

At the Junction Point: The Phenomenon of Vehicular Accidents on Tilt Roads

Haneylyn L. Cagod, MSCJ*; Marjorie A. Hesim, MSCJ**, Rodenson L. Cagod, MAEd (CAR)***,

*J.H. Cerilles State College, Dumingag Campus, Zamboanga del Sur; **Tubod College, Tubod, Lanao del Norte ***DepEd, South District, Pagadian City Division

ABSTRACT

Road traffic accidents are the most major public health threat, resulting in countless injuries and deaths worldwide. Vehicle accidents on tilt roads are common and serious, necessitating the drivers' full attention. The study investigated vehicle accidents on tilt roads in Pagadian City. It used purposive and snowball sampling in identifying the participants. It was participated by 8 participants, but the study reached data saturation in five participants. The researcher used a researcher-made unstructured interview guide in gathering data and information. The data was analyzed using the six stages of data analysis of Yin. The study yielded seven themes, namely:1) Poor Road Condition; 2) Contextual, Environmental and Technical Causes of Driving Accidents; 3) Personal and Psychological Causes of Driving Accidents; 4) Reasons for Not Giving Up in a Difficult Situation when Driving; 5) Identified Effects from the Driving Accidents; 6) Fixed requirement for Professional License, and; 7) Adhering to God's Protection and Guidance. As a result, many drivers continue to travel even under hazardous road and weather conditions to support their families. Many fail to attend Land Transportation Office seminars and training aimed to assist them with traffic education owing to unemployment and economic stability.

KEYWORDS: drivers, injuries, phenomenon, public health threat, tilt roads, traffic accidents

INTRODUCTION

Accidents could occur mostly on the roads than in any other place; they could happen at any time and anywhere. The most cause of death is road accidents in many countries, especially in developing countries (UN) [1], and the main factors that reduce economics. Accidents happen due to many factors, not only because of a high number of vehicles but also people/animal crossing, the buildings around, infrastructure within the road and on the sidewalk, and more (Hammad et al.) [2]. Driver's discipline on the road rules is also a factor (WHO) [3].

It was found out by transportation experts that the leading causes of vehicle damage and fatalities are due to vehicles interaction at higher speeds and intersections (Fountas, Fonzone, Gharavi, & Rye) [4]. Car accidents continue to occur despite new developments in-vehicle technology, such as backup cameras, adaptive lighting, and forward-collision systems (FCS) (Rustamov, Sharipov, & Pulatov) [5]. Understanding how motor vehicle accidents occur is



the first step in preventing injury and death (Bissell) [6]. Drivers in America are driving more miles and spending more time on the road each year, amplifying these variables. This is why, to reduce roadway incidents on US roadways, traffic engineers concentrate on four important aspects of route design.

Most accidents are caused by driving offenses, errors, and infrastructure on the road and the sidewalk, and drivers who commit more violations are more likely to be involved in an accident (WHO) [3]. Traffic infraction monitoring systems have been implemented in some high-risk road sections to preserve traffic order and limit the number of traffic accidents. As a result, decreasing traffic violations can help to prevent accidents (WHO) [3]. Drivers have been identified as one of the key human variables contributing to traffic accidents and investigated in numerous studies.

A variety of reasons, according to the Philippine National Police, contribute to the rise in road accidents. Human mistakes, such as reckless driving, intoxicated driving, and poor overtaking are the most typical causes. It is safe to believe that vehicle collisions could be avoided based on the aforementioned factors. In 2020, the Metro Manila Accident Reporting and Analysis System (MMARAS) recorded 65,032 accidents in the country's main metropolitan area, with 337 persons killed. Metro Manila had an average of 178 road-crash occurrences each day, with 50,230 instances resulting in property damage and 14,465 cases ending in non-fatal injury. This number is rising at an alarming rate, particularly in the National Capital Region (NCR). According to the MMDA-TEC-Road Safety Unit's annual report, from 63,072 in 2007 to 110,025 in 2017, the Metro Manila Accident Reporting and Analysis System (MMARAS) had nearly doubled to 110,025 in 2017. Four hundred thirty-four fatalities, 19,374 non-fatal injuries, and 94,097 property damage in the 2017 Metro Manila traffic collisions (Business Inquire) [7].

