SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 9 | Issue: 5 | May 2024 - Peer Reviewed Journal

THE INFLUENCE OF APPLICATION OF PENALTIES AND SANCTIONS TO OFFENDERS ON ROAD ACCIDENTS REDUCTION IN KAMPALA METROPOLITAN

Norman Musinga

BACKGROUND OF THE STUDY

Globally, road accidents cause approximately 50 million severe injuries daily (Bondar, 2021). The rate of road fatalities per 100,000 individuals stood at 11.0% in 2019, down from 14.9% in 2000, marking a 26% decrease. According to the 2018 Global Status Report on Road Safety, there were over 1.35 million fatalities on roads worldwide. Despite a decline observed in 2019, the number of fatalities in the United States remains concerning. In 2019, a total of 36,096 individuals lost their lives on American roads, reflecting a 2.0% decrease from 2018. Comparatively, the European Union recorded an average of 5.1% deaths per 100,000 individuals in 2019, indicating that the United States performed better than some European nations in terms of vehicle collision rates (Bondar, 2021).

Recent data reveal that the United States experienced 1.2 road deaths per 10,000 registered motor vehicles. This figure represents a 36% decrease since 2000 when it was significantly higher at 43% according to research conducted by the National Highway Traffic Safety Administration (NHTSA) (Chafika, 2020). The UN report (2019) supports the argument that by 2030, these fatalities should be halved. Similarly, Choi (2016) postulated an increasing number of disabling and deforming accidents daily, which require all relevant stakeholders to develop concerted efforts to deal with the problem (Choi, 2016). All road users are impacted by these collisions, including transit users, pedestrians, bicycles, and automobile drivers and passengers (Aleksanin, 2020). For example, the expense associated with traffic deaths is enormous.

Bakhtari et al. (2020) reported that the economic costs associated with road accidents totaled USD 242 billion in 2010, equivalent to 1.6% of the US GDP. This included estimated lifetime economic expenses for 32,999 fatalities, 3.9 million non-fatal injuries, and 24 million total vehicle damages. The cost analysis considered various factors such as employer expenses, productivity declines, property damages, medical expenses, compensation, congestion-related costs, legal and judicial expenditures, as well as emergency services like medical, police, and fire services (Bhin, s2020).

Reports show that in 2013 to 2016 there was an increase in road related deaths in over 104 countries while low numbers of deaths were reported in only 48 counties. Despite reports showing a decrease in road related accidents in 2015 of 3,400 deaths, an increase has been reported to date with over 3,700 deaths. Hence meeting the sustainable development goal (Goal 3.6) of halving the road traffic deaths seem to be practically impossible by 2030, unless appropriate mitigating strategies, as well as approaches are adopted to deal with this menace.

Children and adolescents between the ages of 5 and 29 make up the majority of those impacted, accounting for 54% of deaths, which occur to weaker individuals including pedestrians, bikers, and motorcyclists (Amann, 2018). Because of its adverse impacts, traffic accidents represent a significant societal concern, posing substantial challenges to social, economic, and public health realms, causing distress, concern, and alarm among the population (Akpoghomeh, 2021). People under the age of 21 had the biggest drop in deaths (Anene, 2022). Over a 20-year period, fatalities among persons aged 25 to 64 decreased 2.1%, remained unchanged, but deaths among people aged 65 to 74 rose 30%. Road deaths decreased by 8.8% for people who were 75 years and older throughout this time. The form of traffic accidents with the highest occurrence is also a collision, which has a larger likelihood of occurring in a vehicle (35.74%) than it does in a motorbike (16.55%). The afternoon hours between 12: 00 and 17:59 have seen a 29.75% increase in traffic accidents between 2015 and 2019. Men are more likely to die in traffic accidents than women are, with an average of about 2182 (80%) fatalities each year compared to 551 deaths per year for women. In terms of age range, accidents are more likely to harm people between the ages of 20 and 29 than any other age group (Bakhtari Aghdam, 2020).

