

Awareness and Compliance of Saint Mary's University College Students on Traffic Rules and Regulations

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ABSTRACT

Education plays a key role in Road Safety, which has reduced deaths caused by accidents in developed countries. This study aims to determine the level of awareness and compliance of SMU students to the traffic rules and regulations of the Land Transportation Office, as well as the ordinances of the Municipality of Bayombong, Nueva Vizcaya, where the results were collected by the researcher through an adapted and modified questionnaire that is made by the researcher. A descriptive-quantitative design was used wherein the respondents' level of awareness and compliance with the traffic rules and regulations was described through the numerical and statistical data that was collected through the questionnaires. The respondents are from the tertiary level who have experience in driving, are enrolled student of Saint Mary's University for the academic year 2022-2023, has a driver's license, and are current residents of Bayombong, Nueva Vizcaya. The researcher has employed a snowball sampling. The study's outcome shows that the students have high knowledge and are aware of the rules and regulations of the LTO and the municipal ordinances. While for compliance, it shows that the students have a high sense of compliance with these rules and regulations and the ordinances of traffic; however, they do not always comply with some of the traffic rules, which indicates that there should be some improvements to be made. The researcher recommends that the DSAS offices increase the regular orientation about the traffic rules to provide a high level of compliance among the student drivers of Saint Mary's University.

Keywords: Road safety, LTO, traffic ordinances, student drivers

INTRODUCTION

Many people's lives have been improved as a result of motorization. Societies advanced faster because of these inventions, but the advantages come with a price. According to the World Health Organization (2021), every year, the lives of approximately 1.3 million people are cut short due to a road traffic crash. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury.

Road safety is everybody's concern since recklessness and traffic violations can result in injuries, disabilities, and worst, loss of lives. While individuals normally want to travel from time to time, road accidents do happen, and one of the causes is traffic violations. In addition, motorists, pedestrians, and law enforcement authorities often argue over traffic rules, which can even lead to aggressive fights and malicious killings among them.

Vehicular accidents occur when a vehicle collides with another vehicle, a person, a stationary object, or something else, resulting in bodily injury, death, or property damage. It can also be defined as any fatal or non-fatal, unexpected or unforeseen event causing damage to a person or their property, whether caused intentionally or through the negligence of a person or thing.

Road rage encompasses a variety of aggressive behaviors by the driver of a motor vehicle, which seem well beyond the perceived offense committed by the victim. These reckless behaviors range from shouting, screaming, and yelling at another driver to using a weapon, including the vehicle, to incite damage to the victim or the victim's vehicle. According to an article in eCompareMo (2018), recent road rage data says eight out of

ten drivers admit to acting aggressively at least once a year, and nine out of ten drivers believe aggressive driving puts their physical safety at risk. Furthermore, aggressive driving, impatient honking, inappropriate use of high-beam headlights, counterflowing, and allowing emotions to get the best of you are all examples of how road rage starts. Moreover, in the study of Chai et al. (2019), road rage was associated with time, location, gender, vehicle characteristics, etc.

As stated by Gifty et al. (2021), Road Traffic Accidents have arisen as a global health issue, accounting for the ninth biggest cause of death worldwide, with over 1.2 million people dying each year. While in the Philippines, the annual mortality and morbidity are escalating, with road traffic accidents increasing by an average of 25.58% every year. In the span of 10 years, from 2010-2019, 31% of 894, 989 patients were hospitalized due to road traffic accidents, and motorcycles are considered to be the vehicle that meets the greatest number of accidents (Lu, Lu, & Herbosa, 2022). RTAs are expected to become the world's seventh-largest cause of death by 2030. They also added that identifying effective strategies for preventing RTAs among young adults is of global health importance. A better understanding of effective interventions is needed to inform individuals, organizations, or governments aiming to replicate or implement interventions successfully (Gifty et al., 2021).

Education plays a key role in Road Safety, which has reduced deaths caused by accidents in developed countries. The behavior of pedestrians, motorcyclists, and cyclists is a human factor involved in the occurrence of traffic accidents. Due to the role of the human factor in the occurrence of accidents, traffic safety education programs need to be implemented. The public needs to become aware that the issues of traffic and traffic accidents are vital to their health and safety (Aghdam et al., 2020).

Despite government efforts to improve road safety, the disconnect between policy measures and on-the-ground violations, distractions, and violations reflects regulatory failure (Boulagouas et al., 2020). It is also discovered in their study that unlicensed drivers are more likely to engage in unsafe driving behaviors. The number of serious traffic accidents increases when drivers do not have valid driving licenses compared to those drivers who have valid driver's licenses. Similarly, unlicensed young drivers are noticeably more likely to commit unsafe driving behaviors that result in severe traffic incidents, including death. Women drivers are more likely to be involved in right-of-way violations that result in collision accidents and slight serious injuries, contrary to unlicensed male drivers, who are more likely to commit traffic accidents that result in serious injuries.

Traffic rules and regulations, including traffic guidelines, need to be established in a well-organized manner and must be strictly followed by motor vehicle drivers in order to prevent serious traffic accidents and injuries (Nilkamal Pvt Ltd, 2018). Determining the knowledge and attitude of the population through a compliance survey is a useful tool to establish the level of attitude, knowledge, and compliance with regard to traffic rules and regulations.

Public Awareness on Rules and Regulations

Road safety is a complicated process that is reliant on more than just environmental and technological developments. This relates to attitudes, beliefs, and perceptions in the area of traffic safety, which have an impact on how people deal with topics like traffic laws, police enforcement, penalties, and traffic justice, as stated by Alonso et al. (2018). He also added that between 70 and 80 percent of traffic accidents and injuries are thought to be caused by human activity, according to science, and understanding the interaction between road users and traffic rules, supervision, penalties, and justice, in general, is crucial for this reason. In the awareness of road safety rules, according to the study by Singh (2018), with 150 respondents in the age range of 13-17, only 25.3% are aware of the traffic rules and regulations; hence, improvement of strict implementation and educational provision on traffic rules and regulations by law enforcement agencies is needed to increase the level of awareness of the drivers.

