RESEARCH ARTICLE

LEVEL OF COMPLIANCE OF TRICYCLE DRIVERS ON TRAFFIC RULES AND REGULATIONS IN SAN JOSE, OCCIDENTAL MINDORO

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ABSTRACT

The study was conducted to determine the level of compliance of tricycle drivers on traffic rules and regulation in San Jose, Occidental Mindoro. The study used descriptive correlational research design to utilize the study wherein the quantitative data were gathered using survey questionnaire. The questionnaires were distributed to 105 selective TODA'S member. Part I covers profile of the respondents, Part II dealt with the level of compliance on ten commandments for a safe drive, level of compliance on pavement markings and level of compliance on traffic sign/signals and islands.

Result showed that most of the respondents were middle-adult, male who reached high school level and are operating for 10 years and more.

It was revealed that the tricycle drivers are highly compliant on the ten commandments of safe drive, pavement markings and traffic signs/signal and island.

Further, the level of compliance of tricycle drivers on traffic rules and regulation decreases when they get older, it also decreases if they are operating for a long period of time. Lastly, the level of compliance of the drivers decreases as their educational attainment increases.

Keywords: *tricycle drivers, traffic rules and regulation, compliance, safe driving*

INTRODUCTION

Every day, tricycle drivers play an important role in the lives of passengers; they are the mode of transportation for many commuters, so it is critical that they follow traffic rules and regulations. However, tricycle drivers contribute to traffic congestion such as traffic, violation of traffic rules, and accidents. Passengers were unaware of road safety features such as road signs and markings and relied heavily on the drivers' ability to follow rules and regulations (Castillo, et al., 2019). The drivers are knowledgeable but not compliant, which is concerning because the majority of the drivers are licensed and should be well-versed in traffic rules and regulations, but it is also expected that they will be obedient (Aydinan, 2020).

Traffic rules, regulations, and guidelines must be established and adhered to by drivers in order to reduce the serious risk of an accident (Nilkamal Pvt Ltd, 2018). According to the Philippine Statistics Authority, motorcycle-related injuries account for 69 percent of all reported transportation incidents in the country (Lu, 2016). Due to these statistics, it is beneficial for motorcycle drivers to understand the most common cause of accidents so that they can use it to reduce their risk (Oltaye et al., 2021; Oxley et al., 2013). The most significant cause of road traffic accidents was drivers' lack of awareness of traffic rules, regulations, and laws, as well as their noncompliance with these rules and regulations (Al-Khaldi, 2006).

A compliance survey, which can be used to determine population knowledge and attitudes about traffic rules and regulations on the road, is a powerful tool that can be used to determine population knowledge and attitudes (Vandamme, 2009). The researcher was prompted to conduct this study in order to raise issues related to tricycle drivers' level of compliance with road traffic rules and regulations in San Jose, Occidental Mindoro. When it comes to traffic rules and regulations, this study can be beneficial to the Land Transportation Office (LTO) and traffic enforcers.

METHODOLOGY

Research Design

This research used the descriptive correlational research design. The method describes and integrated what exist. The Descriptive correlational research involves collecting data in order to test hypothesis or answer questions concerning the status of the subject of the study. It also involves description recording, analysis and interpretation of conditions that now exist. This further describe the level of compliance of tricycle drivers on traffic rules and regulation.

Study Site

This study entitled was conducted at San Jose Public Market Area. It is located at Barangay Poblacion IV and V of the said town where the TODA is located.

Sample

The respondents of the study are the professional and non-professional drivers of Tricycle Operators and Drivers Association (TODA) of San Public Market, San Jose, Occidental Mindoro. The participants were chosen purposively to get the necessary information. A total of 105 respondents were selected, the number of respondents was calculated based on the

number of parameters. Since this study has 7 parameters multiplied by 15, then the calculated number of respondents is at least 105 to have strong data analysis.

Research Instrument

To get appropriate data needed, the researcher adopted questionnaire from (Aydinan, 2020). This study used questionnaire that answer the problem and it will be consisting several questions and divided into three parts. The first part aimed to determine the profile of respondents in terms of age, sex, years of operation, and educational attainment. The second part aimed to determine the level of compliance of tricycle drivers in traffic rules and regulation in terms of Ten Commandments of safe driving, pavement markings, tricycle driver's traffic signs/Signals and Island. The third part aimed to determine the significant relationship between the profile of the respondents and the level of compliances of tricycle drivers' traffic rules and regulations in San Jose Occidental Mindoro.

Data Collection

Having found the research instrument reliable and valid, the researchers proceeded in requesting authorization from the research committee to perform the study based on the proposal validation. Prior to conducting research, a letter of approval will be sent to barangay hall of barangay 4. Then the researcher proceed in asking permission and approval from the tricycle drivers where they are the respondents. Upon approval, the researcher administered the primary questionnaires to the respondents. The tricycle drivers personally answered the questionnaires. The researchers immediately Retrieved the questionnaires after the respondents were through answering. After which, the data gathered were organized, summarized and analyzed, tabulated and collected for better analysis and interpretation.