Furthermore, the issue of road accidents is and will remain a societal as well as the world's problem and its negative implications may remain in place, if enough and applied research is not obtained to mitigate the problem. The rate of fatalities in the community are unbearable. Important to note is that false accusations that society attributes to this problem has worsened the problems further. Therefore, it is pertinent to understand that such a fascinating menace affecting society, must be urgently addressed when not so much impact is created. However, in most of the studies, there exists scanty literature regarding the enforcement of road traffic and safety laws and its connotation on reduction of accidents on roads (Choi, 2016)

SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 9 | Issue: 5 | May 2024 - Peer Reviewed Journal

According to the most recent WHO data, 11,730 people died in road traffic accidents in Uganda in 2018, accounting for 4.52% of all fatalities. Uganda is ranked 15 in the world with an age-adjusted death rate of 40.17 per 100,000 people. The results are high when compared to the 38,203 road traffic accident deaths recorded in the United States, or 1.59% of all fatalities. Surprisingly, the number appears lower when compared to neighboring East African nations like Kenya and Tanzania, where the corresponding numbers are 13,484 (5.28% of total fatalities) and 19,058 (5.24% of total deaths), respectively (WHO,2020).

According to a further story from the Independent newspaper on April 30th, 2020, the Traffic Police data for the previous four years indicated that 2,634 pedestrians and cyclists died on Ugandan roads per year. 10,537 pedestrians and riders were killed in accidents between 2016 and 2019 that occurred on city streets, highways, and country roads. This indicates that each day, seven bicycles and pedestrians were killed in collisions. Pedestrians make up 6,210 of the casualties, followed by motorcyclists (3,651) and cyclists (676). According to the police traffic statistics, 1,485 pedestrian deaths occurred in 2019, 1,424 in 2018, 1,384 in 2017, and 1,319 in 2016 (Gallagher, 2020).

Reckless and careless driving behaviors, such as disregarding traffic conditions, driving while fatigued or physically unfit, and failing to maintain safe distances between vehicles, are key contributors to the increasing number of traffic accidents. These accidents, known as road traffic accidents (RTAs), are responsible for over 85% of fatalities and 90% of years lost to disability-adjusted life expectancy in developing countries. Uganda, like many other developing nations, faces a significant challenge with RTAs. They occur daily on Ugandan highways, resulting in a high number of fatalities and injuries, often leading to the loss of entire families. The majority of those affected are in the 20 to 29 age group, considered their prime working years. The burden of injuries and fatalities disproportionately affects low-income individuals, who are often pedestrians, cyclists, or passengers in buses and minibuses (UPF, 2020).

The last four years' worth of traffic police statistics show that at least 2,634 pedestrians and bikers die on Ugandan roads each year. 10,537 pedestrians and riders were killed in accidents between 2016 and 2019 that occurred on city streets, highways, and country roads. According to a study by Katushabe J.D in Rwanda, the Commissioner of Transport at the Works Ministry, at least 3,880 individuals died in traffic accidents in 2019, while 9,635 had serious injuries and survived, and a further 1,175 were hurt slightly. This indicates that each day, seven bicycles and pedestrians were killed in collisions. Pedestrians make up 6,210 of the casualties, followed by motorcyclists (3,651) and cyclists (676) (Gatesi, 2021).

It is thus important to understand that road accidents are not best explained in isolation, and as such possible explanations are used to explain road accidents. In particular, several factors explain for road accidents and some of them include alcohol drinking, fatigue, family problems, social factors and interpersonal relations. However, traffic and safety laws are ranked high in providing an explanation of increased road accidents.

1.2. Statement of Problem

As of now, it is doubtful that Uganda would succeed in stabilizing and lowering the projected number of traffic deaths by 2020, as set forth in the United Nations Decade of Action for Road Safety. This threat is anticipated to worsen for the world's poorest nations in the ensuing decades. The increasing number of road accidents is costly at both global and national level and as such nations need to exploit all possible interventions to mitigate their effects. The increasing number of road accidents may be explained by failure to enforce traffic and safety laws by the responsible authorities, the gap which the current study intends to address.

Ugandan data underscores the severity of the road accident problem. According to statistics from the Uganda Police Force, road accidents stand out as the most prevalent occurrences in Uganda, particularly within the Greater Kampala Metropolitan area, which has accounted for half of all road crashes in the country over the last decade. Shockingly, 22% of fatal crashes have been reported in this city. According to a report presented to parliament by the Ministry of Works and Transport in July 2022, the numbers are alarming. In 2017, there were 3,500 fatalities and 10,420 serious injuries; in 2018, 3,689 fatalities and 9,541 serious injuries; in 2019, 3,880 fatalities and 9,635 serious injuries; in 2020, 3,663 fatalities and 8,370 serious injuries; and in 2021, 4,159 fatalities and 12,589 serious injuries.

