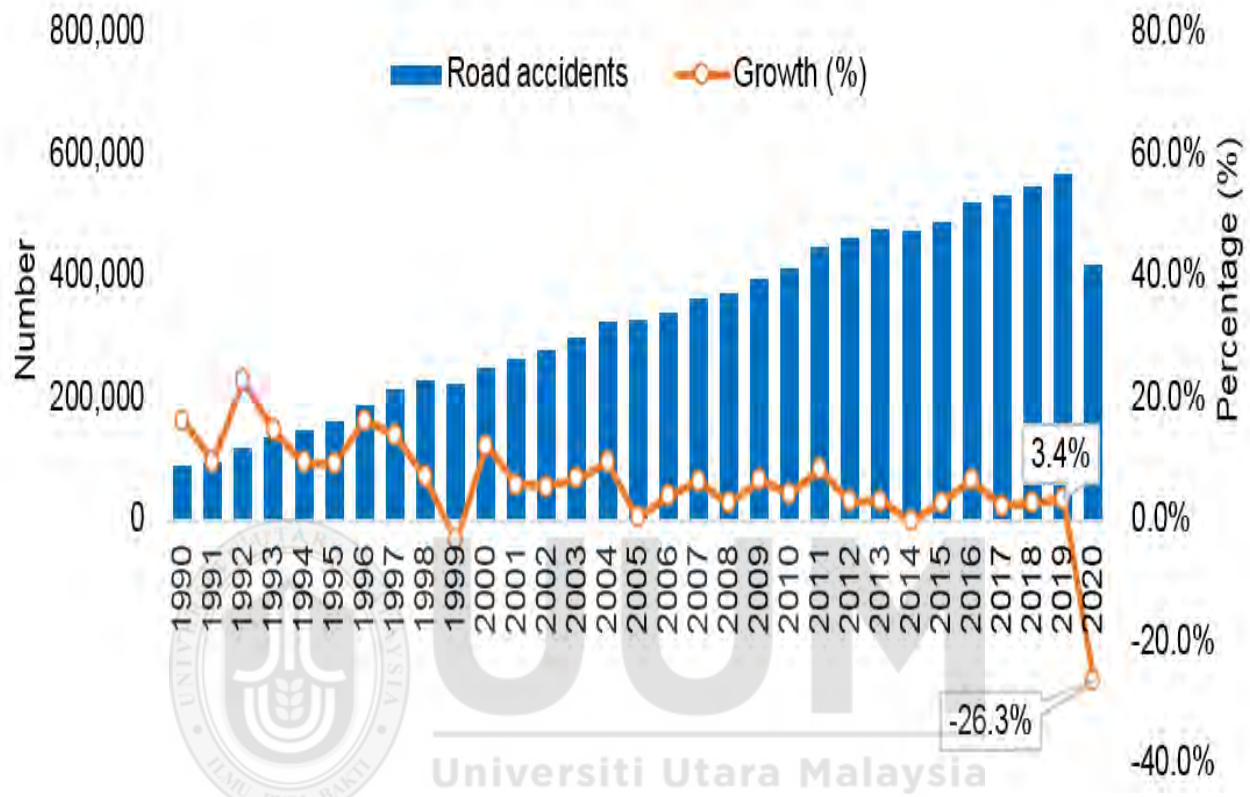
H2: Vehicle factor and vehicle maintenance negatively affect road users.

H3: Environment are largely responsible and effect young road users.

3.3 RESEARCH DESIGN

A research design is a collection of procedures and methods used to gather and analyses data on the variables listed in the problem research (Creswell; John W, 2014). The strategy, conceptual framework, selection of the subject matter to be studied, and the methods and tools utilized for data collection and analysis are the four major factors that make up the research design. The several types of exploratory configurations can be categorized, including subjective and quantitative research. Subjective exploration is described as "principally an inductive cycle of acquiring sorted out information into classes and recognizing designs (connections) within classifications," according to McMillan and Schumacher (1993). The four main categories of a qualitative analysis are phenomenology, ethnography, grounded theory, and contextual analysis. Additionally, the quantitative investigation is the systematic observational examination of perceivably amazing phenomena using numerical, quantifiable, or computational techniques (Given; Lisa M, 2008). There are several different types of quantitative research, and they are typically categorized into four groups based on specific techniques: survey research, correlational research, causal-comparative research, and experimental analysis. The quantitative examination strategy has been used in this examination to guide this investigation. In this study, used the quantitative method to collect the data from the respondent. Its share through the Google form. The questionnaire is broken into two sections: Section one asks about the respondent's demographics, including their gender, age. Section two deals with the human, environment and vehicle factor question. In this study, we have developed 30 questions. Each factor has ten questions. So three factors come out with thirteen questions in this study. The question is took from secondary data.

