



Perceptions of motorcycle riders in RA 10054 "motorcycle helmet act of 2009"

Love H. Falloran, PhD ^(b) Leo C. Naparota, PhD ^(c) Teresa Jane V. Campos, MSCJ ^(d) Ronnel T. Lampawog, MSCJ ^(e)

ARTICLE INFO

Article history:

Received: September 10, 2023
Received in rev. form: October 12, 2023
Accepted: December 10, 2023

Keywords: Motorcycle helmet act of 2009, ra 10054, perception, dipolog city

JEL Classification:
M1 O15

ABSTRACT

This study aimed to determine the perception on the implementation of Republic Act (RA) 10054 also known as the "Motorcycle Helmet Act of 2009" among motorcycle riders in Dipolog City, this fiscal year 2022. This study employed a quantitative method which included descriptive-survey and descriptive-correlational. There were one hundred (100) respondents in the study. Frequency count and percent, weighted mean, Mann-Whitney U Test, Kruskal-Wallis H Test, and Spearman rank-order correlation were the statistical tools used in the study. Further, it also described the difference in the perception as well as the attitude of the respondents relative to the implementation of the subject law when analyzed according to the profile of the respondents. Half of the respondents were 30 years old or younger. It might suggest that the majority of survey respondents were either vicenarians or denarians. It is possible that the selection procedure selected more male responses than female ones. If you take a closer look at the table, you will see that 47% of the respondents—the people who were chosen for the study—were either college students or recent graduates. While 70% of respondents worked for public and private organizations, the remaining respondents (i.e., self-employed, private practitioners) managed their own businesses. It might imply that these respondents were using their cars for work-related purposes. The respondents were "very much aware" that, in addition to being required, protective gear like helmets can shield drivers from serious head injuries.

© 2023 by the authors. Published by Divine Word International Journal of Management and Humanities under the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-nc-sa/4.0/) <https://creativecommons.org/licenses/by-nc-sa/4.0/>

Introduction

The costs of road traffic accidents to people and society weigh heavily on civilization as a whole. Some countries have made progress in reducing the number and severity of traffic accidents, but the situation in the majority of countries is serious and worsening. There have been some attempts to do something, but in many cases, these efforts have been non-systematic, fragmented, and knowledge-based, resulting in ineffectual measures (Varhelyi, 2017). The number of deadly and disabling road accidents occurring on a daily basis is increasing, posing a serious public health challenge for all authorities involved in preventing them. The approach to enforcing the laws and regulations in place to prevent traffic accidents is frequently inefficient and half-hearted. To avoid this public health disaster, increased awareness, rigorous adherence to traffic laws, and scientific engineering interventions are required (Jadaan, Al-Braizat, Al-Rafayah, Gammoh, & Abukahli, 2017).

* Corresponding author. ORCID ID: [0000-0001-6884-3504](https://orcid.org/0000-0001-6884-3504)

The enactment of Republic Act 10054, also known as the "Motorcycle Helmet Act of 2009," declared that it is the state's policy to protect and safeguard its citizens, particularly motorcycle operators or drivers and their passengers, from the devastating and extremely injurious effects of fatal or life-threatening accidents and crashes. Finally, it shall take a more proactive and preventive approach to ensure the safety of motorists, their passengers, and pedestrians at all times by mandating the use of standard protective motorcycle helmets. As a result, all motorcycle riders, including drivers, must always wear standard protective motorcycle helmets while traveling on any sort of road or highway, whether long or short (RA 10054).

Based on the review of the prior research, there is a population gap. Some of these sub-populations have been unexplored and under researched. The demographic profile appears to be important and worthy of investigation in the context of the perceptions of motorcycle riders in RA 10054, "motorcycle helmet act of 2009. An investigation of this group is important because it will affect the perceptions of motorcycle riders in RA 10054. Furthermore, previous research has focused primarily on awareness. Very little research has been done on demographic profiles.

