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CORRELATES ON THE OPERATION OF POLICY ON ROAD SAFETY SYSTEM AND ROAD SAFETY IMPROVEMENT OF LAND TRANSPORTATION OFFICE IN COTABATO CITY

ENGR. BAI SITTIE SHEENA R. AMOLAN, MA

Abstract

This research aimed to determine the policy implementation of the road safety system of the Land Transportation Office in Cotabato City using descriptive – correlational design to the 60 selected respondents composed of 15 LTO personnel, 20 drivers, 20 commuters, and 5 Smoke Emission owners. The study made use of mean and Pearson r- correlation in the data analysis. The findings revealed the extent of policy implementation of the five pillars of the road safety system regarding road safety management, safer roads, safer vehicles, safer road users, and improved trauma care and rehabilitation that were interpreted as implemented. The extent of safety improvement in terms of awareness of road safety measures was highly implemented. On the other hand, the acceptance of road safety measures, alternative road safety measures, and actions to ensure road safety were all interpreted as improved. The correlational analysis between implementing the five pillars of road safety management and road safety improvement reveals a significant relationship. Therefore, the null hypothesis is rejected. This means that the implementation of a road safety management system is helpful in the advancement of road safety for the public. The study concludes that the performance of road safety management system had been implemented. Still, some aspects are not fully monitored and enforced, such as using a cellphone while driving that can become a cause for accidents, and using a seatbelt, which is very helpful in protecting the rider in case accidents happen. The study recommends that intensification of advocacy campaigns on the road safety measures be done to increase cooperation and compliance.

Keywords— Social Science, public governance, road safety, land transportation, descriptive-correlation, Philippines

INTRODUCTION

The 2018 World Health Organization (WHO) Global Report on Road Crash estimated that 1.35 million road traffic deaths occur eve1y year, with injuries at 20 to 50 million, thus, making road traffic injury the 8th leading cause of death worldwide (WHO, 2018). Although countries worldwide had achieved progress in road safety legislation, the WHO reports confirm the high incidence of road traffic injuries, and fatalities remain a major public health and safety development concern (Galvante, 2019).

In the Philippines, due to the staggering number of deaths and injuries due to road crashes, effort must be made to put the road safety issue in the national plan to reduce, if not totally eradicate, its negative impact on the people and the economy. Thus, the Land Transportation Office (LTO), as the leading agency responsible for regulating public road safety, formulated the Road Safely Action Plan that will organize, integrate, and mainstream all road safety initiatives of the Agencies, aligned with established International and Philippine approaches (Rivera and Lam, 2018).

In Mindanao, road accidents are also alarming every year as they grow higher (LTO XII). Thus, the conduct of the Road Safety Congress with an objective of "making our roads safer" through convergence efforts of the different agencies involve is timely as an intensified initiative to address this bugging issue. During the congress, it was emphasized that the implementation of road safety pillars is a critical action that can empower people on road safety practices (Nazario, Damicog & Panaligan, 2019).

Hence, in this viewpoint, the researcher was interested in determining the implementation of the road safety system of LTO in North Cotabato. Through conducting this investigation, some vital insights may be developed to improve the services of the office to improve road safety to the client to address their needs and problems. The main purpose of this research was to determine the key variables that strongly influence the implementation.

Statement of the Problem

The study correlates on the operation of policy application of the road safety system of the Land Transportation Office in Cotabato City.

1. To what extent were the operation of policy application of the five pillars of the road safety system of the Land Transportation Office in terms of :

1.1 road safety management;
1.2 safer road;
1.3 safer vehicles;
1.4 safer road users;
1.5 improve trauma care and rehabilitation?

2. To what level was the road safety improvement in terms of;
2.1 awareness on road safety measures;
2.2 acceptance of road safety measures;
2.3 alternative road safety measures; and
2.4 actions to ensure road safety?
3. Was there a significant relationship between the policy of the five pillars of the road safety system and road safety improvement.

METHODS

The study used the descriptive- correlational research design. This type of research describes relationships of different variables under study using numerical data to describe and explain a particular phenomenon and its factors (Tankersley, 2015).

Furthermore, Correlational research is a type of non-experimental research that measures two variables and assesses the statistical relationship between little or no effort to control extraneous variables (Messerli, 2012).