According to the study of Ramya et al. (2017) with undergraduate medical students as the respondents, the results of the study show that 540 respondents are aware of the traffic rules and helmet usage, with a percentage of 99.2% and 98.8 %. The study also tallies 87.7% of results where the respondents are aware that driving under the influence of alcohol is dangerous, and 67% of the respondents were aware of seat belt usage. Also, of the

392-two-wheeler users and 188 four-wheel users, 36.2% regularly use helmets, and 50% use seat belts regularly and both have a result of 70% for following lane rules.

Lack of awareness and non-compliance with rules and regulations, as well as laws on traffic, are the most significant causes of traffic accidents and incidents. In order to prevent serious accidents and injuries, strict implementation and compliance with traffic rules, regulations, and guidelines must be established (Nilkamal Pvt Ltd, 2018).

Public Compliance with Rules and Regulations

Drivers' violations are attributed to situational considerations, and traffic laws are not taken seriously (Pinera, 2020). Compliance with the law is mostly motivated by visibility. Increased enforcement raises the likelihood of detection, which reduces the tendency of drivers to break the law. He also mentioned that behavioral change does not always result in a change in driving attitudes. Enforcement activities appear to have a short-term effect. As a result, because motorists have not assimilated the traffic laws, compliance behavior is only required in the presence of enforcement officials.

According to Reyes (2021), when driving in the Philippines, it is always helpful to know traffic rules and their corresponding penalties. To maintain an orderly flow of traffic, it is the driver's responsibility and discipline to obey the rules and regulations of traffic.

All driver's license holders should be well-informed about the laws, rules, and regulations pertinent to land transportation. They should be willing to share the roads with other road users. They should understand not only the rights and privileges related to being a licensed driver but also the duties and responsibilities that come with it. Most importantly, they should know the first thing about defensive driving since it is inevitable that they would encounter road users who are reckless, ignorant, arrogant, or grossly noncompliant with the traffic rules.

It is concluded that the drivers are conversant with most of the traffic rules and are potentially inclined to obey them except for the right-of-way rules and rules under pavement markings, and their involvement in RTAs. Furthermore, it is recommended that driver's education be strengthened and the rules on the right of way and the meaning of pavement markings be given emphasis during the conduct of driver's education, intensification of patrols along accident-prone areas, and installation of electronic devices to detect traffic violations.

Effects of Non-Awareness and Non-Compliance with the Traffic Rules and Regulations

Topolsek et al. (2019) discovered that since there were 25,500 fatalities and more than 135,000 injuries on the roads of the European Union in 2016, vehicle accidents pose a serious social issue. Due to this, the European Commission places a high priority on road safety, and the Program's primary goal is to decrease the number of traffic fatalities. They noted that since people make mistakes by nature, for a very long time, human error was thought to be the primary, and often fatal, cause of issues with road safety. One of the cornerstones of road safety methods and solutions for improving road safety, in addition to the differentiation already described, is training and education. Furthermore, the studies they conducted indicated that teens who underwent the education program were less likely to be involved in accidents during their first two years of driving, compared to the teens who did not go through the education.

Saint Mary's University CHSF Guidelines for Motor/Vehicle Owners and Drivers

The study locale, Saint Mary's University, established its own traffic rules and regulations inside the university under the Clean, Healthy, Safe, and Friendly Campus (CHSF) program back in 2019. Its goal is to promote environmental awareness and safety for all community members. Moreover, under the safety component of the program, the CHSF guidelines and reminders to vehicle owners and drivers will serve as a guide while on the campus. These guidelines, such as no RFID; no entry, tapping at the ID reader at the gate, giving courtesy to crossing pedestrians, a speed limit of 20kph inside the campus, prohibition of noisy motorcycle mufflers,

respecting parking area signage, slowly driving at the oval track, avoiding blowing the horn, texting, taking calls, and overstaying at the car, must all be strictly followed.

Road safety is not a joke, and it should be taken seriously and given more attention because while driving on the road with other drivers, many lives can be at stake, and a simple mistake can end up in a whole life of regrets and despair. Students should be intuitive enough to follow and always be in their right mind whenever the students will be driving to their educational institution or other destinations. According to the study by Kumar (2018), a Road traffic accident is the 9th in leading cause of death in the whole world, and this rating is expected to raise to 2nd by the year 2020, just right after ischemic heart disease, and the majority age range of death that is caused by the accident is 10-25 years old, which is the age of teenagers and children that are still studying. Another study from Tabunar (2020) states that from the 156 respondents who either met an accident while driving or not, and with a mean age of 22 years old, the results show a low overall percentage in driving knowledge, attitude, and practices.

According to the DSAS of the research locale, they held one (1) seminar regarding road safety program entitled “Road Safety Forum” that was held on December 4, 2019 at Tonus Gymnasium, Saint Mary’s University spearheaded by the Student Central Council (SCC) in collaboration with Land Transportation Office, Bayombong District Office to grace the forum and discussion on Road Safety Tips and LTO motor vehicle regulations. Resource speaker Mrs. Emelita V. Balana, Chief Officer of LTO-Bayombong District Office, discussed the importance of seatbelts, helmets, speed limits, and car conditions. On the other hand, road signs and road laws, and regulations were discussed by Mr. Romulo M. Pumaras, Assistant Chief of LTO-Bayombong District Office.

This study will determine the level of awareness and compliance with the traffic rules and regulations among the students of SMU in accordance with the Philippine Constitution. The result of the study will show how the students are responsible for driving and observing their degree of knowledge and adherence to the traffic rules and regulations. The study will also serve as the foundation for the making of future research, wherein it can be a basis for additional data and information, as well as a reference to future research.