3.4 OPERATIONAL DEFINITION



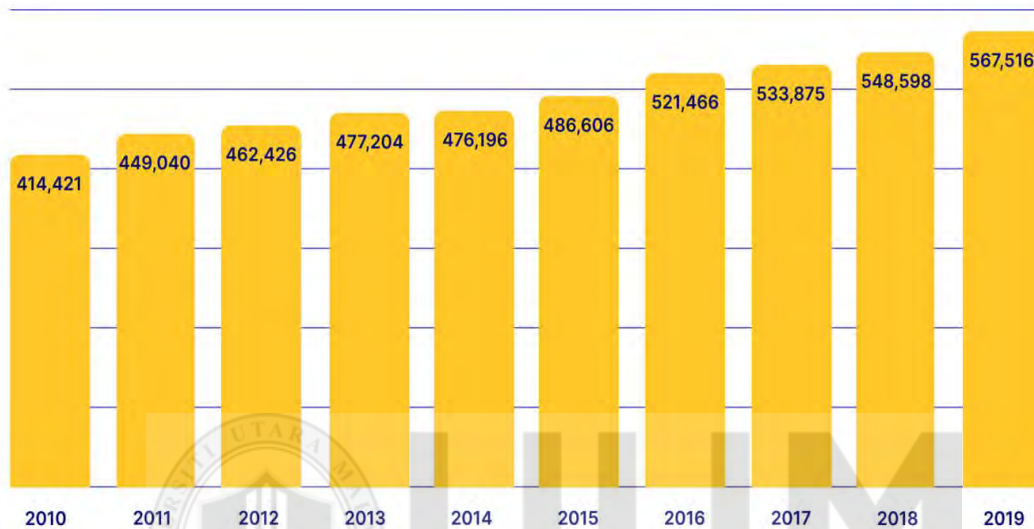
(Figure 3.4.1 Road accident statistics)

(SOURCE: Department of statistics Malaysia official portal, 2021)

The picture above shows the statistics of road accident cases in Malaysia from 1990 to 2020. Data show that road accidents in our country are on the rise. Road traffic accidents have decreased by 3.4 percent during the COVID-19 pandemic. These statistics prove that the road accident issues in Malaysia are getting worse and need high consideration and a solution to solve the effect of road accidents in our country.

2010 -2019

ROAD ACCIDENTS IN MALAYSIA



(Figure 3.4.2 Road accident in Malaysia)

(SOURCE: Ministry Of Transport, 2020) (MOT)

The Ministry of Transport reported a steady rate of road accidents from 2010 to 2019, with over 6,100 fatalities in 2019. They inform us that the accident rate in Malaysia is increasing every day. The effects of road accidents are injuries, fatalities, mental trauma, death, financial loss, and critical injuries. Accidents occur primarily as a result of three major factors: the human factor, the environment, and the vehicle factor, all of which contribute to Malaysia's high rate of road accidents. Environmental factors such as bad weather, rain, or a dark environment make driving and controlling the vehicle difficult. The human factor commonly causes most accident issues. They can consider drinking and driving, using a cell phone, texting, driving too fast, not wearing a seat belt, and breaking the rules as human factors.

3.5 MEASUREMENT OF VARIABLE

The scale of measurement is the term used in research to describe measurement. It pertains to classifications and definitions of variable numbers. It is employed to quantify and categorize variables. Research measures typically aid in the nature-based analysis of variables. Nominal, ordinal, interval, and ratio are the four main categories. In research, measuring is the process of putting numbers on empirical occurrences in accordance with a set of guidelines. You can choose the first rule by choosing observable empirical events. The second one allows you to indicate different characteristics of the events using numbers or symbols. The final rule is that you can connect the observation to the symbol by using a mapping rule. Survey research includes any measurement technique that involves questioning respondents. Different survey types might be utilized, depending on how much time is spent on the investigation. They could consist of cross-sectional or longitudinal surveys. In this situation, in this study conduct a free-answer survey. Free-response questions, also referred to as open-ended questions, are those that are unrestricted, essay-style, or unguided. Based on the choices, the participant can average themselves.