This study is descriptive since it measured the operation of policy applicaton of the 5 Pillars of the road safety system and the road safety improvement. This is correlational since it investigated the relationship between the operation of policy application of the five pillars and road safety system improvement using the survey questionnaire to gather the primary data.

Research Subjects

The respondents of this study were the selected 60 individuals composed of 15 Land transportation personnel who were either regular or contractual, 20 registered drivers, 20 selected commuters, and five emission test owners from Cotabato City at 2021 2022.

This study was conducted within the jurisdiction of the Land Transportation Office in Cotabato City. It included the 37 barangays, specifically in the downtown area where traffic is heavier during rush hours and peak time.

Research Instrument

The study utilized a researcher-made survey instrument formulated with the help of the research adviser validated by experts. The instrument was composed of 2 main parts. The first part was composed of statements that measured the level of policy application of the 5 Pillars of Road Safety system. The second part was statements that measured the level of road safety improvement. In evaluating the level of policy application of the 5 Pillars of Road Safety system and road safety improvement, the following four orderable gradations with their respective range of means using the Likert Scale presented on the next page.

RESULTS AND DISCUSSIONS

The Extent of Operation of Policy Application of the 5 Pillars of Road Safety System in terms of Road Safety Management

Table 1 presents the mean rating of the extent of policy application of the five pillars of the road safety system in terms of road safety management.

Table 1
Mean Rating of the Extent of Operation of Policy Application of the 5 Pillars of Road Safety System in terms of Road Safety Management
n=60

Item	Mean	Interpretation
1. Conducts road safety education of the public.	3.62	Highly Evident
2. Prompts issuance of licenses.	3.31	Evident
3. Implements guidelines in license issuance strictly.	3.42	Evidente
4. Strengthens monitoring and accreditation of driving schools.	3.47	Evident
5. Upgrades and automates the LTO system.	3.33	Evident

Item	Mean	Interpretation
OVERALL MEAN	3.43	Evident

Legend:

3.50 – 4.00	Highly Evident	1.50 – 2.49	Less Evident
2.50 – 3.49	Evident	1.00 – 1.49	Least Evident

The table revealed that the operation of policy application of LTO of road safety management was evident with an overall of 3.42. This result signifies that the agency had made efforts to ensure people adhere to policies issued to ensure public safety in transportation matters.

On the other hand, the highest rating they gave was on the public's road safety education that got a mean of 3.62, interpreted as highly evident. This means that advocacy measures to increase knowledge of the people and compliance in ensuring they know the policies in safety management were conducted.

Meanwhile, the lowest among the answers was Prompts issuance of licenses. With a mean of 3.31 interpreted as evident. This reflects that the LTO had tried its best to issue licenses promptly, and they are doing it at their capacity. Still, due to unavoidable circumstances like problems in the computerized system of the agency, then there were occasions that it will take time before some of the licenses followed were delayed. The prompt issuance is significant in quality services because this will ensure people have licenses when driving.

. This agrees with Li (2015), who explained that road safety management interventions are necessary to enhance the public's safety. These safety interventions will guide drivers and all road users in ensuring they follow the law to ensure order among vehicles traveling on the road.

The Extent of Operation of Policy Application of the 5 Pillars of Road Safety System in terms of Safer Roads

Table 2 reveals the mean rating of the extent of policy implementation of the five pillars of the road safety system in terms of safer roads that got an overall mean of 3.33 interpreted as implemented. This means that road signs and barriers are provided to ensure drivers and road users are guided in directions and actions they need to prevent accidents and ensure the public's safety.

Table 2
Mean Rating of the Extent of Operation Policy Application of the 5 Pillars of Road Safety System in terms of Safer Roads
n=60

Item	Mean	Interpretation
	3.32	Evident

Item	Mean	Interpretation
1. Integrates road signage readings in licensing.	3.38	Evident
2. Incorporates the use of road barriers in licensing.	3.42	Evident
3. Informs clients of road intersection rules.	3.30	Evident
4. Assesses knowledge of drivers on-road prohibited safety signs.	3.23	Evident
5. Evaluates knowledge of drivers on miscellaneous safety signs.		
OVERALL MEAN	3.33	Evident

Legend:

3.50 – 4.00	HighlyEvient	1.50 – 2.49	Less Evident
2.50 – 3.49	Evident	1.00 – 1.49	Least Evident

The respondents' answers revealed the information to the clients on road intersection rules got the highest mean of 3.42 interpreted as evident. This means that the road users are given information about the basic traffic rules, especially in the policies of the country towards safety road measures to guide people of their actions.