CONCEPTUAL FRAMEWORK

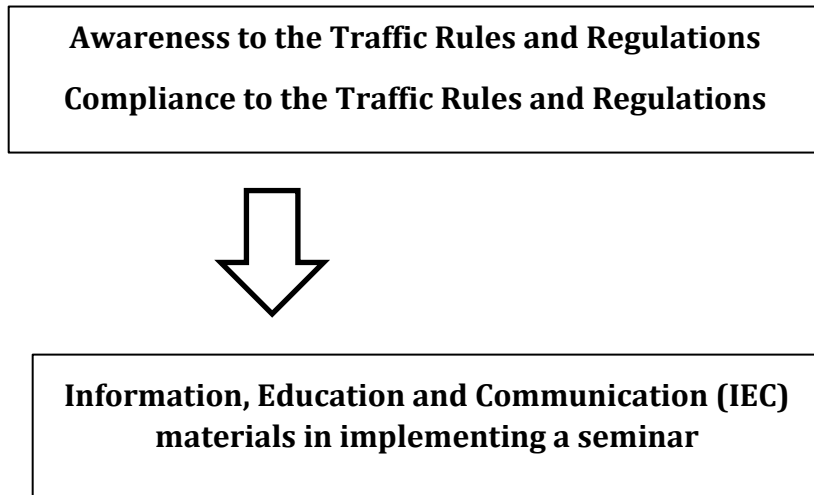
Standard traffic rules and regulations in line with the Land Transportation Office (LTO) and Municipal Ordinances of Bayombong are principles and guidelines with which motorists and road users must be aware and comply, as these standard traffic rules and regulations were used by the researcher. These rules and regulations are created by the government and enforced by law enforcement agencies in order to maintain the safety, peace, and order of the drivers as well as the pedestrians, and in order to avoid accidents, injury, and confusion on the roads.

The variables used in this study are awareness and compliance of the SMU student drivers with the traffic rules and regulations. The illustration of both variables will result in the crafting of the content material for the proposed seminar about awareness and compliance with traffic rules and regulations that will be dispensed to the students who are planning to take a radio-frequency identification (RFID) sticker from Saint Mary’s University.

Figure 1, the research paradigm, illustrates how the level of awareness and compliance among Saint Mary’s University college students will be carried out. It shows in the first and second diagrams the measures of student drivers’ awareness and compliance with standard traffic rules and regulations established by the Land Transportation Office (LTO) and Municipal Ordinances of Bayombong. The results of the study will be the foundation for creating Information, Education, and Communication (IEC) materials and tools for implementing a seminar on traffic rules and regulations that will be given to the Office of the Dean of Student Affairs and Services (DSAS) and to be presented to the students who are planning to take a radio-frequency identification (RFID) sticker from Saint Mary’s University.

Figure 1

Research Paradigm

**Statement of the Objective**

In general, this study aimed to determine the level of awareness and compliance of college students of SMU to the standard traffic rules and regulations of the LTO and the Ordinances of Bayombong Municipal. This study will be conducted during the First Semester of the S.Y. 2022-2023.

Specifically, this study sought to answer the following:

1. To determine the level of awareness of the college students of Saint Mary's University of the Traffic Rules and Regulations.
2. To determine the level of compliance of the college students of Saint Mary's University with the Traffic Rules and Regulations.
3. To create IEC materials on traffic rules and regulations to be disseminated through a seminar, the contents of which will be based on the results of the study.

METHODOLOGY

In this chapter, the methods of conducting the study were discussed, and they included the following: Research Design, Research Locale, the respondents for the study, Data Gathering Tools, and the Data Gathering Procedure.

Research Design

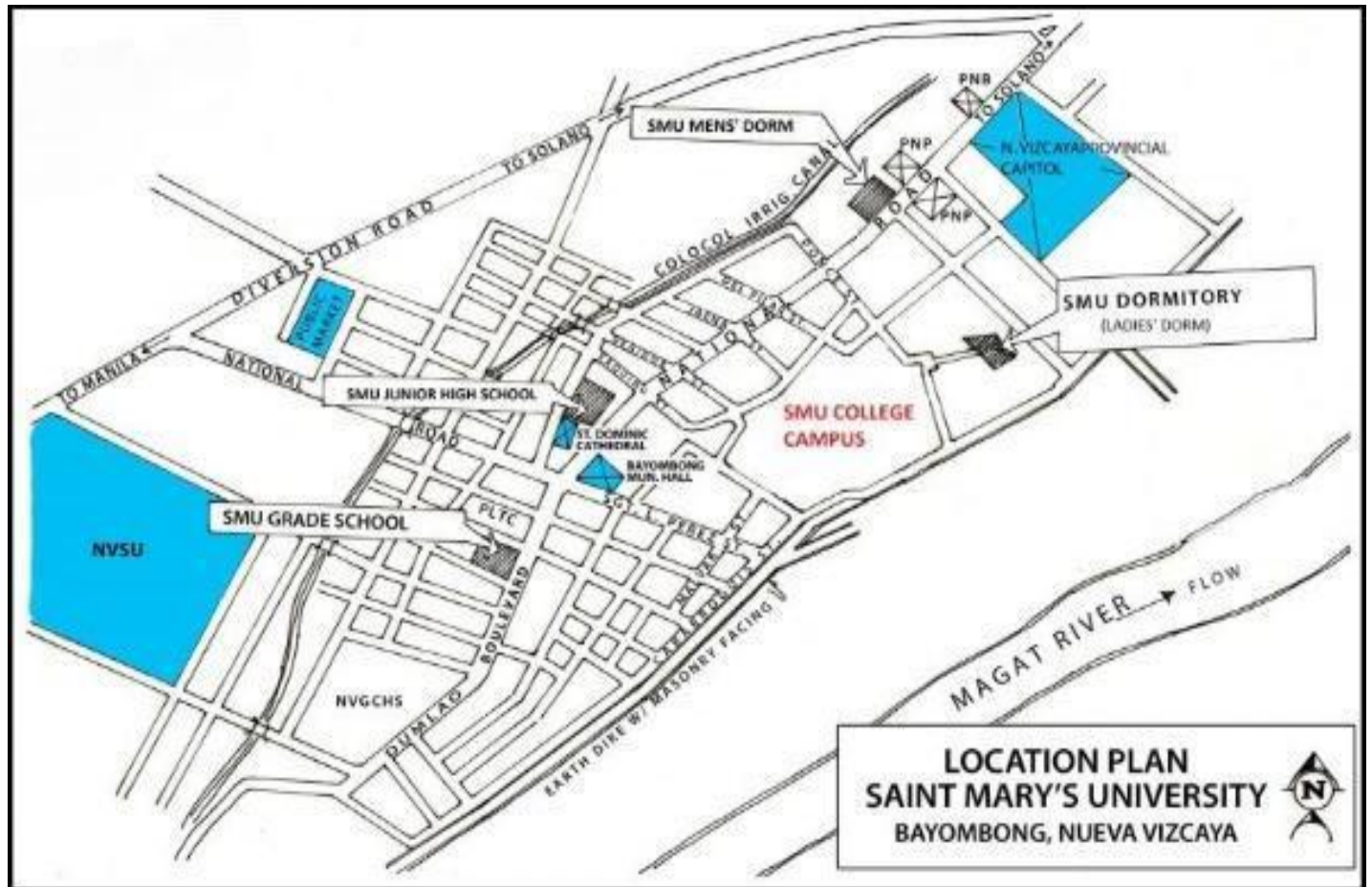
The study used quantitative research, specifically a descriptive design. It is descriptive since it describes the respondents' level of awareness and compliance with the traffic rules and regulations. Through the researcher-made questionnaire, numerical and statistical data were collected and served as the basis for determining the level of awareness and compliance of Saint Mary's University College students with the standard traffic rules and regulations.