The core issue lies in the fact that road accidents predominantly result from driver-related factors such as speeding, fatigue, obstacles, and alcohol consumption. Despite the government of Uganda allocating Ugx 21.5 billion for road safety programs in the 2022/23 fiscal year, road accidents persist unabated. Therefore, this research endeavors to delve into the extent and nature of these causes, aiming to provide a thorough comprehension of the correlation between the enforcement of road traffic and safety laws and the frequency of accidents in Kampala Metropolitan. Through meticulous analysis of statistical data and conducting comprehensive research, this study aimed at enlighting policymakers and stakeholders regarding the effectiveness of existing enforcement measures while identifying avenues for enhancement. Ultimately, the insights gleaned from this research can lay the groundwork for evidence-based interventions aimed at curbing road accidents and fostering public safety throughout Uganda.

SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 9 | Issue: 5 | May 2024 - Peer Reviewed Journal

2.4.1. RELATED LITREATURE

2.4.2. Application Penalties and Sanctions to Offenders on Accident Reduction

Further research by Yasin, (2021), indicated that fines should be both constructive and inescapable when it comes to the enforcement of traffic regulations. Penalties can be a useful strategy for reducing the number of deaths on the road when combined with legislation reform, enforcement, and larger campaigns. One study by (Xu, 2020), conducted in about six nations, reported that drivers in countries with traffic law enforcement committed fewer crimes and violations than those in locations with comfortable and lax enforcement because they were aware of the repercussions of these violations (Xu, 2020).

Additionally, according to a WHO study from 2015, various infraction categories and punishments must be graduated based on the seriousness of the activity, with harsher sanctions for higher levels of violation or for recurrent behavior. For repeat offenders or those who violate the law at a high rate of speed, for instance, attention should be given to license suspension and vehicle impoundment. People were less likely to commit crimes or do them again if they believe they will get harsh punishment (World Bank, 2019).

According to Popova's (2018) study, punishments must be handed out as soon as possible since there is evidence that if the penalty is given right away after the crime is committed, the offender was less likely to perpetrate the same offence again. Delays in the imposition of a penalty can commonly cause the offender to deny committing the crime, have trouble remembering what they did, and commit new crimes. With today's technology advancements, it is conceivable that violations can easily be reported by methods other than postal mail (Nwagwu, 2020).

METHODOLOGY

3.1. Research Design

The study employed a correlational survey design in which the research subjects filled and completed out questionnaires. A correlational survey design, according to Ezeani (2002), is the best since it will help establish the causal link between the research variables. The design also assisted in demonstrating the direction of the connection, including whether there is a positive or negative impact on fewer accidents on the variables of enforcement of traffic and safety regulations.

3.2. Study Area/Site

The study was carried out in Kampala Metropolitan policing area with 3(three) regions comprised of Kampala south, Kampala North and Kampala East which has18 divisions. These areas include Katwe division, Kabalagala division, Kajjansi division, Natete Division, Nsangi division, Entebbe division, kawempe division, Wandegeya division,old kampala division, Nansana division, Kasangati division, Wakiso division, Jinja road division, Kira road division, Kiira division, Mukono division, and Nagalama division.

3.3. Study population

450 police officers working at Central Police Station, both male and female, were included in the research (Human Resources Directorate, 2019). The population was made up of the directorates for engineering and logistics, traffic and road safety, special tasks, welfare, and operations, as well as other members of the local community. The directorate for planning, research, and development was also represented. The researcher believes that the individuals consulted and engaged in the study possess adequate knowledge in their respective fields and have furnished the necessary information for the study.

3.4. Sample size determination

Table 3.1. Category of Target Population and Sample Size

Name of the Department/ Section	Population	Sample Size	Sampling Technique
Criminal Investigation Department(CID)	73	37	Simple random sampling
Field Force Unit(FFU)	81	41	Simple random sampling
Child and Family Protection Unit(CFPU)	34	17	Purposive Non Random
Counter terrorism Unit	47	24	Convenient Radom
Public Relations	23	12	Convenient Radom
International Police(INTERPOL)	38	19	Purposive Non Random
Fire and Rescue Services Unit	24	12	Purposive Non Random
KMP Traffic Unit	130	65	Convenient Radom
Total	450	227	

Source: (Adopted from Central Police Station Human Resources Directorate, 2019).

SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 9 | Issue: 5 | May 2024 - Peer Reviewed Journal

The formula used for determination of the sample size per category these calculations were followed per category:
$\frac{Ni}{N} X\ n$ Where Ni is the size of the category
N is the overall population
N is the sample size
Proportional Allocation
The researcher employed both probability (simple and convenient random sampling) and non-probability (purposive sampling) methods due to the study's nature, which necessitated specific information from the respondents. Purposive sampling was utilized to select police personnel from particular sensitive departments such as international police, the child and family protection unit, and the fire and rescue services unit. A sample size of 227 respondents was chosen from a population of 450 at Kampala's Central Police Station for the study. This sample size of 227 was deemed sufficient, a conclusion supported by Krejcie and Morgan's research (1970), which suggests that a sample size of 227 or more is adequate for a population of 450.

3.4.1 Sampling procedures and techniques
The researcher employed both probability (simple and convenient random sampling) and non-probability (purposive sampling) methods because the study required specific information from the respondents. Simple and convenient random sampling was used to select police officers from specific departments where staff were readily available. According to Best and Khan (2003), this method ensures that every component of the population has an equal chance of being selected, thereby reducing bias and enhancing research generalizability (Sekaran, 2003).

3.5. Data Collection Methods
The study involved gathering both primary and secondary data. Primary data collection utilized questionnaires. To address the issue of reducing accidents in the Kampala Metropolitan Area, secondary data was acquired through historical analysis of previously published literature. Deliberate sampling was employed to select traffic officers with adequate knowledge and expertise in the relevant area. This sampling method, as defined by Mugenda and Mugenda (1999), focuses on specific demographic traits of interest, allowing the researcher to effectively address research questions. Only the most qualified candidates meeting the criteria were retained after eliminating those unfit for the research sample.

3.6. Testing of Validity and Reliability/ Trustworthiness
Achieving appropriate levels of validity and dependability for the various data gathering technologies is what data quality control entails.

3.6.1. Validity
Validity refers to how accurately an instrument measures what it's supposed to measure. To ensure the validity of the research instruments, the researcher shared specific questionnaires and an interview guide with peers, teachers, and the supervisor, seeking feedback for improvements and clarifications. This collaborative effort helped refine the instruments by eliminating confusing questions and incorporating ones aligned with the study's objectives. Two experts from this group were selected to evaluate the study materials using a scale of four: extremely relevant (4), barely relevant (3), somewhat relevant (2), and not relevant (1), as part of assessing content validity. CVI is calculated by multiplying the number of items rated as 3 or 4 by both experts by 100 and then dividing by the total number of items in the tool. A valid instrument is one where the CVI falls within the acceptable range of 0 to 1 and is at least 70%

3.6.2 Reliability
The dependability, stability, consistency, and precision of the research tools are what we mean by reliability. The Rwenzori West Policing Area, which is not included in the study sample but has features in common with the Kampala Metropolitan Policing Area, was used as a pilot site for testing the questionnaires in order to verify dependability. As a result, the questionnaires was restructured.

3.7. Data Analysis Techniques and Procedures
In data analysis, a researcher's tasks include organizing data, breaking it into manageable parts, synthesizing information, identifying patterns, determining relevance, extracting insights, and deciding what to communicate (Bogdan & Biklen, 1982). This process enables drawing conclusions that address research questions and align with the study's objectives. Given the study's qualitative and quantitative nature, the analysis was conducted separately in distinct methodologies:

3.7.1. Quantitative Analysis
Collected data was examined by utilizing the statistical software SPSS Version 21.0 application and converted the raw data into codes. The personal information of the respondents was displayed in frequency and percentage tables created from the coded data. The association between the variables connected to the enforcement of road traffic and safety legislation and the decrease in accidents was examined using correlation tables.

SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 9 | Issue: 5 | May 2024 - Peer Reviewed Journal

To enhance the quantitative analysis the following comprehensive and insightful assessment of the relationship between enforcement of road traffic and safety legislation was adopted.