Due to the hilly landscape of Pagadian City, road accidents frequently occur, especially during heavy rains. Even in the middle of the pandemic, traffic accidents continue to occur in Pagadian City, particularly on the tilt road connecting Dao, Pagadian City, Balintawak, and Dumalinao. It is the busiest road in Zamboanga del Sur, with the majority of travelers coming from the provinces of Lanao del Sur and Zamboanga Sibugay, as well as a center for goods commerce.

According to the incident report, seven persons died, and 44 were injured during a vehicular accident in Pagadian City, the capital of Zamboanga del Sur. On the report, a jeep with passengers traveling from Barangay Cogonan, Labangan, had undergone a brake malfunction and lost control of the steering wheel while navigating on a descending road in Barangay Dao Pagadian City. Driver mistakes, mechanical failure, overspeeding, drinking before driving, and finally, damaged roads or roads under construction without sufficient warnings were the leading causes of road accidents. However, no research has been done on vehicle accidents on tilt roads. As a result, this study will be done to assess existing designs, including the effectiveness of road markings, and to determine road design preventive measures.

METHODOLOGY

The study utilized the qualitative approach using the case study design. A case study is an empirical investigation into a case or case by answering "how" or "why" questions about the phenomenon of interest (Yazan) [8]; (Yin)[9]. The researcher's significant role and the field



notes gathered through interviews played a crucial part in the coherent pattern. The study used research questions derived from the literature reviewed. It sought to conduct a deep investigation and understand why and how the vehicular accidents occurred on tilt roads in Pagadian City.

This study was conducted at Pagadian City, Zamboanga del Sur. Pagadian City is the capital of the Zamboanga del Sur and is classified as the 2nd class component city on the northeastern side of western Mindanao, Philippines. It is the regional capital of the Zamboanga Peninsula and the region's second-largest city, after Zamboanga City. It has four native languages: Subanon, Cebuano, Chavacano, and Tagalog.

The study participants were the five drivers of Pagadian City, Zamboanga del Sur, who had encountered road accidents within the past three years. Participants were identified using purposive and snowball sampling techniques. The following were the inclusion criteria: 1) must be of legal age, 18 years old and above; 2) have experienced a vehicle accident on the Pagadian tilt road; and 3) willingness to participate in the study. However, only five participants were included as data saturation was already reached.

A researcher-made interview guide was used in gathering the relevant data. For easy understanding, the interview guide questions were translated into vernacular language.

Informed consent was secured from the participants afterwhich interviews were conducted which lasted about 20-30 minutes per participant. It used cellphone as audio-recorder and datasheet to accurately capture all responses, including their reaction and comments.

RESULTS AND DISCUSSION

This research aimed to look at the phenomenon of vehicle collisions on tilted roads. The study were participated by eight drivers from Pagadian City, Zamboanga del Sur. All of the participants have previous road accident experiences from one of the known tilt road in the City. They were between the ages of 32-54 and serving more than five years as professional drivers. Their identities were first collected from the traffic and police station in Pagadian City. They were selected using purposive and snowball sampling techniques. Out from eight volunteered participants, only five were included as data saturation was already achieved. There are seven emerging themes, namely: 1) Poor Road Condition; 2) Contextual, Environmental and Technical Causes of Driving Accidents; 3) Personal and Psychological Causes of Driving Accidents; 4) Reasons for Not Giving Up in a Difficult Situation when Driving; 5) Identified Effects from the Driving Accidents; 6) Fixed requirement for Professional License, and; 7) Adhering to God's Protection and Guidance.