LTO (2020) explained that part of the requirements of the issuance of a driver's license is undergoing seminars about traffic rules and road safety principles. This is one way of informing the people about it.

This agrees with the idea that the roads constructed today are designed to provide higher safety measures such as road warning signs, road barriers, and prohibited driving actions are also included to guide drivers and users of the road safely (Alelis, 2018).

They also answered that the evaluation of drivers' knowledge of miscellaneous safety signs was implemented with the lowest mean of 3.23. This means there are postings and signage about how to cross the street, where to part, and where the no u-turn areas can help prevent congestions in the road.

As embedded in the Road Safety Design Manual series of 2012 government ensured providing safer and quality roads and transport systems to the people. It contains guidelines of road safety effectiveness through the implementation of road safety design, road safety planning, road safety, risk assessment, and management of national highways and local roads to give higher road measures (RSDM, 2012).

The Extent of Operation of Policy Application of the 5 Pillars of Road Safety System in terms of Safer Vehicle

Presented in Table 3 is the overall mean rating of the extent of policy application of the five pillars of the road safety system in terms of safer vehicles at 3.36 interpreted as evident. This answer signifies that measures to ensure vehicles traveling comply with the modernization requirements to ensure the safety of the people riding on them.

Table 3
Mean Rating of the Extent of Operation of Policy Application of the 5 Pillars of Road Safety System in terms of Safer Vehicle
n=60

Item	Mean	Interpretation
1. Checks vehicle condition during the renewal of license.	3.45	Evident
2. Inspects emission test results as licensing requirements.	3.43	Evident
3. Requires modernization of public vehicles.	3.03	Evident
4. Holds or confiscates non-compliant vehicles on mandates like smoke-belching.	3.38	Evident
5. Checks license status of vehicles.	3.53	Highly Evident
OVERALL MEAN	3.36	Evident

Legend:

3.50 – 4.00	Highly Evident	1.50 – 2.49	Less Evident
2.50 – 3.49	Evident	1.00 – 1.49	Least Evident

The table presents the respondents' answers, revealing the checking of the license status of vehicles got the highest mean of 3.53 interpreted as highly evident. This result manifests high conformity with the mandate of the law to ensure compliance of the public in licensing because this gives an assurance of safety.

According to D.0.No. 2017-011 (2017) the Land Transportation Office (LTO) is mandated to ensure they check vehicle condition during the renewal of license, inspect emission test results as licensing requirements, require modernization of public vehicle and old or confiscate non-compliant vehicles on mandates like smoke-belching which are vital actions that ensure the vehicle they registered are safe for public or private transport.

But, in terms of requiring modernization of public vehicle, the answers revealed it got the lowest mean of 3.o3 interpreted as implemented. This result was justified by LTO personnel explaining that they were enforcing this law,

but not everyone can immediately comply since it means a large amount of money.

Borsos, Koren, Ivan & Ravishanker (2012) emphasized the importance of ensuring registered vehicles comply with safety standards mandated by law. They must be functioning effectively, especially the warning devices; it has a seatbelt and another protective gadget. This can give higher safety measures to the passengers.

The Extent of Operation of Policy Application of the 5 Pillars of Road Safety System in terms of Safer Road Users

Table 4 describes the extent of operation of policy application of the five pillars of the road safety system in terms of safer road users, with an overall mean of 3.48 interpreted as evident. This answer signifies that guidelines and policies on ensuring compliance of road users to the traffic rules and procedures are being followed. This will provide safety measures to the public.