The question was taken from secondary data from privileged researchers. The question is posed by three different people based on different factors. The question was adapted from a Malaysian article published between 2015 and 2019. Then only the question can be related to Malaysian factors.

3.6 DATA COLLECTION

The study was carried out among Malaysian young drivers without regard for state borders. The information questioned is disseminated via social media apps such as WhatsApp, Telegram, Facebook, and Instagram. It is primarily responsible for forwarding the students' lectures from UUM; other than that, the Google Form was distributed to potential respondent. The main reason to use the Google form is that it's easier to collect the data from the respondent in this case as well. From the Google Form questioner, also have a chance to get more responses. It is up to the person in charge to respond to the question in their spare time, so they do not need to rush and answer the question. They have time to clearly understand the question and the respondent to the question that have been provided in this case. The data collection period took more than one month. This study period is just for four months. The time period for the data collection is too short. Through this study, able to collect data from 277 respondents within a month.

3.6.1. SAMPLING

A sample is the specific group from which we will collect data. A proportionate stratified random sampling method was used in three age categories, the first being 18 to 24, the second being 25 to 31, and the third being 32 to 38 years of age. The population studied in this study is made up of Malaysian young drivers. In this study, the population size was chosen as all Malaysian young drivers, just to get more respondents and clearer data on the main factors that contribute to the road accident issue among Malaysian young drivers.

3.6.2. SAMPLING TECHNIQUE

This study used a quantitative sampling strategy. When sampling with probability, each person in the population has a chance of being chosen. A basic random sampling has an equal chance of selecting every member of the population among the young drivers in Malaysia. So there is a high chance to get the Accutane data based on the young respondent in this case as well. In this case, there are 205 female respondents and 72 male respondents. They are mostly classified as students.



CHAPTER FOUR:

DATA ANALYSIS AND FINDINGS

4.0 Introduction

This chapter discusses the results of this study. This chapter consists of five sections. The first section describes the demographic profile of the respondent. The next section describes the descriptive statistics of the three main variables of this study. They are the human, environment, and vehicle factors of this study. Reliability analysis using Cronbach Alpha is also outlined in this chapter. Following that, this chapter presents the inferential analysis consisting of Pearson correlation and multiple regression to test the main hypothesis of the study. The chapter's conclusion is discussed in the final section.

4.1 Profile of the Respondents

This following section describes the backgrounds of the respondents to this study. The background of the respondents consists of age, gender, and employment status.

As shown in Table 4.1 and from the analysis using SPSS, results show that the highest age group was between 18-24, respondents of the sample which is 56.6%. Following that frequency results shows that the age group between 25-31 years has 73 respondent which report 23.8 % of the sample. The smallest age group was below 32-38, 32 respondent and 10.4% from sample of respondent. Next, the frequency result shows the gender of young road users in Malaysia. Results reveal that 205 respondents (66.8 %) were female and 72 (23.5%) were male respondent in this survey.

The employment status of the respondents shows that the majority of the respondents are students. The frequency is 172 (56.0%). The level of employment is 86 (28.0%). The majority of Lowes respondents are unemployed, with 11 (3.6%).

Table 4.1: Distribution of Respondents by Age, Gender, and Employment Status

DEMOGRAPHIC			
VARIABLES	CATEGORY	Frequency	Percent
AGE	18-24	172	56.0
	25-31	73	23.8
	32-38	32	10.4
EMPLOYMENTSTATUS	STUDENT	180	58.6
	EMPLOYED	86	28.0
	UNEMPLOYED	11	3.6
GENDER	MALE	72	23.5
	FEMALE	205	66.8

4.2 Descriptive Statistics of Variables of Study

This section discusses the descriptive statistics of the variables in the study. In this study, there are three main variables: the human factor, the environment factor, and the vehicle factor. Table 4.2 below shows the descriptive statistical analysis of the human factor. Based on the five-point Likert scale used, the minimum human factor rating was 1.00. The standard deviation value is 0.99371. The mean value of the human factor is 1.9718. The next factor is the environment. The minimum environment rating was 1.00. The standard deviation value of the environment factor is 0.79848. As last are vehicle factor statistics. The minimum rating is 1.00. The standard deviation value of the vehicle factor is 0.92726.