Research Locale

The study took place at Saint Mary's University, a private Catholic Philippine higher education institution operated by the Congregation of the Immaculate Heart of Mary (CICM), located at Ponce Street, District 4, in the municipality of Bayombong, Nueva Vizcaya, 3700. Some of the students who are enrolled at Saint Mary's

University have encountered or experienced a road accident. SMU was chosen as the research locale because, for the past years, it has held only one (1) seminar regarding traffic rules and regulations, which only transpired in the year 2019, and since then, there have been no seminars regarding traffic rules and regulations.

Figure 2 Map of Saint Mary’s University (Source: <http://smu.edu.ph/wp-content/uploads/2021/05/8-Maps-and-Directions.jpg>)



Research Respondents

The respondents of this study were the college students of Saint Mary’s University who were drivers. The researcher employed a snowball sampling method wherein the respondents were chosen by the researcher to take part in the data gathering for the study. The respondents that were chosen were drivers of any kind of motor vehicle from every school at the tertiary level, and the researcher started with five respondents. Then, the researcher asked the respondents for referrals for other qualified respondents for the study, then the next respondents after the first batch for referrals, until the number of respondents that are needed to represent the study is reached. The study had 100 respondents regardless of the school they are attending, as long as the student is qualified to be a part of the study. The basis of the sample size of the study was taken from the records of students who registered for a car pass/motor pass from the University Associate Deans of Student Affairs and Services (ADSAS) from the school year 2019-2020, wherein there were 231 students who took a car pass. From the 231 students who have registered for a car pass/motor pass, the panelists of this study have suggested that the above-mentioned number of respondents of the study will represent the whole population of the study.

To be eligible to participate in the study, respondents must satisfy the following inclusion criteria; must have experience in driving, must be a college student enrolled in SMU in the school year 2022-2023, must also have a valid driver’s license as compliance to the rules and regulations of the Land and Transportation Office and to the ordinances of the Municipality of Bayombong, and must be a current resident of Bayombong, Nueva Vizcaya. The following are excluded from the study: students who are below 18 years old, and the qualified

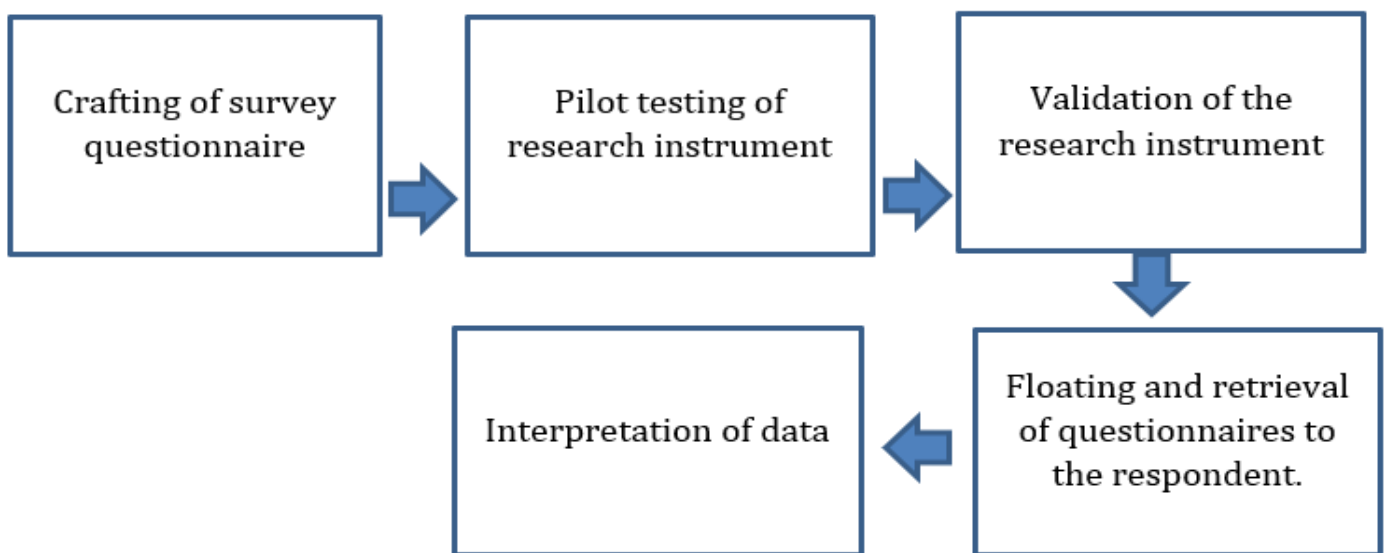
respondents from the Criminal Justice Education Department (CJED), since there is a collegial relationship with the researcher, and their consent is more of a favor rather than a free will to join and be a respondent to the study.

Research Instrument

To achieve the objectives of the study, the researcher crafted a research instrument adapted from the questionnaire of the study of Badua (2021) and modified it using the standard traffic rules and regulations from the Land Transportation Office (LTO) and the municipal ordinances of Bayombong that sought to measure the respondents' awareness and compliance regarding traffic rules and regulations. The questionnaire underwent a tool validation by the panel of evaluators and the research coordinator, and the tool was approved to undergo pilot testing.