The state of the road has a significant impact on road users. A bad road will raise vehicle costs, travel time and possibly damage the loads being transported. It will also impact the number of accidents, the comfort of road users, and the environment. Car accidents can be caused by various factors, one of which is poor road conditions. It has the potential to cause an accident, especially at night. When a driver does not expect the road conditions to be hazardous, the most serious accidents occur.



The following are the responses of the participants:

"I was only driving as fast as 50-60 kph because it was steep and I need a head start, but don't drive fast on that part due to its steepness and at the top, there is a curved road, and I also had a passenger with things for his house." (P1)

"Based on my experience as an old driver, the hardest road for me is the one with a curved road which are steep, just because there is not enough room and could easily get out of balance." (P5)

"As a driver, the most challenging road is when you're driving on a tilting road because if you can't control your vehicle, you will be in trouble, it will be the cause of your accident." (P2)

"It wasn't that I was momentarily distracted, but indeed, it was a slippery, winding and tilting road that contributed to the mishap."(P1)

Coming 'round the mountain seems like a lot of fun, but driving steep slopes on small mountain roads can be difficult for drivers and their vehicles. You'll be better prepared to drive through mountain ranges securely if you have some sure-footed driving skills. Steep uphill and downhill grades can place additional strain on your vehicle's major components, including the engine and brakes. Fortunately, whether you're driving up or down a mountain road, you can take certain precautions to help your vehicle (Allstate) [10].

These are the response of the respondents:

"On that occasion, I was driving for about 40-60kph, and I was going uphill with some cargoes in me. And because of my vehicle, I could not go that fast, and sometimes my vehicle could easily fall over, especially on uphill roads. The hardest road is the uphill in the Pagadian from Plaza Luz which is very tiring if you're just going to walk." (P4)

"For me, the hardest route is in that steep road also it very curve. Especially if you're loaded, turning is not easy due to my unbalanced vehicle; when I try to turn sometimes, I get tilted. It's ok if it's only persons I have because they will just adjust on every turn, the hardest to turn if you are carrying some cargoes." (P1)

Listening to a teacher in class is similar to driving a car. You may believe you can get away with not paying attention, but you will pay the price in the form of a poor or failing grade or an accident. When you're not driving, save the Snapchatting for later. After all, it's against the law. Even minor tasks like as connecting your phone with the car's audio system or programming Waze should be completed before you get behind the wheel (Philstar Global) [11].

Contextual, Environmental and Technical Causes of Driving Accidents

Road accidents are caused by a combination of contextual or missing road signs, environmental factors, and technical issues. Although Pagadian City is now a progressive city, but most of the roads (both national and local) have no road signs, driving precautions, and street lights. These are the most common causes of accidents, especially among tourists who are unfamiliar with the city's roads.



These are manifestation of the respondents:

"Upon entering the rotunda from IBT Pagadian City, you could see road signs, but after the rotunda going to Plaza Luz Pagadian City, I didn't notice some road signs in that area and Dimly-lit highways are accident-prone areas. With road signs and warnings, these roads danger can still be prevented by drivers, passengers and even pedestrians. " (P1)

"Upon entering the rotunda from IBT Pagadian City, you could see road signs, but after the rotunda going to Plaza Luz Pagadian City I didn't notice some road signs in that area." (P2)

"I am suggesting that they will put some road/street lights on dark areas and repairing those unpaved roads to prevent vehicular accidents due to this factor." (P3)

The lack of nighttime street lighting has the greatest influence on the number of deaths and serious injuries. The findings demonstrate that evening lighting has a significant potential for enhancing traffic safety and reducing the severity of accidents, particularly for those who are killed or seriously injured. To ensure a good installation and offer a basis for tendering, a road lighting standard is required. Minor roads, also known as subsidiary roads, have lighting designed to meet the needs of pedestrians (Fotios & Gibbons)[12]. Moreover, bad weather condition or rainy days is likely to cause a vehicular accident, particularly on steep roads, which becomes slippery when wet. Tricycles are more prone to accidents during rainy days or bad weather conditions. Steep roads are very hard to control for tricycles when roads are wet with a full passenger.