Descriptive Statistics: Besides frequency and percentage tables, the study employed measures such as mean, median, and standard deviation to offer a more comprehensive insight into the data and elucidate the findings. Descriptive statistics are valuable for summarizing and presenting key characteristics of variables.

Hypothesis Testing: The study utilized inferential statistics to examine hypotheses concerning the correlation between variables. Specifically, it aimed to elucidate the relationship between the enforcement of road traffic and safety legislation and the reduction of accidents. Techniques such as t-tests or regression analysis were employed to assess the significance of these relationships.

Visualization: Here statistical analysis with data visualization techniques, such as bar charts, scatterplots, or histograms was adopted to the findings and make them more accessible and understandable to a wider audience.

3.8. Ethical Considerations

According to Du Ploy (2009) asserts that ethics in research adhere to a morally recognized set of guidelines that include protecting respondents' privacy, exercising professional control, and maintaining confidentiality. The research goal and direction was disclosed to participants in order to emphasize the ethical problems. To guarantee that participation in the study was voluntary, all participants were informed of the study's confidentiality policies, and a section for consent forms was included to the questionnaire. Informed consent, according to Cohen, Manion, and Morrison (2011), refers to the decision to voluntarily engage in the study. Participants received complete contact information so they may get in touch with the researcher if they have any questions about taking part in the study (Hatch, 2002).

RESULTS AND FINDINGS

	Application of penalties and Sanctions to offenders					
12.	Lack of enforcement contributes to the penalty system's poor efficacy.	12.3	9.5	5.7	47.4	25.1
13.	I condone driving a motorcycle without a current license	21.7	8.0	1.9	24.1	44.3
14.	Sanctions for riding a motorcycle without donning a head-protective crash helmet	8.0	0.9	0.0	37.3	53.8
15.	Imprisonment of drivers who is not using a safety belt while driving is being done at our police station	18.5	26.4	6.5	27.8	20.8
16.	Person riding in a car without a safety belt should pay a fine	4.2	1.9	1.9	22.2	69.9
17.	Fines and Penalties for using a motor vehicle without a current Certificate of Fitness to teach new drivers	0.9	1.4	3.2	29.6	64.8
18.	Driving as a professional driver rather than a student on a motorcycle, in a car, or in a dual-purpose vehicle	6.3	13.5	9.6	47.6	23.1
19.	Use of a motor vehicle for the hiring or reward of the transportation of persons or property without the necessary license	26.9	32.2	3.4	19.7	17.8
20.	Punishing offenders for road traffic and safety laws has been the norm	0.9	3.2	4.2	43.1	48.6
21.	Rewarding of required and preferred traffic behaviors on the Road is one of the best practices	11.3	6.6	8.9	40.4	32.9

Application of Penalties and Sanctions

There's acknowledgment of the importance of enforcing penalties, with a majority agreeing that punishing offenders for road traffic and safety laws has been the norm (91.7% agree or strongly agree). However, there are also indications of lax enforcement, as seen in the responses regarding driving a motorcycle without a current license (68.4% agree or strongly agree).

SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 9 | Issue: 5 | May 2024 - Peer Reviewed Journal

4.7. Correlation results for the relationship Between Application of Penalties and Sanctions to Offenders on Road Accidents Reduction

The second hypothesis posited that the application of penalties and sanctions to offenders would have a significant impact on reducing road accidents in Kampala Metropolitan. To test this hypothesis, Pearson's correlation coefficient was employed, as illustrated in Table 4.5.

Table 4.5: Pearson's correlation results showing the relationship Between Application of Penalties and Sanctions to Offenders on Road Accidents Reduction

		Application of Penalties	Road Accidents Reduction
Application of Penalties	Pearson Corr.	1	.249**
	(2-tailed)		0.001
	N	211	211
Road Accidents Reduction	Pearson Corr.	.249**	1
	(2-tailed)	0.001	
	N	211	211

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

The relationship between Application of Penalties and Sanctions to Offenders on Road Accidents Reduction

The second hypothesis proposed a significant impact of implementing penalties and sanctions on reducing road accidents in Kampala metropolitan. The correlation coefficient (r) of 0.249 suggests a moderate positive correlation between these factors. Furthermore, the p-value (P) being less than 0.01 indicates that this relationship is highly unlikely to have arisen by random chance. They suggest that implementing penalties and sanctions for offenders of traffic laws could be an effective strategy for reducing road accidents. Policymakers may consider strengthening enforcement mechanisms and penalties to deter risky behaviors on the road. Similarly, law enforcement agencies could prioritize efforts towards enforcing traffic regulations and imposing appropriate sanctions on offenders. This may include measures such as increased patrols, surveillance cameras, and stricter penalties for traffic violations. These findings could support public awareness campaigns highlighting the consequences of traffic violations and the importance of adhering to road safety regulations. Such campaigns could emphasize the correlation between penalties for offenders and the overall reduction in accidents, promoting responsible driving behavior.