Table 4
Mean Rating of the Extent of Operation of Policy Application of the 5 Pillars of Road Safety System in terms of Safer Road Users
n=60

Item	Mean	Interpretation
1. Monitors drivers' compliance with traffic rules.	3.45	Evident
2. Apprehends and prohibits driving under the influence of alcohol.	3.57	Highly Evident
3. Apprehends and prohibits driving without a license.	3.80	Highly Evindent
4. Apprehends and prohibits driving of minors.	3.33	Evident
5. Apprehends and prohibits the use of cellphone when driving.	3.27	Evident
OVERALL MEAN	3.48	Evident

Legend:

3.50 – 4.00	Highly Evident	1.50 – 2.49	Less Evident
2.50 – 3.49	Evident	1.00 – 1.49	Least Evident

The respondents answered that LTO has highly evident on the apprehension and prohibition of driving without a license with the highest mean of 3.80. this signifies the government is very strict in ensuring people who are driving know the rules and regulations of road safety since this is part of licensing requirements.

The same idea was expressed by Hughes (2017), who explained that participation of road users in intensifying road safety is vital to preventing accidents. The users' compliance with the traffic and road crossing rules is essential to the user's safety, including drivers and passengers, and compliance with license requirements in driving.

However, they only gave an evident answer on the apprehending and prohibition of cellphone use when driving that got a mean of 3.27. They are implementing it but encountered difficulty letting all people obey this mandate since some really will secretly use cellular phones. This behavior can increase the chances of accidents.

The WHO (2018) confirmed that many road accidents are due to destruction from the drivers' attention, such as using cell phones and gadgets. This is one of the reasons for advocating for drivers not to use these gadgets while driving. The driver's focus during the driver is critical in the safety of the vehicle they are driving. Therefore the strict implementation of this law is vital to road safety.

The Extent of Opertion of Policy Application of the 5 Pillars of Road Safety System in terms of Improved Trauma Care and Rehabilitation

Table 5 presents the overall mean rating of the extent of policy application of the five pillars of the road safety system in terms of improved trauma care and rehabilitation at 3.11 interpreted as evident. This means that there were available services provided to respond to an emergency, which is vital in the survival of victims.

Table 5
Mean Rating of the Extent of Operation of Policy Application of the 5 Pillars of Road Safety System in terms of Improved Trauma Care and Rehabilitation
n=60

Item	Mean	Interpretation
1. Provides hotline for emergency lines during accidents.	3.45	Evident
2. Provides a rescue team for accidents.	3.43	Evident
3. Links with DOH for vehicular accidents.	3.03	Evident
4. Facilitates traffic flow during accidents.	3.38	Evident
5. Implements policies for immediate transport of victims during accidents.	3.53	Highly Evident
OVERALL MEAN	3.36	Evident

Legend:

3.50 – 4.00	Highly Evident	1.50 – 2.49	Less Evident
2.50 – 3.49	Evident	1.00 – 1.49	Least Evident

As shown in the table, most answers confirm that implementing policies for immediate transport of victims during accidents is highly evident, with the highest mean of 3.53. This shows rescue teams and support systems trained in case some accidents will happen on the roads because the prompt response can save lives and at the same time facilitate traffic flow better.

Road trauma is recognized internationally as an important issue with significant public health, social, economic, and transport consequences. Governments want to reduce this trauma and have developed road safety strategies for many years to articulate how they intend this to be achieved (OECD/ITF, 2016). Training rescue teams do this to respond in such situations.

But, they gave the lowest rating on the linking with DOH for vehicular accidents that got a mean of 3.03 interpreted as implemented. This was justified by some respondents who explained that they have a link, especially in training their rescue teams. Still, sometimes the DOH is not around to do it in case of emergency, so their team will be the immediate responders.

Latin (2020 mentioned in his report that the LTO had been training their personnel towards basic life support as part of the rescue teams in collaborations with other agencies. And anybody nearest to the accident site can conduct the rescue during an emergency. The linkages of different agencies can help in reducing mortality cases.

Road Safety Improvement in terms of Awareness of Road Safety Measures

Table 6 shows the overall mean rating of the extent of safety improvement in terms of awareness on road safety measures at 3.58, interpreted as highly improved. This answer signifies that the LTO had effectively informed the public about road safety measures, increasing support and cooperation of the people to increase public safety.