Literature review

Republic Act No. 10054 – “Motorcycle Helmet Act of 2009”. The policy of the State to secure and safeguard its citizens, notably the operators or drivers of motorbikes and their passengers, from the disastrous and very harmful effects of deadly or life- threatening accidents and collisions. To that aim, it will take a more proactive and preventive approach to ensuring the safety of motorists, their passengers, and pedestrians at all times by mandating the wearing of standard protective motorcycle helmets.

The increasing requirement for mobility in urban centers and the poor level of service of public transportation has led to worsening congestion. Because of its perceived operational flexibility (i.e., allows motorcycle riders to weave through traffic) and affordable acquisition cost, the motorcycle has become a popular mode of transportation in urban centers. Moreover, in rural areas that have intermittent or no public transportation, it is also considered the go-to means of transport. Thus, the number of motorcycles in the Philippines has increased at an average rate of 10.5% per annum from 2009-2015, much higher than the overall vehicle growth rate. However, alongside its increasing popularity as a transportation mode is its higher exposure to involvement in road crashes. Based on the data of the Traffic Accident Recording Analysis System (TARAS) of DPWH between 2007- August 2009, the motorcycles showed the highest occurrence of involvement in both fatal crashes and serious injuries (Napalang, n.d.).

In addition, the use of motorcycle helmets by habal-habal drivers is an efficient method of reducing road accidents. Furthermore, enacting the rule as a means of making helmet use mandatory can reduce casualties. The most effective strategy to compel people to wear helmets is to follow the law, which demands that every driver and rider wear one whenever they ride in order to increase its usage, save money, and save lives. Its use is the most effective approach to avoiding serious road accidents (Batuhan & Conales, 2018).

Motorcycles as a means of mobility have become an issue, specifically among developing countries. While it is a valid mode of transportation and accessibility, it is not originally intended for public transport. Issues raised against motorcycle-based public transport are traffic congestion, decrease safety, and worsening of the environment. Motorcycle-based public transportation continues to prevail in most cities of developing nations and that is attributed that they are affordable by all sectors of society. Anyone who decides to ride a motorcycle must consider wearing a helmet from preventing injuries from a crash or fall. Riders are vulnerable to crashing or falling even how knowledgeable and alert a rider is. Motorcycle helmets protect drivers and passengers from extremely injurious and most often fatal road accidents (Batuhan & Conales, 2018).

Road traffic accidents (RTAs) are among the leading causes of deaths, disabilities, and injuries worldwide. Every year, as many as 50 million people are injured and nearly 1.3 million people lose their lives on the road. Road injuries are the 8th leading cause of death globally, in developing countries and sub-Saharan Africa. In contrast, they are the 17th leading cause of death in developed countries even though they have dramatically higher motorization rates. Despite the low number of registered vehicles, the burden of RTA is disproportionately high in low- and middle-income countries, where over 90% of the world's fatalities on roads occur in these regions. Motorcycle crashes are among the leading causes of traffic-related injuries and deaths in all age groups, especially in low- and middle-income countries. This can be attributed to the use of motorcycles for commercial transport. Motorcycles are the most popular private vehicles in low-income countries. Evidence has shown that motorcycle drivers are among the most vulnerable road users (Bedru, Teshome, & Kebede, 2022).

Effective enforcement of traffic laws is a critical requirement for road safety. Even with this in place, if the laws are not effectively enforced; fatal accidents increase daily on our urban roads. Corruption poses a threat to the enforcement of traffic laws thus there is a need to know what this corruption is and how to solve it. When people fail to respect traffic rules, there is no safety on the roads. Road users have the responsibility of knowing how dangerous corruption is and of ensuring their conduct does not endorse it. However, corruption involves actions of both officials and receivers of bribes in equal measure (Ogombe & Nyonje, 2017).