Given the positive relationship identified, resources could be allocated towards enhancing the capacity for enforcement and adjudication of traffic violations. This may involve investing in technology, training for law enforcement personnel, and improving the judicial process related to traffic offenses.

SUMMARY OF FINDINGS AND RECOMMENDATIONS

5.0. Introduction

This chapter integrates existing theoretical insights, police practices, and the researcher's recommendations to outline areas for improvement and identify new research directions. It encompasses a summary of the study, conclusions derived from the findings, and recommendations for future actions

5.1. Summary of the Findings

5.1.1. Demographics

The study had a relatively balanced representation of gender within the police force, with a slight majority of female respondents. Most respondents had attained either a certificate or a degree as their highest level of academic qualification. There was a diverse range of experience levels among respondents, with a relatively even distribution across different tenure categories. The Traffic and Road Safety Directorate had significant representation within the police force. Predominant age group among respondents fell within the 32-41 years range. A substantial majority of respondents were married

5.1.2. Enforcement of Road Traffic and Safety Laws Dimensions and Accidents Reduction

Concerns were raised about the standards of driver training and licensing, indicating a need for improvement. While there's acknowledgment of the importance of enforcing penalties, there are also indications of lax enforcement in certain areas.

SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 9 | Issue: 5 | May 2024 - Peer Reviewed Journal

Recognition of the need for improvement in traffic safety laws, with concerns about gaps in regulations. Dangerous attitudes towards speeding were prevalent among respondents, indicating a need for stricter enforcement. Acknowledgment of the importance of vehicle inspection, although non-compliance was evident in certain areas.

Firstly, the study found no statistically significant relationship between regular training and sensitization for drivers and the reduction of road traffic accidents. This suggests that factors other than training and sensitization may contribute more significantly to accident reduction.

Conversely, there was a moderate positive correlation between the application of penalties and sanctions to offenders and the reduction of road accidents. These findings suggest that implementing penalties and sanctions for traffic law offenders could be an effective strategy for reducing accidents. This underscores the importance of strengthening enforcement mechanisms and penalties to deter risky behaviors on the road.

Moreover, the study revealed a significant positive relationship between the review of traffic and safety laws and the reduction of road accidents. This implies that as the review and updating of traffic laws increase, there tends to be a corresponding decrease in accidents. Therefore, ongoing evaluation and updating of traffic and safety laws may contribute positively to efforts aimed at reducing road accidents in the area.

Additionally, there was found to be a moderate positive correlation between driving speeds, adherence to speed limits, and the reduction of road accidents. Enforcing speed limits and promoting safe driving practices may play a crucial role in mitigating the occurrence of road accidents in the area.

Furthermore, there was a significant positive relationship between vehicle requirements and inspection and the reduction of road accidents. Compliance with vehicle requirements and inspection protocols was associated with a decrease in the occurrence of accidents. Ensuring vehicles meet regulatory standards and undergo regular inspections may thus play a crucial role in lowering the frequency of road accidents.

In conclusion, the study underscores the importance of comprehensive measures, including enforcement of penalties, review of laws, adherence to speed limits, and vehicle inspections, in reducing road accidents. Policymakers and law enforcement agencies should prioritize these measures to enhance road safety and mitigate the risk of accidents in Kampala Metropolitan.

5.2. Recommendations

Strengthening of enforcement mechanisms and penalties to deter risky behaviors on the road. This can involve increasing police presence, implementing stricter enforcement protocols, and imposing heavier penalties for traffic violations. By ensuring that consequences for reckless driving are swift and severe, individuals are more likely to adhere to traffic laws and regulations, ultimately leading to a safer road environment for all.