The following are the statements of the participants:

"The condition at that time is very hot because at the middle of the day. And the sun was flaring on me, and I couldn't see clearly on the blind curve. That's why I couldn't control it, and I with my wife got into an accident. " (P3)

"As I have mentioned. Driving a tricycle may seem easy, but actually, it is not. It may have three wheels making it seem balanced and easy to maneuver, but dealing with swift and tight turns is unforgiving. Turning the handlebars too close to your body will surely cause the tricycle to lose balance and eventually tumble. Needless to say, whatever a person may be driving on a slippery road and in a stormy condition, accidents and mishaps are likely to happen." (P1)

"A single momentary lapse in concentration in these conditions may sometimes prove fatal, and during my accident, it was rainy season; I couldn't forget because it was the month of June, it was even flooding in other place that's why the road was slippery, and my tires were already smooth. It's also the reason the tires of my vehicle slipped when I went to the terminal in the IBT, and my vehicle was overturned. Thankfully to our heavenly Father, even because of that, I only got some of my injuries. I thought it was my last. So, to every driver out there, don't forget to pray to our God, especially if traveling because He will guide you always. But on that accident, it may be due to the slippery road and the loss of balance when I made a turn. That's why I couldn't control my vehicle, and it just overturned." (P1)



"The condition on the road is slippery because the rain was pouring until morning and the wheels of my vehicle are already worn out. I wasn't able to drive up at that time. That's why my vehicle backed up, and without the breaks, I couldn't control it, and I went directly downhill." (P2)

Vehicle parts also have a lifespan. When it reaches its lifespan, it will be damaged or not functioning properly. Regular check-up for vehicle parts for maintenance has to be scheduled regularly to avoid unnecessary malfunction or even vehicular accidents. It is also advised to use genuine parts to replace damaged parts to assure the quality and durability of the vehicle parts. Their manifestations showed that some parts of their vehicle were not functioning well or had a low-quality performance that drove them into accidents.

These are stated the participants:

"A little ma'am because when I was on my way from IBT of Pagadian City my brake was malfunctioned and I try to manage during the first attempt but in the middle of my way from the rotunda to Plaza Luz my brake malfunctioned and it couldn't help to avoid such accident." (P5)

"My vehicle is on condition because I always make sure to check before leaving. That is why I did not expect that we would go to crash at that time, but maybe it's just because the scooter tires are slippery. I was shocked that we just fell over on that uphill road." (P3)

Likewise, poor road and weather conditions enhanced the relative accident risks. Previous studies revealed that the danger on motorways was higher in poor weather and road conditions than on two-lane and multiple-lane roads, despite the fact that the overall risk was lower on motorways (Bhattarai, & Conway) [13]; (Forster et al.) [14]; (Harith, Mahmud, & Doulatabadi) [15].

Personal and Psychological Causes of Driving Accidents

For everyone engaged in a vehicle accident, it is a stressful experience. The quick crash, loud noises, and vehicle damage may pass in a second, but they can have a long-term impact on someone's worry and phobias. It's not simply the worry of something horrible happening; it's the fear of something bad happening in an unknown location, far from home, with no one to help. Being trapped in traffic is an annoyance that no one enjoys, but if you have fear panic attacks, being stuck is much scarier than the previous.