Data Gathering Procedures

Figure 3 Data Gathering Procedure



After the URC gave clearance to conduct pilot testing, the researcher then conducted pilot testing of the research instrument at Nueva Vizcaya State University, Bayombong Campus, and Purisimo L. Tiam College (PLTC) through Google Form, where the participants are also licensed drivers. The researcher gave an Informed Consent Form (ICF) to the participants wish to participate in the pilot testing.

After conducting pilot testing of the instrument, the collected data were computed by the URC and validated it to see its reliability and were used in gathering data for the study.

The URC gave clearance since the research instrument is considered reliable, and the researcher started to gather data by distributing the survey questionnaire in person. The researcher informed the respondents about the study and why they were chosen as qualified respondents to the study through an informed consent form. After the respondents gave their consent, the researcher distributed the questionnaires to the respondents and gave instructions on how to answer the questionnaires.

After the respondents had finished answering the questionnaire, the researcher proceeded to retrieve the questionnaires for the gathering of the data from the respondents. Each respondent was requested to refer another possible respondent to the study. This process continues until the number of target respondents is reached.

After the collection of the data from the respondents, the researcher tallied the answers of the respondents, and the tallied data will be interpreted in a way that the results will be used as an IEC material and content for a seminar about awareness and compliance of students on the traffic rules and regulations that will require the students to acquire an RFID for their motor vehicles.

Treatment of Data

To achieve the objectives of the study, the respondents' level of awareness and compliance were analyzed using descriptive statistics such as mean and standard deviation. The collected data were compiled and statistically analyzed using SPSS version 22.

Table 1 Level of Awareness on Traffic Rules and Regulations

Scale Values	Mean Ranges	Qualitative Description
1	1.00-1.75	Not Aware
2	1.76-2.50	Slightly Aware
3	2.51-3.25	Moderately Aware
4	3.26-4.00	Greatly Aware

Table 2 Level of Compliance on Traffic Rules and Regulations

Scale Values	Mean Ranges	Qualitative Description
1	1.00-1.75	Rarely
2	1.76-2.50	Sometimes
3	2.51-3.25	Oftentimes
4	3.26-4.00	Always

Tables 1 and 2 showed the Likert scale that was used for the study. It consists of four (4) scale values, ranging from 1 as the lowest and 4 as the highest, and the Likert scale for Awareness will use (Greatly Aware, Moderately Aware, Slightly Aware, Not Aware), and for Compliance (Always, Oftentimes, Sometimes, Rarely). The mean ranges will have 0.75 intervals, which were adopted from the data gathering instrument of Badua (2021). The questionnaire has two categories that measure awareness and compliance; the first category was based on the National Laws (LTO), and the second category of the questionnaire was based on the Municipal Ordinance of Bayombong.

Ethical Considerations

The study was submitted for ethics approval to Saint Mary's University Research Ethics Board (SMUREB) with the following address and contact information in accordance with research ethical standards: Second Floor, Rev. John Van Bauwel Building, SMU Main Campus, Ponce Street, Don Mariano Marcos, Bayombong, 3700, Nueva Vizcaya, Philippines, Contact Information: 078-321-2221 / 09177053041.

Conflict of Interest

There is no conflict of interest in this study, and the researcher has no desire to gain anything from it. It is just for research purposes and for the benefit and well-being of the community.

Confidentiality and Data Protection

All collected data, as well as each respondent's privacy, will be respected and kept with the highest confidentiality. For individuals who are far away from the researcher, the collected data will be recovered using Google Forms, while for those who are close to the researcher's residence, it will be retrieved personally. Furthermore, the researcher will use number codes instead of names or emails to ensure that the respondents' identities are protected. Except for the researchers of these studies, no one will be able to identify the respondents. Furthermore, all the data will only be in our possession for the first semester of the school year 2022-2023. Finally, after the study is completed, bound in a book, saved on a CD, and sent to the Research Center and

Library, all raw data, including questionnaire replies, will be disposed of by shredding and erasing soft copies. Only the overall result will be stored in the Study Center and Library for future research purposes.

Management of Vulnerability

To control the respondents' vulnerability, all the details of the research and the questionnaire will be explained in a manner and language so that they will be completely understood. The process of obtaining consent consists of the following: consent should be given freely (voluntary), subjects should understand what is being asked of them, and involved persons must be competent to consent. This means that to participate in a research study, participants need to be adequately informed about the research, comprehend the information, and have the power of freedom of choice to allow them to decide whether to participate or decline.

Risk/Benefit Ratio

The option to distribute survey questionnaires face-to-face includes a health risk, but the researcher will adhere to the health protocols for everyone's safety. However, if the number of Covid-19 cases increase, the researcher will distribute questionnaires using Google Form. There are no known disadvantages to participating in this study. If the respondents want extra information on the study, the researcher will inform them the study's significance which will be explained by the researcher. Furthermore, for the compensation of the respondents, a copy of the result of the findings of the study will be made accessible for them to view and gain knowledge about the study. The researcher have no intention of profiting from their work and it will be only for the sake of study.

Informed Consent

After receiving approval from the SMU-REB for data collection, the researcher will begin choosing respondents. For those who live far away, the consent form and surveys will be supplied electronically; for those who live close to the researcher' homes, the consent form and questionnaires will be delivered personally. Respondents must first sign in with a valid email address in order to complete the form electronically. Selected respondents are informed about the conduct of the study and they are requested to give their consent to participate in the research. After giving their consent, they will be asked to respond to the questionnaire.

Terms of Reference

The intellectual property of the study results will be owned by the researcher. No insurance is involved in this study.

RESULTS AND DISCUSSION

This chapter shows the analysis and interpretation of the collected data. This study aims to determine the level of awareness and compliance of Saint Mary's University students with the traffic rules and regulations under our Constitution. Survey questionnaires were given to the college students from whom data were gathered.

SECTION I. The level of awareness of the college students of Saint Mary's University of the Traffic Rules and Regulations.