Table 4.2: Descriptive Statistics of Human, Environmental, and Vehicle Factors

DESCRIPTIVE STATISTICS				
VARIABLE	Minimum	Maximum	Mean	Std. Deviation
HF	1.00	5.00	1.9718	0.99371
EF	1.00	5.00	1.8630	0.79848
VF	1.00	5.00	1.9630	0.92726

4.3 Reliability Analysis

For this study, reliability analysis has also been done. The reliability analysis was carried out to assess the validity, consistency, and stability of the questionnaire used in this study. Cronbach's alpha is used to calculate the reliability coefficients for all items.

The dependability of the variables is regarded as excellent when Cronbach's alpha is 0.9 or greater (Hair et al., 2010), according to the bibliography. Cronbach's alpha is used to calculate the reliability coefficients for all queries pertaining to the environment and the human aspect. The value of Cronbach's alpha for the human factor is 0.980. The next Cronbach Alpha for environment is 0.986. The vehicle factor's most recent Cronbach Alpha score is 0.990. Table 4.3 displays the outcomes of the reliability coefficients for each variable measured using Cronbach's alpha.

Table 4.3: Reliability Coefficients (Cronbach Alpha) of the scales

RELIABILITY STATISTICS		
Variables	N of Items	Cronbach's Alpha
Human Factor	10	0.980
Environment factor	10	0.986
Vehicle factor	10	0.990

4.3 Inferential Statistics

The results of the inferential statistics of the study are discussed in this section. Inferential statistics explains to infer the relationship between two variables, differences in a variable among different subgroups and finally how several independent variables might explain the variance in a dependent variable (Sekaran, 2003). This section comprise of two subsections whereby the first part (4.4.1) reports the results of the Pearson correlation between the main variables of this study. The second part (4.4.2) accounts for the results of the multiple regressions of the study.

4.3.1 Correlation

A measure of the strength of the linear link between two variables is called the correlation. Between the two variables, there are three conceivable relationships: a positive linear correlation, a negative linear correlation, or no association at all (Fah & Hoon 2009). The link between the variables (independent, mediating, and dependent variables) of the study is examined using the Pearson correlation coefficient.

As illustrated in Table 4.4 below, human factor has a significant positive relationship on the environment factor ($r = .759$, $p < 0.05$). Secondly, human factor has a significant positive relationship on the vehicle factor ($r = .659$, $p < 0.05$). The human factor value is equal to 1

Table 4.4: Correlations among human factor, environment factor, and vehicle factor

CORRELATIONS			
	HF	EF	VF
HF	1		
EF	.759**	1	
VF	.659**	.822**	1

** . Correlation is significant at the 0.01 level
(2-tailed).

4.3.2 Multiple Regressions

This part presents the findings of the three models: summary, Anova, and coefficients for the three factors. There are human, environmental, and vehicle factors in this study as well. The coefficient value of the human factor is 0.190. The next is the environment factor the coefficient is 0.833. As last coefficients are vehicle factors of 0.117.

4.4.2 Multiple Regressions

This part presents the findings of the hypotheses tests of the study. There were five hypotheses tested using multiple regressions analysis. This section tests the relationship between independent variables and dependent variable.

4.4.2.1 Relationship between Independent Variables and Dependent Variables

In this study have four hypotheses proposed to test the relationship between IVs (human, environment and vehicle factor) and DV (young road users). The following part is to test the relationship between IVs (human, environment and vehicle factor) and DV (effect among young road users). The below show the hypotheses in this study.

H1: The human factor contribute to road accident among young road users.

H2: Vehicle factor and vehicle maintenance negatively affect road users.

H3: Environment are largely responsible and effect young road users.