The following are their shared statements:

"On my estimate, I had 5-6 hours of sleep, just because sometimes there are some nights that we can't get some good sleep when we grow older." (P5)

"In reality, during that time I was able to get a small amount of sleep because I was drinking with my friends. It so happened that my friend arrived from another country, that's why we drank too much. During that time, I think I only had 1 or 2 hours of sleep." (P2)

"From what I've remembered ma'am, I only got 4 hours of sleep because I went out at night before I got an accident. I went to my friend who I hadn't seen for a while, and we



bonded because he is living now with his wife and it is also his son's birthday which is also my godson, and we finish at dawn already. " (P4)

"The first reason on my mind why I got on an accident is that I lost focus, it wouldn't be got into an accident if I didn't care less. Yes, ma'am, I believed that I was distracted at that time in which is the reason it brought me to get into an accident. If I noticed the curve, I think I wouldn't crash." (P3)

"As I have mentioned. Driving a tricycle may seem easy, but actually, it is not. It may have three wheels making it seem balanced and easy to maneuver, but dealing with swift and tight turns is unforgiving. Turning the handlebars too close to your body will surely cause the tricycle to lose balance and eventually tumble. Needless to say, whatever a person may be driving on a slippery road and in a stormy condition, accidents and mishaps are likely to happen. A single momentary lapse in concentration in these conditions may sometimes prove fatal." (P1)

Drinking alcohol and operating a motor vehicle is known as driving under the influence (DUI) or impaired driving. Because they do not have a traffic collision every time they drink and drive, drivers are frequently unaware of the risk they are taking when driving under the influence of alcohol. Even a trace amount of alcohol in the blood can impair driving and increase the chance of an accident. If a motorist intends to drive a vehicle at night, he/she must not drink to avoid a mishap.

These were confession of the participants:

"Maybe also because I was drunk, I had less sleep, and I lost control because of hit a rock at that time, which it did not expect of a cement road. Maybe it was just because of my carelessness; that's why you must drive only when you haven't drunk something and in perfect condition because I get rattled sometimes." (P2)

"I drunk a lot at night because I went on a birthday night before the accident. We had fun because it's seldom to see them and just for old times' sake. In the morning, even if I'm tired because I haven't slept well, I still go on driving." (P4)

Human factors in road accidents are divided into two categories: cognitive-behavioral factors and behavioral aspects. While acknowledging the negative effects of road conditions and vehicle health in causing accidents, researchers have hypothesized that the effect of human factors is omitted and should be investigated. Personality qualities (based on the Big Five personality traits), driving behavior, and mental problems are among the elements that have been eliminated (Alavi, et. al.) [16].

Reasons for Not Giving Up in a Difficult Situation When Driving

Many people have lost their work due to the pandemic. Drivers from all over the world were also affected. The closures of borders, establishment and markets also diminish the number of commuters. To have suited income for their families, drivers performed their jobs beyond their limitation. This circumstances cause many drivers to be involved in the accident.

These are their shared testimonies:

"During that time, I could feel that I'm going to crash. I was thinking of jumping or just holding on because I was thinking about my passengers; I didn't want to leave them behind. That's why the only thing on my mind is to pray that we all be going to be fine.



Just thinking that the vehicle could still be repaired, but a life cannot. I was saying that I wasn't ready; I wanted another chance in life from our heavenly Father. We thought that I still had young kids and would care for them, especially since my wife was jobless." (P1)

"With all that "luck" I was worried about the expenses I have to pay for myself and those passengers with me during that fateful day." (P1)

"When I notice that I'm going to be in an accident, I tried to control the wheel on my vehicle. There are too many things that went on my mind at that time, if what was going to happen to me, if my vehicle was going to be broken and how could I pay to fix it, and lastly, what to do with my family." (P4)

Car accidents are the most prevalent type of bad driving experience, and they can be the most frightening, but there are others. Driving in a terrible storm, being the target of road rage, being lost, or having a panic attack can all be unpleasant experiences. You may find yourself replaying the event in your head, fearful that it may happen again. The person's anxiety may be exacerbated by repeated thoughts and anxieties, causing them to avoid driving (Anxiety & Depression Association of America) [17].