Table 6
Mean Rating of the Extent of Road Safety Improvement in terms of Awareness on Road Safety Measures
n=60

Item	Mean	Interpretation
1. Agrees on important road and traffic signs.	3.42	Improved
2. Acknowledges the importance of an updated driver's license.	3.70	Highly Improved
3. Accepts the importance of LTO licensing for vehicles.	3.75	Highly Improved

Item	Mean	Interpretation
4. Displays comprehension on the benefits of modernization law in the transport sector. 5. Shows understanding of the essence of seeking a franchise permit.	3.48	Improved
	3.53	Highly Improved
OVERALL MEAN	3.58	Highly Improved

Legend:

3.50 – 4.00	Highly Improved	1.50 – 2.49	Less Improved
2.50 – 3.49	Improved	1.00 – 1.49	Least Improved

The respondents gave a highly improved answer on the acceptance of the importance of LTO licensing for vehicles with a man of 3.75. This means that people are aware that there is a need to comply with all the law mandates to ensure safety in driving. This shows a good outcome in the road safety management strategies implemented.

Ahmed (2013) explained that licensing is a basic requirement for driving because it will assure the public that they undergo evaluation in their knowledge and skills in driving. The driver's license means the person passed the knowledge test about road signs and the do's and dent's driving and traffic rules.

Although they gave the lowest rating provided on agreeing on the importance the road and traffic signs with a mean of 3.42 interpreted to be improved. The answer denotes some people are not very particular in reading traffic and road signs. This is explained by some respondents who said that some are not able to read English words.

The information drive provided to the people increases their awareness of public safety. The need for people to understand the road and traffic signs and regulations is vital to road safety effectiveness. Also, the driver's knowledge on the importance of having updated driver's license and traffic rules is another aspect that gives higher road safety goal attainment of preventing accidents (Ortegon-Sanchez & Tyler, 2016).

Road Safety Improvement in terms of Acceptance of Road Safety Measures

Table 7 presents the mean rating of the extent of safety improvement in terms of acceptance of road safety measures that got an overall mean of 3.49 interpreted as improved. This answer signifies the people complained about the road safety measures implemented, which can help save lives and prevent accidents from happening.

Table 7
Mean Rating of the Extent of Road Safety Improvement in terms of Acceptance Road Safety Measures
n=60

Item	Mean	Interpretation
1. Cooperates in traffic rules in loading and downloading of passengers.	3.33	Improved
2. Complies with licensing requirements for drivers.	3.73	Highly Improved
3. Supports the transport modernization program.	3.55	Highly Improved
4. Follows with the health protocol guidelines like wearing of face shields and social distancing.	3.52	Highly Improved
5. Adheres to use of seatbelt and other safety measures.	3.30	Improved
OVERALL MEAN	3.49	Improved

Legend:

3.50 – 4.00	Highly Improved	1.50 – 2.49	Less Improved
2.50 – 3.49	Improved	1.00 – 1.49	Least Improved

Most of the respondents answered that in terms of compliance with drivers' licensing requirements, it got the highest mean of 3.73, interpreted as highly improved. This means that, as perceived by the people, the LTO is doing its efforts to ensure all people who are driving are qualified for the public's safety.

This result aligns with the mandate of Republic Act No. 4136 series of 1964, known as the Land Transportation and Traffic Code, which is an act that created the Land Transportation Commission, which is mandated explicitly on the regulation of registration, and operation of motor vehicles and licensing of owners, dealers, conductors, drivers as a safety measure to ensure road safety is protected.

However, in terms of adherence to seatbelt use and other safety measures, it got the lowest mean of 3.30 described as improved. This means that people disobeyed this mandate, which can be harmful to them if accidents happen.

The recent implementation of Republic Act No. 8750 series of 2019 is an act requiring mandatory compliance by motorists of private and public

vehicles to use seat belt devices and requiring vehicle manufacturers to install seat belt devices in all their manufactured vehicles. These laws are centered on safety measures to ensure drivers and vehicle owners observe safety measures(Galvante, 2019).

Road Safety Improvement in terms of Alternative Road Safety Measures

Table 8 presents the mean rating of the extent of safety improvement in terms of alternative road safety measures that got an overall mean of 3.31 interpreted as improved. This answer describes the different actions and alternative ways of providing not only comfort but, most of all, safety interventions towards road usage.