Multiple regressions analysis was used to evaluate the effects of independent variables (human, environment and vehicle f actor) on dependent variable (effect among young road users). As depicted in Table below, the regression results revealed that the R square value of .580. This indicates that 48% of variance that explained the DV (perceived waiting time) was accounted for by the IVs (human, environment and vehicle f actor) $R^2 = .0.580$, Adjusted $R^2 = 0.577$, $F = 189.566$, $p < 0.05$ which are positively related with H1, H2, H3 and H4 as assume before the survey. All the hypothesis are passively match with variables as well. In this case most of the respondent agree with environment factor which is .822. Then the lowest variable factor is vehicle factor in this case as well.

Table 4.6: Results of the Multiple Regression Analysis with Self Efficacy

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.762^a	0.580	0.577	0.64597
a. Predictors: (Constant), VF, Ef				
b. Dependent Variable: HF				

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	158.205	2	79.103	189.566	.000 ^b
	Residual	114.335	274	0.417		
	Total	272.540	276			
a. Dependent Variable: HF						
Coefficients ^a						
Model				Standardized Coefficients Beta	t	Sig.
1	HF	0.190	0.100		1.903	0.058
	Ef	0.833	0.085	0.670	9.752	0.000
	VF	0.117	0.074	0.109	1.590	0.113
a. Dependent Variable: HF						

$R^2 = .0580$, Adjusted $R^2 = 0.577$, $F = 189.566$, $p < 0.05$

CHAPTER FIVE:

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter closes the study by summarizing the results. This chapter is divided into four parts. The discussion of the findings is presented in the first section, which is followed by a summary of the study's findings in relation to the study's goal. The required additions to the body of knowledge are covered in the third section. The study's shortcomings were highlighted in the next section, which was followed by suggestions for additional research. Section 5.5 provides a summary of this chapter's conclusion.

5.1 Discussion

In this study, the independent variable is demographic, which includes the respondent's age, gender, and occupation status. Other than the main three variables, the independent variable also has three variables. They are human factors, environment factors, and vehicle factors. Other than in this study, the dependent variable is the effect of young road users.

The results from the regressions analysis between independent variables (demographic, human, environment and vehicle factor) and dependent variables (young road users.) presents that there is a positive significant relationship between young road users. (Esteban et al. 2021) According to Esteban 2021) youngest age group highly effect and contributor to road accident in Malaysia as well. Its positively match with current results as well.

The purpose of this study was to look into the direct effects of young drivers from various backgrounds on themselves as well as the human, environmental, and vehicle aspects that may affect how they interact with young road users in Malaysia. In Malaysia, there are more road accidents as a result of many factors. This includes the way that one drives, the condition of the car, and the environment and traffic flow. To reduce the frequency of traffic accidents, major improvements in automobile maintenance have been created. Driver behavior, however, is a human factor that might impact a traffic collision (Liana et al., 2012). According to previous studies, the author emphasizes that people are the primary cause of road accidents, especially among young drivers.

5.2. Validation of Questionnaire Items

All the question are refer and took from multiple papers from Road Safety Perception Questionnaire (RSPQ) 2021(Esteban et al. 2021), OF driver vehicle (Analysis et al. n.d.), Survey on the Causes of Road Traffic Accidents in (Cao, Schniederjans, and Schniederjans 2017)(Sabahiah et al. 2016) Each factor contain 10 question. All the question was took from reference paper as well in this study.

(Esteban et al. 2021) based on previous research paper it's positively affect among human factor among young road users in Malaysia. The regression analysis of this study supports this literature and also shows that human factor has positive significant relationship with the effect of young road users. Based on the results of multiple regressions, the researcher found that the proposed environment factor it's mostly agreed by the respondent in this case as well. Other than human factor it's significantly effect on young road users.

Next the, previous research explain that (Esteban et al. 2021) human factor highly effected based on previous study. Which it's significantly support current study. The Cronbach's Alpha value is 0.885. In this study, the Cronbach's alpha for the human factor is 0.980. Which the Cronbach's Alpha value is more excellent and significant than in the previous study. The nest is the environment factor. Cronbach's alpha value is 0.986. As last is the vehicle factor. Cronbach's alpha value is 0.99. All the variables in this study contain ten questions for each and every factor.