Every individual has different descriptions of awareness as the process begins. Each participant goes through various stages of awareness throughout the process. This is a spiral as people may go through the same stage again but with a broader understanding. To keep the process on track, be aware of where people are in this process and guide them to the next step through communication and participation. Use the knowledge of their perceptions and interest in the process through decision analysis to anticipate what is needed as moving through the steps in the decision process. Moving ahead before most participants are ready may cause conflict and delays by making it more difficult for people to reach the next stage. These stages are – Dawning awareness: Beginning to understand the problem and the situation; Sense of urgency: Rushing to solve the problem right now; Wishful thinking: Thinking of all the options available; Discovery of choices: Narrowing the options to what is available; Weighing choices: Finding the need to make tradeoffs and to balance interests; Practical resolve: Evaluating and weighing the alternatives for the best workable solution; Responsible judgment:

Deciding on a solution, and Implementing solutions: Solving the problem (Larsen, 2017)

Theoretical framework

This study is anchored on the Street-level Bureaucrat's Theory by Lipsky (1980). This stated how much discretion and power the theory of street bureaucrats has over policy success (or failure). The street-level supervisors are responsible for many of the most central operations of public agencies, from evaluating program eligibility to the distribution of benefits, to assessing enforcement, enforcing restrictions, and exempting individuals and companies from penalties. Also, since these operations include direct contact with residents, street bureaucrats often exercise considerable discretion (Lipsky, 1980).

Statement of the problems

This study aimed to determine the perception on the implementation of Republic Act (RA) 10054 also known as the "Motorcycle Helmet Act of 2009" among motorcycle riders in Dipolog City, this fiscal year 2022.

Specifically, it sought to answer the following:

1. **What is the profile of the respondents in terms of:**
 - 1.1 age;
 - 1.2 sex;
 - 1.3 educational attainment;
 - 1.4 civil status; and
 - 1.5 number of years driving?
2. **What is the perception of the respondents on the implementation of Republic Act 10054 also known as the "Motorcycle Helmet Act of 2009"?**
3. **Is there a significant difference in the perception of the respondents on the implementation of the Republic Act 10054 also known as the "Motorcycle Helmet Act of 2009" when analyzed according to their profile?**

Research methodology

This study used a descriptive quantitative method of research utilizing a questionnaire as its principal tool for gathering data. It is descriptive because the study described the following concerns: describe the profile of the respondents, and determine their perception on the implementation of the "Motorcycle Helmet Act of 2009". Further, it also described the difference in the perception as well as the attitude of the respondents relative to the implementation of the subject law when analyze according to the profile of the respondents.

Research instrument

The instrument used by the researcher was an adopted questionnaire. The items were based on the

expression provisions of the traffic laws, rules, and regulations. The questionnaire shall consist of two (2) parts, the first part was the demographical profile of the respondents in terms of age, sex, educational attainment, civil status, and number of years driving. The second part were the perception of the respondents on the implementation of the motorcycle helmet act (Adeomi, 2015).

Statistical treatment of data

Frequency counting and percent. These tools were used to determine the respondents' profile in terms of age, sex, educational attainment, occupation, number of years driving, and ownership of the motorcycle driven. The percent was calculated by getting the frequency of each category divided by the total number of respondents.

Kruskal-wallis test. It was utilized to test the difference in the respondents' perception and attitude on the implementation of the "Motorcycle Helmet Act of 2009" when analyzed as to age, educational attainment, occupation, number of years driving, and ownership towards the motorcycle driven

Mann-whitney test. It was utilized to test the difference in the respondents' perception and attitude on the implementation of the "Motorcycle Helmet Act of 2009" when analyzed as to sex. The statistical test was performed at a 0.05 level of significance.

Standard deviation. Is a measure of how dispersed the data is in relation to the mean. Low standard deviation means data are clustered around the mean, and high standard deviation indicates data are more spread out.

Weighted mean. It was used to quantify the ratings of the respondents' perception and attitude toward the implementation of the "Motorcycle Helmet Act of 2009".