Identified Effects from the Driving Accidents

Young driver collisions have been linked to inexperience, lack of expertise, and risk-taking behavior. The collisions of senior drivers, on the other hand, have been linked to visual, cognitive, and movement impairment. Although the drivers may not realize it, being involved in a bad vehicle accident can have long-term consequences. If they were in an automobile accident due to someone else's negligence, they might be eligible for compensation. The majority of traffic accidents are caused by the driver's judgments behind the wheel rather than their lack of knowledge of how to drive a car.

Participant 2 affirmed:

"We had some violations also for disobeying curfew, and we had to pay it there. Our family scolded us, but we accepted it because it was our fault. We have paid a lot for the hospital and for disobeying the curfew." (P2)

Any accident may appear to be a major, but there is a distinction between a major and a small one. It depends on the extent of the car's damage, your physical and mental injuries, and the amount of money required resolving the case. Your vehicle may sustain minor damage in a minor accident. It can, however, result in serious injuries, leaving you with medical costs, lost pay, and other losses.

These are the statement of the respondents:

"My foot got stuck on the muffler of my vehicle, and I got dizzy, maybe because I was shocked on what happened on that day." (P3)

"I got so many bruises, and my head was spinning because it was a long way when I got on an accident. The people immediately brought me to the hospital, they were quick to call an ambulance." (P4)



"After that mishap, I got many lumps in my body, and the most affected part of my body is my arm and feet because during the mishap I have fallen under my vehicle." (P5)

"Returning to the accident scene to examine how the accident occurred makes the motorist believed their survival was a miracle. "After that freaking accident, I revisited the accident site & scene to talk with some eyewitness who was somewhat dumbfounded that I survived that crash with only bruises and concussions to show. They shared that with the condition and shape of my vehicle, it was indeed a miracle that we came out on that dreadful accident with minor injuries. God works in mysterious ways." (P1)

Car accidents continue to occur despite new developments in-vehicle technology such as backup cameras, adaptive lighting, and forward-collision systems (FCS). Accidents, whether little or major, can radically alter a person's life. They can lead to wage loss, pain and suffering, and even permanent impairments. The fact that road accidents are widespread does not negate the importance of familiarizing yourself with the facts.

Fixed requirement for Professional License

Transportation is indispensable means for human developed. Almost everyone has desired to travel and drives. Having the skills of driving give edge to anyone, particularly those who have their own vehicles. Majority of Filipinos, skills in driving is not just a luxury but become part of livelihood. Being professional drivers provide income or additional incomes for the needs of their families.

Participants confided these statements:

"Regarding the LTO, they are giving free seminars or driving workshops. I've heard of these many times, especially among new drivers and license applicants. I knew for myself that these seminars would benefit me and all other drivers, especially with regards to our safety, so also for our passengers' well-being. But practically speaking, with our economic state and my financial status, I'd rather allocate my time driving to earn a living and provide for my family than spend a day listening to speakers and workshop facilitators preaching safety measures and dependable driving skills." (P1)

"I still drove because we could buy some food if I didn't work. It's hard to look for money, and there are few passengers going out due to the pandemic; So I resorted to approach the fixer to have my license without any hassle." (P4)

After earning money for driving, it is a huge aid and delight for me. That's, why I pay the fixers a friend of mine to get my license without taking the exam. I know that was wrong, but I need it to continue my earning." (P5)

Studying your theory and taking and passing your driving tests provide you with valuable personal development abilities. By deciding to start the process of acquiring your driver's license and working through the personal development plan that a professional driving instructor can provide, you will surely gain the ability to learn, develop, and progress in ways that you can apply to other aspects of your life (Progress News) [18].

Adhering to God's Protection and Guidance

Faith in God is the best hope and confidence; it assures us that everything will be well since he is always there for us, even in the most trying of circumstances. Faith in God should be practiced daily, especially through difficult circumstances. It goes far deeper and further than



the hope that all will work out in the end. Put God above all, and he will provide everything you need, especially when you are hoping for a miracle.