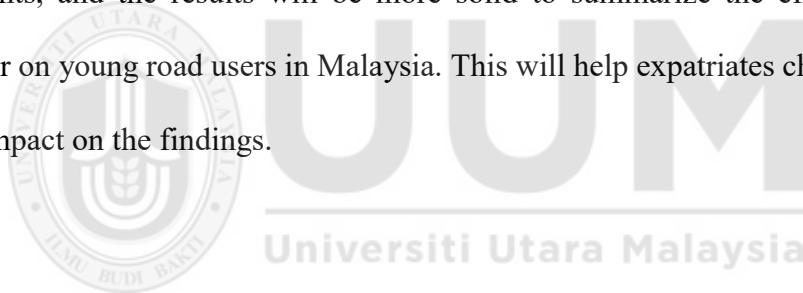
5.3 Summary of Findings

The research outcomes are outlined in this part and are discussed in light of the study's research goals. In this study, the researcher has offered three research objectives, each of which has been independently discussed.



5.4 Recommendation for Future Research

Based on the limitations of the study, this study suggests a few recommendations for future research. It was suggested that researchers need to ensure the number of responses from their sample of respondents. The researcher should get a large number of respondents to conduct this study. So, researchers must continually follow up regarding the feedback from respondents. More time and action should be taken in order to reach the respondents by visiting the particular universities, schools, and shopping complexes and handing over the questionnaire to the respondents. This will help the researcher get feedback immediately. In the future, the study should be conducted on a larger population where researchers can collect data from the entire Malaysian youngster. By doing so, the study will reach more respondents, and the results will be more solid to summarize the effect of road users' behaviour on young road users in Malaysia. This will help expatriates change and will have a great impact on the findings.



5.5 LIMITATIONS OF THE STUDY

In conducting the study, there were a few limitations that had to be analysed. The first limitation of the study is related to the low feedback of respondents. The low feedback from the respondents is lacking to summarize the results of the study. Besides that, respondents to this the studies are focused on Malaysia's young generation only. At the same time, the limitation of this study was being able to collect the data only through an online platform. If we had the chance to collect the data face-to-face, could get more respondents.

5.6 Conclusion

Finally, this study has discussed the human, environmental, and vehicle factors that contribute and affect the young road users in Malaysia. Its explanation explains how all three variables have a significant impact on young Malaysian drivers. Following that, this study also provides important insights three factor they are human factor, environment and vehicle factor in this study. Through this study, able to identify three variables in the environment that have a high impact in this study as well. Other than In this case, the majority of respondents are females between the ages of 18 and 24. The majority of them are students in this study as well. In this study, based on the respondent information, the factor most affected by Malaysia's young drivers is the environment. The respondent agrees that the environment is a highly contribute factor in road accident cases in Malaysia. So the government should come out with more street lights on dark roads to avoid and reduce the accident issues. Aside from bad weather, one should consider road accident issues. So advise the young road drivers to drive more carefully and slowly during bad weather or the rainy season to avoid accident cases in our country. So for sure, it will help reduce the accident cases around Malaysia and worldwide.

APENDIX

1. HUMAN BEHAVIOUR FACTOR
Driving at speeds higher than those allowed by law
Driving without obeying traffic signals
Driving when visibility is poor (e.g. at night/during heavy downpours)
Driving while talking on the phone
Driving while chatting online
Driving under the influence of alcohol
I enjoy speeding my vehicle beyond the given limit
It is hard to control myself not to speed
For me, riding over the speed limit is not dangerous
Reckless / careless driving

HUMAN BEHAVIOR FACTOR QUESTION

2. ENVIRONMENTAL FACTOR
High traffic congestion
Bad weather condition
Poorly maintained road
Wet road during rainy season
Animal crossing domestic or wild
Rain, mist, or drizzle
Glare from sun, headlights
Road construction or maintenance
Standing or moving water

Lighting deficiencies on interurban roads
--

ENVIRONMENT FACTOR QUESTION

3. VEHICLE FACTOR

Poor break system

Bald tyres contribute to accident
--

Fouly lights

Defective steering

Brake failure

The high average age of the vehicle fleet
--

The high proportion of vehicles in the vehicle fleet that does not have anti-lock braking systems (ABS).

Vehicle breakdown

The high proportion of vehicles in the vehicle fleet does not have a speed limiter (heavy duty vehicle)
--

Not complying with the regulations regarding vehicles
--

VEHICLE FACTOR QUESTION

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