Prioritizing efforts towards enforcing traffic regulations and imposing appropriate sanctions on offenders. This entails allocating resources and manpower towards actively monitoring and enforcing compliance with traffic laws. Law enforcement agencies should focus on identifying and addressing high-risk areas, such as intersections with high accident rates or zones prone to speeding. By proactively addressing these areas, authorities can effectively reduce the likelihood of accidents occurring.

Public awareness campaigns highlighting the consequences of traffic violations and promoting responsible driving behavior. These campaigns should highlight the consequences of traffic violations, such as the potential for injury, loss of life, and legal ramifications. Additionally, promoting responsible driving behavior through educational initiatives can help instill a culture of safety and accountability among road users.

Allocation of resources towards enhancing the capacity for enforcement and adjudication of traffic violations. This includes investing in technology, such as surveillance cameras and speed detection devices, as well as providing training for law enforcement personnel. By equipping authorities with the necessary tools and skills, they can more effectively identify and address traffic violations, ultimately contributing to a reduction in road accidents.

Ongoing evaluation and updating of traffic and safety laws to contribute positively to efforts aimed at reducing road accidents. Regular evaluation and updating of traffic and safety laws are necessary to adapt to evolving road conditions and emerging safety concerns. This involves conducting thorough assessments of existing laws and regulations, identifying areas for improvement, and implementing necessary revisions or updates. By ensuring that traffic laws remain relevant and effective, authorities can better address emerging road safety challenges and mitigate the risk of accidents.

SJIF Impact Factor (2024): 8.675| ISI I.F. Value: 1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online)
EPRA International Journal of Research and Development (IJRD)
Volume: 9 | Issue: 5 | May 2024 - Peer Reviewed Journal

Enforcing speed limits and promoting safe driving practices to mitigate the occurrence of road accidents. This can involve implementing measures such as speed limit signage, speed bumps, and traffic calming measures to encourage compliance with speed limits. Additionally, promoting safe driving practices through education and awareness campaigns can help reinforce the importance of adhering to speed limits and exercising caution while driving.

Ensuring vehicles meet regulatory standards and undergoing regular inspections to lower the frequency of road accidents. This involves enforcing compliance with vehicle safety regulations, such as proper maintenance, functioning lights, and adequate tire tread depth.

Overall, these findings underscore the need for comprehensive measures to strengthen enforcement, improve regulations, and promote responsible driving behaviors to enhance road safety in the studied area.

REFERENCES

1. *Bondar, T. B. (2021). Accident analysis: the way to effective traffic safety management on roads.*
2. *Choi, J. L. (2016). A Meta Analysis of the Effects of Road Safety Facilities on Accident Reduction: Focusing on Signalized Intersection. Journal of the Eastern Asia Society for Transportation Studies, 34, 291-303.*
3. *Aleksanin, S. (2020). Problems of road traffic injuries and road traffic safety in Russia.*
4. *Bakhtari Aghdam, F. (2020). Developing a national road traffic safety education program in Iran. BMC Public Health.*
5. *Amann, G. (2018). PW 1212 Changing mind-sets: what can be done in Portugal, after policies implementation and huge reduction of road traffic injuries! Injury Prevention, 24, A68 - A68.*
6. *Anene, W. (2022). Investigation into the Understanding of Traffic Signs, Symbols and Safety Rules among Drivers in Southern Nigeria. Journal of Engineering Research and Reports.*
7. *Gallagher, J. (2020). Criminal Deterrence when There Are Offsetting Risks: Traffic Cameras, Vehicular Accidents, and Public Safety. American Economic Journal: Economic Policy.*
8. *Gatesi, J. (2021). Study on the Impact of "Gerayo Amahoro Policy" on Road Traffic Accidents Reduction in Rwanda. Brilliant Engineering.*
9. *UPF., U. P. (2020). Road safety and traffic guidelines.*
10. *Xu, C. Z. (2020). Prediction of Road Traffic Accidents based on Rolling-optimized Grey Markov Mode. IOP Conference Series: Materials Science and Engineering, 792.*
11. *Yasin, Y. G.-Z. (2021). Global impact of COVID-19 pandemic on road traffic collisions. World Journal of Emergency Surgery: WJES, 1(16).*
12. *Nwagwu, E. J. (2020). Federal road safety corps and administration of traffic laws in South-east Nigeria: an appraisal. International Journal of Injury Control and Safety Promotion, 27(4), 510–519.*