Table 8
Mean Rating of the Extent of Road Safety Improvement in terms of Alternative Road Safety Measures
n=60

Item	Mean	Interpretation
1. Advocates for the creation of bike lanes to ensure safety.	3.17	Improved
2. Intensifies the conduct of drug tests for license issuance.	3.19	Improved
3. Strengthens the no smoking policy in public vehicles.	3.37	Improved
4. Intensifies the wearing of helmet policy.	3.52	Highly Improved
5. Enforces the speed limit policies.	3.32	Improved
OVERALL MEAN	3.31	Improved

Legend:

3.50 – 4.00	Highly Improved	1.50 – 2.49	Less Improved
2.50 – 3.49	Improved	1.00 – 1.49	Least Improved

The respondents rated the intensification of wearing of helmet policy to be highly improved, with the highest mean of 3.52. This answer denotes that the drivers in a motorcycle were one of the highest cases for deaths in the accident is safer due to the implementation of policies to wear protective equipment.

Similarly, Ogundele, Ifesanya, Adeyanju & Ogunlade (2013) emphasized that wearing helmets for motorcycle road users is essential

because this can prevent fatal injury in the head that caused death to many accidents.

Meanwhile, they gave the lowest rating on the advocacy on creating bike lanes to ensure safety, with a mean of 3.17 interpreted to be improved. This answer shows the need to advocate more about the construction of safe roads for smaller vehicles like bikes because they are vital in the cyclist's safety, especially during heavy traffic.

Dela Cruz (2020) reported that bike lane construction is now becoming popular in the Philippines to protect cyclists, especially in the new normal situation wherein many people are now using bikes as transportation modes. With their construction, higher safety and protection of the cyclist are given consideration. This had been supported by many lawmakers and local government units in the country, for they find it very helpful.

Road Safety Improvement in terms of Actions to Ensure Road Safety

Table 9 reveals the result of the extent of safety improvement in terms of actions to ensure road safety, with an overall mean of 3.36 interpreted as improved. This means that close monitoring and supervision of compliance of the people in the safety measures are being conducted.

Table 9
Mean Rating of the Extent of Road Safety Improvement in terms of Actions to Ensure Road Safety
n=60

Item	Mean	Interpretation
1. Conduct inspections as monitoring for compliance.	3.33	Improved
2. Conducts visitation of the terminal for inspection of vehicles.	3.50	Highly Improved
3. Gathers feedback using social media on issues.	3.35	Improved
4. Installs CCTV in strategic places for monitoring compliance to policies and laws.	3.22	Improved
5. Conducts a survey on accident rates monthly.	3.42	Improved
OVERALL MEAN	3.36	Improved

Legend:

3.50 – 4.00	Highly Improved	1.50 – 2.49	Less Improved
2.50 – 3.49	Improved	1.00 – 1.49	Least Improved

Among the answers, the respondents gave the highest rating on the conduct of visitation of the terminal for inspection of vehicles that got a mean of 3.50, interpreted as highly improved. This means that even the big buses were inspected to ensure the safety of many people who are riding these vehicles. If the company does proper management, then the higher safety of the people is assured.

The World Bank (2019) recommended that tight inspection of big busses helped in decreasing major road accidents. The strict regulations in the drivers' qualifications also helped the compliance of companies in the mandated standards.

Though the answers on CCTV installation in strategic places for monitoring compliance to policies and law got the lowest mean of 3.22, it was still interpreted to be improved. This means that there were already many roads, especially those prone to traffic and accidents, installed with CCTV to motivate drivers to be careful in their driving in such areas. This can lessen accidents and traffic.

Alfonsi, Persia & Tripodi (2016) highlighted the importance of actions to ensure road safety. This includes feedback gathering using social media on issues and installing CCTV in strategic policies for monitoring compliance to polices and laws. It surveys accident rates monthly because it will reflect the effectiveness of the interventions provided. The integration of modern technology in formulating actions towards higher road safety is beneficial.

Correlational Analysis Showing the Relationship Between the Policy Implementation of the Five Pillars of Road Safety System and Road Safety Improvement

Table 10 presents the relationship between the policy implementation of the five pillars of the road safety system and road safety improvement. the Pearson Product Moment Correlation Coefficient at 0.05 level of significance was used to determine the significant relationship.