Table 3 Level of Awareness of the college students of Saint Mary's University to the Traffic Rules and Regulations implemented by the LTO

No.	Indicators	Mean ± SD	GA	MA	SA	NA	QD
1	Use of Helmet	3.95 ± .219	95	5	0	0	Greatly Aware
2	Do not disrespect law enforcers	3.91 ± .378	93	6	0	1	Greatly Aware
3	Do not overtake at an intersection	3.91 ± .428	95	2	2	1	Greatly Aware
4	No drunk driving	3.90 ± .414	94	2	4	0	Greatly Aware
5	No drugged driving	3.89 ± .510	95	1	2	2	Greatly Aware

6	Do not overtake upon a curve	3.89 ± .490	94	3	1	2	Greatly Aware
7	Yielding right of way to ambulance, police, or fire department vehicles	3.88 ± .455	92	5	2	1	Greatly Aware
8	Giving proper signals	3.88 ± .408	90	9	0	1	Greatly Aware
9	No driving without license	3.87 ± .580	95	2	0	3	Greatly Aware
10	Do not speed up when being overtaken	3.85 ± .519	90	7	1	2	Greatly Aware
11	Do not disregard traffic signs	3.83 ± .551	89	7	2	2	Greatly Aware
12	Do not overtake when the left side is not visible or clear of oncoming traffic	3.83 ± .532	88	9	1	2	Greatly Aware
13	Do not operate any vehicle with defective parts and accessories	3.82 ± .575	89	6	3	2	Greatly Aware
14	Avoid reckless driving	3.82 ± .592	89	7	1	3	Greatly Aware
15	Use of Seatbelts	3.82 ± .557	88	8	2	2	Greatly Aware
16	No OR/CR papers	3.80 ± .696	91	3	1	5	Greatly Aware
17	Do not overtake at a no-overtaking zone	3.79 ± .573	85	11	2	2	Greatly Aware
18	Avoid distracted driving (use of cell phones and gadgets)	3.79 ± .537	85	9	6	0	Greatly Aware
19	Yielding the right of way	3.79 ± .591	86	9	3	2	Greatly Aware
20	Do not drive against traffic	3.78 ± .628	87	6	5	2	Greatly Aware
21	No parking where prohibition signs are installed	3.78 ± .628	86	9	2	3	Greatly Aware
22	Do not drive when license is expired	3.78 ± .675	88	6	2	4	Greatly Aware
23	Do not drive when license is suspended or revoked	3.77 ± .617	85	9	4	2	Greatly Aware
24	Do not drive an unregistered motor vehicle	3.75 ± .757	88	5	1	6	Greatly Aware
25	No obstruction	3.73 ± .679	83	10	4	3	Greatly Aware
26	No parking in an intersection	3.72 ± .682	83	8	7	2	Greatly Aware
27	No plate number, no travel	3.72 ± .667	81	13	3	3	Greatly Aware
28	No illegal turn	3.71 ± .728	84	6	7	3	Greatly Aware
29	Do not drive a motor vehicle without a body number	3.59 ± .829	77	9	10	4	Greatly Aware
30	No hitching	3.58 ± .793	73	16	7	4	Greatly Aware
31	Do not drive a motor vehicle without a silencer	3.53 ± .881	72	16	5	7	Greatly Aware
32	No trip cutting	3.51 ± .858	70	16	9	5	Greatly Aware
	Overall Mean	3.79 ± .418					Greatly Aware

Legend: 1-1.75 – Not Aware; 1.76-2.50 – Slightly Aware; 2.51-3.25 – Moderately Aware; 3.26-4.0 – Greatly Aware.

In this study, awareness is defined as the degree to which the student-drivers of Saint Mary’s University demonstrate knowledge, understanding, and recognition of municipal ordinances within their locality, including their capacity to interpret and comply with these regulations in their everyday activities.

Table 3 contains the descriptive statistics of the different items under the level of awareness of Saint Mary’s University student drivers of the traffic rules and regulations implemented by the LTO. As seen in the table, the overall mean score of 3.79 shows that the respondents were “greatly aware”. This implies that the student drivers of Saint Mary’s University are well-informed of the traffic rules and regulations implemented by the LTO. However, the rule “no trip cutting” received the lowest mean score of 3.51, while the “use of helmet” was evaluated to have the highest mean score of 3.95 having a qualitative description of “greatly aware”.

In relation to the study by Ramya et al. (2018), it showed that a percentage of 99.2% of the 540 undergraduate medical students were aware of the traffic rules and regulations, and that “wearing of helmet” has the highest percentage of 98.8 % among all the other traffic rules. Additionally, the rule “do not disrespect traffic enforcers” also ranked as one of the highest mean scores in the study of Badua (2021), and having a total mean average of 3.58 for the level of awareness of the traffic rules and regulations enforced by the LTO implies that they are well-informed of the rules and regulations because they underwent orientation and examination when they applied for licenses. Moreover, as a driver, it is essential to be familiar with traffic laws in the Philippines to be safe and protect others from experiencing harm (Reyes, 2021).

Overall, it is evident that Saint Mary's University College students are knowledgeable about the traffic rules and regulations that the LTO enforces. However, as can be seen from the table, although having a high overall mean, the frequency counts indicate that some students are still unfamiliar with some of the rules and regulations enforced, and this indicates that there is a need to be re-informed of the specific law.

Table 4 Level of Awareness of the College Students of Saint Mary’s University to the Municipal Ordinance

	Mean ± SD	Frequency				QD
		GA	MA	SA	NA	
Wearing of helmet	3.93±.355	95	4	0	1	Greatly Aware
Do not use expired certificate of registration	3.90±.414	93	5	1	1	Greatly Aware
Always bring the Official Receipt (OR) or Certificate of Registration (CR)	3.88 ± .537	95	0	3	2	Greatly Aware
No illegal parking	3.86±.532	92	4	2	2	Greatly Aware
Do not use unregistered motorcycle	3.86±.512	91	6	1	2	Greatly Aware
No using of modified mufflers	3.85±.519	90	7	1	2	Greatly Aware
Avoid reckless driving	3.85±.519	90	7	1	2	Greatly Aware
No counter flow	3.84±.465	87	11	1	1	Greatly Aware
Do not use unauthorized/improved plate	3.83±.586	91	3	4	2	Greatly Aware
No loading/unloading in prohibited zone	3.81±.614	89	6	2	3	Greatly Aware
Do not disregard traffic sign	3.79±.607	86	10	1	3	Greatly Aware
Avoid unlicensed driving	3.79±.671	89	5	2	4	Greatly Aware
Overall Mean	3.85±.419					Greatly Aware

Legend: 1-1.75 – Not Aware; 1.76-2.50 – Slightly Aware; 2.51-3.25 – Moderately Aware; 3.26-4.0 – Greatly Aware.