These are the statements of the participants:

"As I've said that God saves me in mysterious ways, I could suggest to the drivers and to those who want to drive that before going anywhere just check your vehicle if it's in good condition and if there's a seminar regarding the traffic safety and rules of the road traffic just give the time it's for the safety of everybody and don't forget to pray." (P4)

"I was saying to myself that I wasn't ready, I wanted another chance in life from our heavenly Father—thinking that I still have young kids and who would be taking care of them especially that my wife is jobless." (P1)

"It's also the reason the tires of my vehicle slipped when I went to the terminal in the IBT, and also my vehicle was overturned. Thankfully to our heavenly Father, even because of that, I only got some of my injuries. I thought it was my last. So, to every driver out there, don't forget to pray to our God, especially if traveling, because He will guide you always." (P2)

Faith in the Lord entails trusting that God is good, that He is on your side, and that He is always working behind the scenes, even when you can't see it. Other versions render the word "faithfulness" as "truth," implying that God's message is correct and His activity is carried out in the light of truth. This means we can have more faith in Him (Christian Living, Faith) [19]. Faith also aids us in assisting others who are going through a tough time by providing us with the perspective and empathy necessary to care for and lift them. What is true is that when you have faith, no suffering is in vain (Allison) [20].

CONCLUSION AND RECOMMENDATIONS

The tilt roads leading from Plaza Luz to Rotonda were where drivers faced vehicular accidents in Pagadian City, and it also varies on the vehicle utilized. According to the findings, the majority of the incidents happened due to road problems and conditions. Having poor road condition which reduces the visibility of the drivers. Contextual, environmental and technical causes of driving accidents also makes it difficult for drivers to maintain control of their vehicles since the road becomes more slippery and steep. There are also personal and psychological factors that contribute to car accidents. Some drivers find it difficult to drive again after a stressful occurrence on the road, which could lead to an accident on the road at any time. Thus, this gave reasons for drivers to continue driving even in pandemic and bad weather condition.

Even when they are in a difficult circumstance or are not feeling well, some drivers continue to drive in order to meet the requirements of their families. Effects of car accidents have been identified. It is difficult for the motorist to recuperate from such an accident, particularly if they view the location where it occurred, and the traumatic injury may potentially lead to an accident. All of the drivers may have distinct motivations for continuing to drive in a pandemic situation. We owe them gratitude for their unwavering assistance. It pays to have a strong and assertive attitude on the road without being arrogant. Many accidents (or near-accidents) occur as a result of certain drivers' hesitant or unsure driving tactics, which confuse other drivers. However, it is also beneficial to give way, particularly to pedestrians.



That is why knowing one's right of way before getting on the road should be a must for all drivers. Many cases of road rage may have been prevented if everyone knew where they were supposed to be on the road.

Furthermore, when the weather is lovely and clear, traffic accidents are more likely to occur. Drivers are less cautious when driving in excellent weather than in bad weather. The scenario is made worse when drivers neglect to maintain their vehicle's tires and brakes, which raises the likelihood of drivers being involved in a road accident. In addition to being safer on the road since there are fewer vehicles on the road, drivers tend to speed up. This condition has considerably increased the probability of an accident. As a result, many drivers continue to travel even under hazardous road and weather conditions to support their families and many fail to attend Land Transportation Office seminars and trainings aimed to assist them with traffic education owing to unemployment and economic stability.

Based from the findings and conclusions, the following recommendations are drawn; tilted roads with sharp curves may possibly be well-lit, road/warning signs be placed visibly along these roads to avoid untoward incidents. Mountain slopes along tilted roads may be placed with solid steel or cement railings to provide additional safety to vehicles passing through. The Land Transportation Office (LTO) may implement stricter rules that every driver with no license cannot drive a vehicle, and every driver should undergo training and seminars. Adequate surveillance throughout the area at every time of the day and night to prevent, monitor drivers and other crimes, with specialized apparatus on determining any illegal substances and alcohol contents of each apprehended individuals.