Results and discussion

Profile of the respondents in terms of age

	Frequency	Percent
30 years old & below	50	50.0
31 – 40 years old	19	19.0
41 – 50 years old	16	16.0
51 years old & above	15	15.0
Total	100	100.0

Table 1 shows the profile of the respondents in terms of their ages. The table reveals that 50% of respondents were aged 30 or younger. It might imply that most of those who responded to the survey were either vicenarians or denarians. In contrast, the remainders of the study respondents were at least 30 years old. It implies that these respondents might qualify as cautious drivers.

The present finding is similar to the study of Ferrer-Celicious and Naparota (2023) which indicated that driver- respondents are mostly in the 30-39 age bracket while pedestrian-respondents are in the

40-49 age bracket.

Table 2

Profile of the respondents in terms of sex

	Frequency	Percent
Male	74	74.0
Female	26	26.0
Total	100	100.0

The sex profile of the responders is shown in Table 2. The table shows that there were more male respondents than female respondents. From a different angle, this demonstrates that there might be more male than female drivers. Also, observation indicates that men predominate in driving. The present finding is similar to the study of Ogombe, (2016) which indicated that majority of driver-respondents were males. This finding could be attributed to the likelihood of more males than females being found as driver.

Table 3

Profile of the respondents in terms of educational attainment

	Frequency	Percent
Elementary level/graduate	19	19.0
High school level/graduate	19	19.0
College level/graduate	47	47.0
Master's level/Master's degree holder	3	3.0
Doctoral level/Doctor's degree holder	12	12.0
Total	100	100.0

The profile of the respondent's educational background is shown in Table 3. Looking closely at the table reveals that the respondents, who made up 47% of the study's chosen respondents, were college students or college graduates. The table also shows that 62 people surveyed had completed at least college-level coursework or obtained their profession. This result indicates that many respondent drivers are educated and trained professionals. However, a sizable portion of the respondents—19% in elementary school and 19% in high school—remained in these levels. As a result, some drivers are less educated. The present finding contradicts to the study of Ferrer-Celicious and Naparota (2023) which indicated that the majority of the driver- respondents are in high school/graduate level.

The present finding also contradicts to the study of Ogombe, Otieno, and Mwangi (2014) which stated that the majority of the drivers who participated in the study were elementary-level.

Table 5

Profile of the respondents in terms of civil status

	Frequency	Percent
Single	54	54.0

Married	24	24.0
Separated	15	15.0
Widow/er	7	7.0
Total	100	100.0

Table 5 displays the respondents' profiles regarding their civil status. The table shows that 54% of the respondents to the survey were single respondents, which is more than half of the total sample size. That implies that single people make up a larger proportion of the respondents. The table also reveals that married, separated, or widowed people participated in the study. It implies that people drive motor vehicles today regardless of their civil/marital background. The present finding contradicts to the study of Olakulehin et al.(2015) which indicated that majority of driver-respondents were married. This finding could be attributed to the likelihood of more married than single being found as driver.

Table 6

Profile of the respondents in terms of number of years driving

	Frequency	Percent
Less than a year	18	18.0
More than a year but less than 3 years	12	12.0
More than 3 years but less than 5 years	55	55.0
More than 5 years but less than 10 years	7	7.0
More than 10 years	8	8.0
Total	100	100.0

The profile of the respondents in terms of years of driving is shown in Table 7. According to the table, 70% of the respondents had at least three years of driving experience. The responders are thus likely to be experienced drivers of legal driving age. The table, however, reveals that some of the respondents to the survey were new to driving and that those with less than three years of experience may need to adhere to rigorous safety precautions including wearing a helmet and other protective driving gear. The present finding contradicts to the study of McCartt et al. (2009) which indicated that 30% of driver-respondents had at least one year of driving experience.

Problem 2: What is the perception of the respondents on the implementation of Republic Act (RA) 10054 also known as the “Motorcycle Helmet Act of 2009”?