Table 4 displays descriptive statistics for the various items included in the level of awareness of Saint Mary's University college student drivers of the traffic rules and regulations implemented by the Municipality of Bayombong. As seen in the table, the overall mean score of 3.85, having a qualitative description of “greatly aware”, implies that the student drivers of Saint Mary’s University are well-informed of the traffic rules and regulations implemented by the municipality of Bayombong. The importance of "wearing a helmet" when driving received the highest mean score of 3.93, with a qualitative description of "greatly aware," while the rule "avoid unlicensed driving" received the lowest mean score of 3.79, thus still falls within the range of "greatly aware".

In connection with the study of Tirwa et al. (2022) it shows that 84% of the sample population strongly agreed that wearing a helmet should be mandatory, and that about 90% of the 349 respondents were aware that wearing a helmet is important for motorcycle riders. However, in accordance with the study by Boulagouas (2021), it is more likely for drivers who are “driving without a license" to engage in risky driving behaviors like disobeying traffic signals and signs, using poor driving methods, and intentionally deviating from safe driving practices, which increases the likelihood that they will be in a serious traffic accident. On the contrary, a study by Topolsek et al. (2019) confirmed that educational approaches regarding traffic law and regulation cancel out drivers' deviant behavior in driving and show a significant decrease in road accidents.

The findings imply that Saint Mary’s University College students were adequately informed on the traffic regulation ordinances put in place by the municipality of Bayombong. However, based on the frequency counts, it shows that some students appear to be unfamiliar with some of the Bayombong municipality's laws and ordinances. This implies that the students' understanding of the information regarding those laws should be reviewed.

SECTION II. The level of compliance of the college students of Saint Mary’s University with the Traffic Rules and Regulations.

Table 5 Level of Compliance of the college students of Saint Mary’s University to the Traffic Rules and Regulations implemented by the LTO

	Mean± SD	Frequency				QD
		A	O	S	R	
No Drugged driving	3.70±.834	86	6	0	8	Always
Do not disrespect law enforcers	3.69±.825	85	6	2	7	Always
Yielding a right of way to ambulance, police, or fire department vehicles.	3.68±.776	82	9	4	5	Always
No Drunk driving	3.64±.785	79	10	7	4	Always
Giving proper signals	3.63±.824	79	11	4	6	Always
Do not overtake upon a curve	3.60±.828	75	17	1	7	Always
Do not drive when license is expired	3.60±.887	79	10	3	8	Always
Do not overtake when the left side is not visible or clear of oncoming traffic	3.59±.888	79	8	6	7	Always
Do not overtake at a no-overtaking zone	3.58±.818	73	18	3	6	Always
Do not drive when license is suspended or revoked	3.58±.912	78	11	2	9	Always
Use of Helmet	3.57±.714	67	26	4	3	Always
Do not overtake at an intersection	3.56±.902	76	12	4	8	Always
No driving without license	3.55±.880	74	14	5	7	Always
Do not operate any vehicle with defective parts and accessories	3.54±.892	74	13	6	7	Always
No parking at any place where signs of prohibitions have been installed	3.53±.858	71	17	6	6	Always
Do not disregard traffic signs	3.53±.881	72	16	5	7	Always
Yielding the right of way	3.52±.870	72	13	10	5	Always
No parking in an intersection	3.50±.915	72	13	8	7	Always
Do not drive an unregistered motor vehicle	3.49±.979	73	14	2	11	Always
No plate number no travel	3.49±.904	69	19	4	8	Always
No obstruction	3.48±.858	66	22	6	6	Always
No OR/CR papers	3.46±1.04	75	9	3	13	Always
Do not speed up when being overtaken	3.46±.936	69	16	7	8	Always
Use of Seatbelts	3.43±.819	60	27	9	4	Always
Do not drive a motor without a body number	3.40±1.03	69	14	5	12	Always
Avoid distracted driving (use of cell phones and gadgets)	3.38±.850	58	26	12	4	Always
No hitching	3.35±.936	60	22	11	7	Always
No trip cutting	3.31±.960	58	23	11	8	Always
Do not drive a motor without a silencer	3.27±1.05	60	19	9	12	Always
Do not drive against traffic	3.11±1.26	63	7	8	22	Oftentimes
Avoid reckless driving	2.97±1.32	58	9	5	28	Oftentimes
No illegal turn	2.91±1.28	52	13	9	26	Oftentimes
Overall Mean	3.47±.643					Always

Legend: 1-1.75 – Rarely; 1.76-2.50 – Sometimes; 2.51-3.25 – Oftentimes; 3.26-4.0 – Always.

Compliance, in the context of this study, refers to the initiative to which the student-drivers of Saint Mary’s University follow the municipal ordinances implemented within their locality. It reflects not only their willingness to observe these regulations but also their consistent behavior in accordance with them in everyday situations.

Table 5 contains the descriptive statistics of the different items under the level of compliance of Saint Mary’s University student drivers to the traffic rules and regulations implemented by the Land Transportation Office. Based on the table, the results show that the students of Saint Mary’s University are “always” complying with the traffic rules and regulations of the Land Transportation Office, with an overall mean score of 3.47. Despite the overall mean score and its description, the table shows that there are rules and regulations that have a rating between 2.51 and 3.25 under the range of “oftentimes”. The rule that has the lowest mean is “no illegal turn” with a mean of 2.91, which falls in the range of “oftentimes”. From the table, the rule that garnered the highest mean is “no drugged driving” with a mean of 3.70.

With reference to the study of Pinera (2020), from the 322 respondent-drivers, the results of the study show that the respondent-drivers have the lowest rating in compliance with the pavement markings on the road; however, a “much complied” description in the matter of following other rules and regulations of traffic, with having high knowledge about it. The results from the study of Badua (2021) contradicted the results of compliance from this study, where it shows that the rule “avoid reckless driving” has a mean of 3.50 and has a descriptive interpretation of “always”, which was higher than the mean of compliance of this study under the mentioned rule with only 2.97 as a mean and it is under the range of “oftentimes”.