Table 10
Correlational Analysis Showing the Relationship Between the Policy Implementation of the Five Pillars of Road Safety System and Road Safety Improvement

Policy Implementation of the 5 Pillars of Road Safety Management	Road Safety Improvement							
	Awareness		Acceptance		Alternative		Actions	
	r	Sig	r	Sig	r	Sig	r	Sig

Road Safety Management	.465	.000 S	.304	.018 S	.496	.013 S	.258	.047 S
Safer Roads	.465	.000 S	.793	.000 S	.692	.000 S	.298	.021 S
Safer Vehicles	.304	.018 S	.734	.000 S	.522	.000 S	.842	.000 S
Safer Road Users	.496	.013 S	.692	.000 S	.734	.000 S	.292	.023 S
Improved Trauma Care and Rehabilitation	.258	.047 S	.298	.021 S	.522	.000 S	.419	.001 S
Overall	.419	.001 S	.742	.000 S	.842	.000 S	699.	.000

**. Correlation is significant at the 0.05 level (2-tailed).

It was described that the p-value between road safety management and: awareness on road safety measures was .000 showing a significant relationship, acceptance of road safety measures was .018 showing the meaningful relationship, alternative road safety measures was .013 showing the significant relationship and actions to ensure road safety was .047 showing a significant relationship. Since all the p-values were lower than 0.05, the null hypothesis that there was no significant relationship was rejected. This means that road safety management has contributed to the improvement of road safety that can protect the public.

In the study of Hughes (2017), it was cited that the main reason for higher road safety measures among advanced countries is the implementation of a standardized framework for road safety management. The assurance of compliance of all road users in the said framework helped decrease the loss of life and property due to accidents.

Similarly, the table describes that the p-value on the between safer roads and: awareness on road safety measures was .000 showing the significant relationship, acceptance of road safety measures was .000 showing the significant relationship, alternative road safety measures was .000 showing significant relationship and actions to ensure road safety is .021 showing the significant relationship since all the p-values were lower than 0.05, the null hypothesis that no significant relationship was rejected. It means that the implementation of safer road measures has helped improve road safety, which protects the public when traveling and crossing the crossing streets.

In the study of Lu (2016), it was explained that road crashes are one of the highest causes of morbidity and fatality in the Philippines. To increase road safety improvement, the National Government implemented road safety management policies that guide all road users of the proper utilization of roads, vehicle care reminders when traveling and modernization programs

for the transport system in the country. This hopped to counter the alarming increase of road crashes and accidents.

It is described that the p-value on the between safer vehicles and: awareness on road safety measures was .018 showing a significant relationship, acceptance of road safety measures was .000 showing the significant relationship, alternative road safety measures was .000 showing significant relationship and actions to ensure road safety was .000 showing the significant relationship. Since all the p-values are lower than 0.05, the null hypothesis is that no significant relationship is rejected. This means that the implementation of safer vehicles as part of road safety management has boosted road safety improvement since the vehicles allowed to travel in the country were properly heck and undergo compliance to the safety measures implemented.

The same view was expressed by Lantin (2020), who explained that road safety strategies implemented n the Philippines focus on the modernization of vehicles to ensure safer vehicles traveling all over the country. This can promote safety in accidents and environment friendly for lesser fumes are emitted for modern vehicles. Modern vehicles today are designed to be safe for the public and users.

Additionally, the p-value between safer road users and: awareness of road safety measures was .013 showing a significant relationship, acceptance of road safety measures was .000 showing a meaningful relationship, alternative road safety measures was .000 showing a significant relationship and actions to ensure road safety was .023 showing a significant relationship. Since all the p-values were lower than 0.05, the null hypothesis that no significant relationship was rejected. This implies that the conduct of activities to improve safer road users contributed to the attainment and improvement of road safety, which highlighted the significance of information dissemination and seminars provided to the people and drivers before registering their vehicles to give them the knowledge to increase support and cooperation in following rules on road safety.

This finding agrees with Orias's (2017) study, which mentioned that empowerment of the people, not only drivers on the road safety measures, can increase their knowledge on how to use the roads correctly. This can develop better behavior and compliance towards obeying traffic rules and other road safety policies. The support of the people towards these rules and policies can result in road safety outcomes.