Data Analysis

This study used descriptive statistics such as frequency count, percentage analysis, weighted mean and Kendall's Tau-b were the statistical tools in this study to describe the level of compliance of tricycle drivers on traffic rules and regulation

RESULTS

The result shows that most of the respondents belong to middle-adult (36.2%), male (84.8%), operating for 10 years and more (56.2%), and at least reached high school (54.3 %).

Table 1. Profile of the respondents.

Profile	Frequency	Percentage
Age		
21-30	14	13.3
31-40	26	24.8
41-50	38	36.2
50 above	27	25.7

Sex		
Female	16	15.2
Male	89	84.8
Years of Operation		
1-3 years	17	16.2
4-6 years	22	21.0
7-9 years	7	6.7
10 years above	59	56.2
Educational Attainment		
Elementary	13	12.4
High School	57	54.3
College	35	33.3

Level of compliance of tricycle drivers

The result shows that the respondent of the study is highly compliant with the Ten Commandments for safe drive (4.63+.72). Moreover, they are also highly compliant with the pavement markings (4.06+.72). Additionally, they are highly compliant with the traffic sign/signals and islands (4.13+.72).

Table 2. Level of compliance on the traffic rules and regulations.

Compliance Variables	**Mean**	**SD**
Ten Commandments for a safe drive		
Giving way to pedestrian	4.66	0.62
Do not use gadgets while driving	4.50	1.10
Using signal light when turning	4.89	0.35
Not overtaking in solid yellow lane	4.51	0.77
Following the speed limits	4.59	0.73
Do not hog the passing or overtaking lane	4.67	0.80
Always keep cool when driving	4.50	1.02
Not parking at do not park signs	4.73	0.49
Do not driving while in the influence of alcohol	4.64	1.02
Weighted Mean	**4.63**	**0.72**
Level of Compliance in Pavement Markings		
Overtaking only in a single white dotted lane is present and opposing lane is clear	4.63	0.70
Overtaking when there is single continuous lane	4.18	1.08
Overtaking by passing over the solid white lines on four lanes	4.25	0.95
Overtaking when double yellow or white line	2.40	1.40
Overtaking when there is single yellow or white dotted line and the solid line is in my side	3.82	1.09
Passing on the passing lane if it is present on the road	4.30	0.88
Stopping and loading or unloading in pedestrian lane	2.93	1.59

Following the directional arrows	4.77	0.59
Stopping at stop line before intersection or pedestrian lane	4.57	0.93
Avoiding bumping on traffic cones in case of accident	4.79	0.68
Weighted Mean	**4.06**	**0.88**
Level of Compliance in Traffic Sign/Signals and Islands		
Observing caution when triangle traffic signs are present on the road	4.83	0.43
Following prohibited signs and restrictive signs like "No Entry"	4.89	0.40
Following the mandatory signs like "Minimum Speed"	4.58	0.72
Following the stop and yield signs	4.79	0.55
Unloading and loading passengers on designated areas on the road	4.48	0.96
Parking on pedestrian island	2.50	1.44
Counter flowing when there is division island	4.22	1.17
Following channelize island especially on intersection	4.57	0.79
Following rotary island if it is present	4.73	0.79
Weighted Mean	**4.13**	**0.69**

Scale: 5.00= Very High, 4.00-4.99= High, 3.00-3.99= Moderate, 2.00-2.99= Low, 1.00-1.99= Very Low

Correlates of the level of compliance of tricycle drivers' traffic rules and regulations

The result shows that the level of compliance with the traffic rules and regulation has significantly negative correlation with the number of years of operation (r-value=-.80, p-value ≤0.001); age (r-value=-.90, p-value≤0.001), and educational attainment (r-value=-0.78, p-value ≤0.001). [Table 3].

Table 3. Correlates of the level of compliance of tricycle drivers' traffic rules and regulations.

Profile	TCSD		PM		TSSI		LOC	
	R	p-value	R	p-value	R	p-value	R	p-value
Years of Operation	-.516	.000*	-.797	.000*	.794	.000*	-.795	.000*
Age	-.705	.000*	-.878	.000*	-.874	.000*	-.868	.000*
Educational Attainment	-.785	.000*	-.783	.000*	-.799	.000*	-.777	.000*

Legend: Ten commandments of safe drive (TCSD); pavement marking (PM); traffic sign/signals and Islands (TSSI); level of compliance (LOC)
*Note: * p-value of <0.05 is significant*

DISCUSSIONS

The results demonstrates that the transportation sector is still controlled by men strengthens the notion that driving is still primarily done by men. (Ames, et al. 2014). Younger drivers were also more likely to be non-compliant (Stephens, et al., 2017). Employed drivers have an increased road traffic violation tendency (Macharia, 2022).