From the results, the student-drivers from Saint Mary’s University show that they are responsible drivers and not only do they have knowledge about the existing traffic rules and regulations of the LTO, but the student-drivers of Saint Mary’s University are also always observing and complying with the rules and regulations because of the overall mean that the table has, which is under the range of “always”. Though the results state that the student-drivers are truly following the rules and regulations every time that they are using their motor vehicles, it still has its downfall because some rules were not able to have a qualitative description of “always”. Based on the frequency of the table, some rules have a large quantity that did not respond “always”, and this implies that some traffic rules and regulations are not being followed totally by the student-drivers, and there is a need to improve their thoughts about following those specific rules and regulations.

Table 6 Level of Compliance of the College Students of Saint Mary’s University with the Municipal Ordinance

	Mean±SD	Frequency				QD
		A	O	S	R	
Always bring the Official Receipt (OR) or Certificate of Registration (CR)	3.73±.776	87	5	2	6	Always
Wearing of helmet	3.69±.761	82	10	3	5	Always
Do not use expired certificate of registration	3.67±.829	83	8	2	7	Always
No counter flow	3.56±.913	77	10	5	8	Always
No illegal parking	3.53±.904	73	15	4	8	Always
Do not use unregistered motorcycle	3.51±.948	74	12	5	9	Always
No using of modified mufflers	3.43±1.02	71	13	4	12	Always
No loading/unloading in prohibited zone	3.10±1.20	58	13	10	19	Oftentimes
Avoid unlicensed driving	2.95±1.35	60	4	7	29	Oftentimes
Do not disregard traffic sign	2.94±1.31	56	9	8	27	Oftentimes
Do not use unauthorized/improved plate	2.92±1.34	58	4	10	28	Oftentimes
Avoid reckless driving	2.91±1.31	53	13	6	28	Oftentimes
Overall Mean	3.33±.795					Always

Legend: 1-1.75 – Rarely; 1.76-2.50 – Sometimes; 2.51-3.25 – Oftentimes; 3.26-4.0 – Always.

Table 6 displays the descriptive statistics of the different items under the level of compliance of Saint Mary's University student drivers to the traffic rules and regulations implemented by the Municipality of Bayombong. The table showed that SMU students comply with all the municipal ordinances with an overall mean of 3.33 and a descriptive rating of "always". This implies that the respondents were compliant and a good example of law-abiding citizens who helped traffic enforcers do their job more easily. However, it can be seen in the table that there are traffic ordinances that fall under "oftentimes", which implies that some respondents did not fully commit to following those traffic ordinances and failed to comply whenever their motor vehicles were being used.

A mean of 3.73, being the highest mean, indicates that the student drivers are "always" compliant with the provision of bringing the Official Receipt (OR) or Certificate of Registration (CR). In relation to the study of Badua (2021), it shows that the respondents are compliant with always bringing the Official Receipt (OR) or Certificate of Registration (CR), with the highest mean of 3.65. This is because this had been instilled in their minds. After all, they would be asked to present their "OR/CR" whenever a traffic enforcer approached. On the other hand, student drivers are oftentimes compliant with the rule "avoid reckless driving," which falls in the lowest ranking. According to the study by Badua (2021), when there is traffic congestion, drivers often drive recklessly for the reason that they look for ways to go through and along the national highway, which often results in committing traffic violations.

The results imply that Saint Mary's University College student drivers were effectively informed and compliant about the standard traffic rules and regulations ordinances implemented by the Municipality of Bayombong. Nevertheless, based on the frequency of the table, some ordinances have a higher number of responses other than "always", which means that some of the respondents show signs of not complying with those traffic ordinances. The results imply that the student's understanding of different traffic rules and regulations needs to be strictly and efficiently enforced and complied with by the student drivers.

Section Iii. The IEC Materials and the Seminar about the traffic rules and regulations of the LTO and Municipal Ordinances regarding traffic.

The researcher has formulated IEC materials and made a program for a seminar about the different traffic rules and regulations. Based on the findings, it is clear that the respondents' level of awareness and compliance with the rules and regulations is high. As a result, sustenance for the rules and regulations will be included in the IEC materials in order to maintain the students' high level of awareness and compliance. On the other hand, the frequency counts showing there are still students who are unfamiliar with and do not follow some traffic rules and regulations suggest that there is still a need for student-drivers to be re-informed about traffic rules and regulations through the IEC materials.

Brochure

The contents of the brochure contain the different rules and regulations of the Land Transportation Office, with short descriptions and also with some images of different road signs.

Tarpaulin

It contains a safety reminder to "Drive Smart. Be Patient. Drive Safely. There's someone waiting for you at home," and it will be posted along the highway. It also includes that the reminder is from Saint Mary's University and the tarpaulin was made by BS-Criminology students, with the logos of Saint Mary's University, Land Transportation Office, and the Municipality of Bayombong.

Seminar

The title for the seminar is "The Road to Becoming a Better Driver: a seminar about the traffic rules and regulations". The contents of the seminar discuss the different rules and regulations of the LTO and its

punishments if ever violated.

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the conclusion and recommendations of the study based on the data and information analyzed in the previous chapter. The conclusions derived from the findings of the study on awareness and compliance of Saint Mary's University college students on standard traffic rules and regulations are described, and the recommendations were based on the results, conclusions, and objectives of the study.

Conclusions

The student drivers of Saint Mary's University are knowledgeable enough of the traffic rules and regulations implemented by the Land Transportation Office and the Municipality of Bayombong.

The student drivers of Saint Mary's University are compliant with the traffic rules and regulations implemented by the Land Transportation Office and the Municipality of Bayombong.

Recommendations

As manifested by the conclusions of the study, the following recommendations are hereby proposed:

- 1) To increase regular orientation or to have information dissemination about the compliance with traffic rules and regulations from the LTO and the municipal ordinances, which had the lowest compliance level based on the study, to instill a deeper sense of commitment and responsibility in driving.
- 2) For greater security and a more ensured safety, the student drivers of Saint Mary's University are to undergo a seminar on traffic rules and regulations.
- 3) For continual efforts to increase road safety measures, IEC and other related activities should be conducted.
- 4) This study should be utilized by proposing to the Dean of the Student Affairs and Services to conduct the seminar about the traffic rules and regulations, and ask for some assistance for the other IEC materials that this study has formulated.

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