REFERENCES

- i. United Nations, (2018). Traffic Deaths, Injuries Major Health, Development Concern, Delegates Stress, as General Assembly Adopts Resolution on Improving Global Road Safety. Retrieved from https://www.un.org/press/en/2018/ga12008.doc.htm
- Hammad, H. M., Ashraf, M., Abbas, F., Bakhat, H. F., Qaisrani, S. A., Mubeen, M., ... & Awais, M. (2019). Environmental factors affecting the frequency of road traffic accidents: a case study of sub-urban area of Pakistan. Environmental Science and Pollution Research, 26(12), 11674-11685.
- iii. WHO, (2021). *The Safe System approach: accommodating human error*. Retrieved from https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries
- iv. Fountas, G., Fonzone, A., Gharavi, N., & Rye, T. (2020). *The joint effect of weather and lighting conditions on injury severities of single-vehicle accidents. Analytic methods in accident research*, 27, 100124.
- v. Rustamov, A., Sharipov, K., & Pulatov, T. (2020). VULNERABILITY ANALYSIS OF EMERGENCY RESPONSE SYSTEM BASED ON NAVIGATIONAL UNITS IN CASE OF VEHICLE ACCIDENTS. Technical science and innovation, 2020(2), 14-18.
- vi. Bissell, D. (2018). Automation interrupted: How autonomous vehicle accidents transform the material politics of automation. Political Geography, 65, 57-66.



- vii. Business Inquirer. (2018). What you need to know about Road Safety in the *Philippines*. From https://business.inquirer.net/255709/need-know-road-safety-philippines
- viii. Yannis, Kondyli & Mitzalis (2021). *Road Safety Signs*. From https://www.researchgate.net
- ix. Yin, R. K. (2009). Case study research: Design and methods (Vol. 5). sage.
- x. Allstate (2019). Safe Mountain Driving: Brush up on these Safety Tips. Retrieved From https://www.allstate.com/tr/car-insurance/safety-tips-mountain-driving.aspx
- xi. Philstar Global, (2017). *12 reasons why driving is like life*. From https://www.philstar.com/
- xii. Fotios & Gibbons. (2018). Road lighting research for drivers and pedestrians
- xiii. Bhattarai, K., & Conway, D. (2021). Urban Growth. In Contemporary Environmental Problems in Nepal (pp. 201-334). Springer, Cham.
- xiv. Forster, Y., Hergeth, S., Naujoks, F., Krems, J., & Keinath, A. (2019). User education in automated driving: Owner's manual and interactive tutorial support mental model formation and human-automation interaction. Information, 10(4), 143.
- xv. Harith, S. H., Mahmud, N., & Doulatabadi, M. (2019, March). *Environmental factor* and road accident: A review paper. In Proceedings of the International Conference on Industrial Engineering and Operations Management, Bangkok, Thailand (pp. 5-7).
- xvi. Alavi, Seyyed Salman, et. al., (2017). *Personality, Driving Behavior and Mental Disorders Factors as Predictors of Road Traffic Accidents Based on Logistic Regression*. From https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5337762/
- xvii. Anxiety & Depression Association of America, 2017
- xviii. Progress News (2018). 10 Reasons why Learning to Drive is a Skill of a lifetime. Retrieved from https://progressschoolofmotoring.com/news/2018/learning-
- xix. Christian Living, Faith, (2021). *What does it mean to have Faith?* From https://www.orbcfamily.org/blog/faith/what-does-it-mean-to-have-faith/ coloradoinjurylaw.com/overcoming-fear-after-an-accident/
- xx. Allison S. (2021). *30 Bible Verses About Faith Scriptures for Dfficult Times*. From https://pushpay.com/blog/bible-verses-about-faith/