It was described that the p-value on the between improved trauma care and rehabilitation and: awareness on road safety measures was .047 showing a significant relationship, acceptance of road safety measures was .021 showing the significant relationship, alternative road safety measures was .000 showing significant relationship and actions to ensure road safety was .001 showing the significant relationship. Since all the p-values are lower than 0.05, the null hypothesis that no significant relationship was rejected. This result signifies that the government's efforts to provide emergency team and responders and safety measures on the roads helped improve the country's road safety and promote services in times of road accidents that can save lives.

This result corroborates with the WHO (2018) study that concluded the contribution of road safety management to improve rescue and life-saving activities have decreased deaths and casualties due to road accidents. It was reported that a high incidence of death due to accidents is one of the most challenging aspects of road safety management. Thus, promoting trauma and rehabilitation activities can help decrease mortality due to road crashes and accidents.

It was described that the p-value on between the overall implementation of the five pillars of road safety management and: awareness on road safety measures was .001 showing a significant relationship, acceptance of road safety measures was .000 showing the significant relationship, alternative road safety measures was .000 showing the significant relationship and actions to ensure road safety was .000 showing the significant relationship. Since all the p-values were lower than 0.05, the null hypothesis that no significant relationship was rejected. The response denotes that the implementation of policies in road safety management is directed towards ensuring road safety measures that can save lives and prevent road accidents.

Similarly, Msese (2015) concluded that the reason behind this was that road traffic accident is strongly linked to available recourses and capacity of the national and local authorities to put road safety strategies in place. Therefore the strict implementation of the policies and laws about road safety management is a measure that can help in improving road safety and decrease road traffic accidents and deaths.

Summary of Findings

Supported by the data gathered, the following are the major findings of the study:

The extent of operation of policy application of the five pillars of the road safety system in terms of road safety management with an overall mean of 3.42, safer roads with an overall mean of 3.33, safer vehicles with an overall mean of 3.36, safer road users with an overall mean of 3.48 and improved trauma care and rehabilitation with an overall mean of 3.11 that were interpreted as evident. This means there is still a need to improve the operation.

The extent of safety improvement in terms of awareness on road safety measures with an overall mean of 3.58 interpreted as highly improved. On the other hand, the acceptance of road safety measures got an overall mean of 3.49. Alternative road safety measures got an overall mean of 3.31, and actions to ensure road safety got an overall mean of 3.36 were all interpreted as improved. This means that people are compliant and obedient despite the lower implementation of road safety management.

The correlational analysis between implementing the five pillars of road safety management and road safety improvement reveals a significant relationship. Therefore, the null hypothesis was rejected. This means that the implementation of a road safety management system is helpful in the improvement of road safety for the public.

Conclusions

The study concludes that the operation of policy appliction of road safety management system had been applied. Still, some aspects are not fully monitored and enforced, such as using a cellphone while driving that can become a cause for accidents, and using a seatbelt, which is very helpful in protecting the rider in case accidents happen. However, despite the challenges in implementing the road safety system, the people have manifested higher acceptance and awareness on understanding the benefits of road safety practices. This helped guide their actions towards safety behaviors in the road, either as drivers or road users. The provision of many strategies and alternative actions to improve road safety has been improving due to the people's support and cooperation, which are also driven by the enforcement of the LTO's policies of the five pillars of the read safety system.

Recommendations

In the light of the findings and conclusion of this study, the following are strongly recommended:

To National Government to provide more information dissemination ads on the TV and radio to reach out to more people on the significance of compliance to laws and policies n road safety measures, this can motivate higher support and cooperation.

To the Land Transportation Office to intensify laws like seat belt policy, the wearing helmet strictly to all riders and others to instill the value of safe driving and roads for this can save lives.

To Local Government, Units to extend support, advocacy, and enforcement of the LTO of the pillars of road safety system to improve the locality traffic situation and protect their constituent from harm during accidents.

To the DOH and LTO to intensify training and capacitate their responders to accidents, this gains the lowest rating among the answers that should be enhanced for better response mechanisms in times of accidents.

To the People in the Community to deepen their commitment to abide and obey the traffic rules and support the road safety laws because this will benefit them in ensuring their safety.

To the DPWH to localized the road signs so that even people who can not read English signage will read the signs to guide them on their actions.

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