The respondents are often using their signal lights when they are turning to be able to avoid collision or further accident. Drivers can effectively communicate with one another by using their turn signals and lane change indications. Turn signal use also has important safety

ramifications (Muley, et al., 2022). Tricycle drivers are always in a hurry, even if there is approaching traffic, and because they are confident that their vehicles are small enough to pass through other large vehicles, they are remarkably more likely to engage in unsafe behavior than other vehicle drivers, even during traffic, especially on straight roads (Uzondu, et al., 2019).

In pavement markings among all the indicators it showed that the drivers are often avoiding bumping on traffic cones. They are highly compliant in order to avoid further accident and also to lessen the probable traffic. Meanwhile the respondents occasionally overtaking when a double yellow or white line is present. The double yellow lane is strictly prohibited to overtake or counter-flow in order to avoid the accident but the respondents are disregarding it. Relative to the foregoing findings, it shows that drivers can adapt their driving accordingly by using markings and traffic signs to give them timely and accurate information about an impending danger. Road markings distinguish the roadway surface and give drivers visual cues. Road markings have been used since they were originally introduced and are now a regular component of transportation infrastructure (Babić, et al., 2020).

In traffic sign/signals and islands the respondents often follow the "no entry" signs. It tells that the drivers are always following the no entry sign in order to avoid the citation ticket on their violation. The result is supported by the idea that drivers' knowledge of traffic signals mostly depends on its quantity in the area the respondent frequently travels through and the ease of a layout that is simple enough for a driver to understand (Fernandez, et al., 2020).

The result shows that the drivers go older the least they are following the traffic rules and regulation. The findings supported the study of Lee, et al. (2014) that stated that driving skill of older drivers was found to decline with age also logistic regression analysis, the cognitive abilities associated with the crash occurrence were working memory, decision making under pressure of time, and confidence in driving at high speed. The result shows that the longer the driver is operating the tricycle; they are being not compliant with it. The findings supported the study commission of traffic violations increased with increasing driver experience whilst the frequency of violation of traffic regulations on speeding and overtaking when prohibited (Akaateba, et al., 2015). The result shows that the higher the education they get the least they follow the traffic rules. Relative to the foregoing finding, it shows that the likelihood of being a high-risk driver in Spain increases with educational attainment (Martínez-Gabaldón, et al., 2019). Additionally, drivers trained from driving schools reported an overall higher mean frequency of commission of traffic violations compared to other drivers (Akaateba, et al., 2015).

While the descriptive correlational research design employed in this study served as a valuable approach to investigate the level of compliance of tricycle drivers with traffic rules and regulations in San Jose Occidental Mindoro, it is essential to acknowledge several limitations inherent in the research methodology and data collection process. The descriptive correlational research design is primarily focused on describing and correlating variables, which makes it challenging to establish causal relationships. This limitation prevents the study from identifying the underlying causes or factors contributing to tricycle drivers' compliance with traffic rules and regulations. Future research may benefit from more advanced research designs, such as experimental or quasi-experimental approaches, to explore causality more

rigorously. The sample size for this study was determined based on a parameter calculation, resulting in 105 respondents. While this sample size was deemed adequate for the specific parameters considered, the study may face limitations in terms of generalizability. The findings may not represent the broader population of tricycle drivers in different geographical regions or cultural contexts. Further research with larger and more diverse samples could enhance the external validity of the results. Data collection relied on self-reported information from the tricycle drivers. Self-report data can be influenced by various biases, including social desirability bias, where respondents provide answers, they believe are socially acceptable. This subjectivity could affect the accuracy and reliability of the data. Combining self-report data with objective observations or external verification methods could strengthen the data quality. While this study has contributed valuable insights into the compliance of tricycle drivers with traffic rules and regulations in a specific locale, these limitations should be acknowledged when interpreting and applying the findings. Addressing these limitations through more robust research designs, broader sampling, culturally adapted instruments, and objective data verification could enhance the validity and applicability of future research in this area.

CONCLUSIONS

This study offers valuable insights into the demographics and compliance behaviors of tricycle drivers in San Jose Occidental Mindoro. The findings suggest that tricycle drivers, while generally highly compliant with traffic rules and regulations, may benefit from targeted interventions aimed at addressing the decline in compliance associated with factors such as age, experience, and educational attainment. These conclusions can serve as a basis for developing policies and programs designed to enhance road safety and regulatory compliance among tricycle drivers, ultimately contributing to safer and more orderly transportation in the region. Further research and interventions are warranted to build upon these findings and foster a safer road environment for all road users.

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