Table 7

Respondents' perceived level of RA 10054 implementation

Descriptors	AWV	SD	Description	Interpretation
1. The helmet protects against serious head injury.	3.68	0.649	Very Much Agree	Very Much Aware
2. A helmet prevents harassment from law enforcement agents.	3.15	0.857	Much Agree	Much Aware

3. Aware of prescribed type of helmets	3.36	0.823	Much Agree	Much Aware
4. Helmets are truly protective	3.56	0.783	Very Much Agree	Very Much Aware
5. Wearing helmets obstruct the rider's view	2.71	0.957	Much Agree	Much Aware
6. Helmets generate a lot of heat on the head	2.82	0.999	Much Agree	Much Aware
7. Wearing helmets impairs hearing	2.78	1.011	Much Agree	Much Aware
8. Wearing helmets is uncomfortable	2.47	1.105	Agree	Partly Aware
9. Not wearing helmets is against the law	3.23	1.062	Much Agree	Much Aware
10. Law enforcement agents are strict about helmet wearing	3.64	0.718	Very Much Agree	Very Much Aware
Overall Mean & SD	3.14	0.561	Much Agree	Much Aware

AWV-Average Weighted Value, SD-Standard Deviation

The respondents' assessed level of Republic Act 10054 implementation is displayed in Table 9. The data shows that the respondents were "much aware" that, in addition to mandatory helmet use, protective gear like helmets can shield drivers from severe head injuries. The respondents were "highly aware" of the six (6) items describing RA 10054 implementation in addition to these. That proves that the responders know about the Motorcycle Helmet Act of 2009. The responders, however, were "partly aware" of how uncomfortable helmets are to wear. It implies that comprehension of the law and drivers' protection is more critical than comfortability. As a result, motorcycle riders must be well protected against head injuries to reduce their risk of suffering from one of the most common causes of death and disability.

In totality, the respondents were "much aware" of RA 10054's execution and advantages. That demonstrates that responders fully understand how helmets are intended to reduce the risk of head injuries. It is not cool to die or suffer irreversible brain damage due to a catastrophic fall or accident. Because most of the impact energy during a fall or collision is absorbed by the helmet rather than the head and brain, wearing a helmet lowers the risk of suffering a significant brain injury and passing away.

The current finding is supported by Batuhan (2017) which stated that the respondents are much aware of the existence of the law Republic Act 10054 because they have known it from the source of information where it delivered, provided and informed them about the nationwide public information campaign of the law.

Problem 3. Is there a significant difference in the perception of the respondents on the implementation of the Republic Act (RA) 10054 also known as the “Motorcycle Helmet Act of 2009” when analyzed according to their profile?

Table 8

Test of difference in the respondents' perceived level of RA 10054 implementation analyzed by profile

<i>Demographic Profile</i>	<i>U-Value</i>	<i>H-Value</i>	<i>p-value</i> <i>0.05</i>	<i>@</i>	<i>Interpretation</i>
Age	912.50	1.081	0.782		Not Significant
Sex			0.697		Not Significant
Educational attainment		11.837	0.019		Significant
Civil status		4.888	0.180		Not Significant
Number of years driving		3.952	0.412		Not Significant

Table 10 conveys the test of variation in the respondents' perceived levels of RA 10054 implementation broken down by profile. The table shows that regardless of the respondent's age, sex, civil status, number of years behind the wheel, or ownership of the motorcycle they were riding, there was no discernible variation in their perception of the extent to which RA 10054 had been implemented. It means that respondents' levels of awareness on the implementation of RA 10054 are comparable independent of their ages, sexes, employment status, marital status, driving privileges, and whether they are motorcycle unit owners. Hence, responders are aware that helmets are intended to protect the head from external forces and incidents that could result in harm or death. They also know that wearing a helmet reduces their risk of injuries in an accident.

The respondents age. The finding of this study is similar to the study of Ferrer-Celicious and Naparota (2023) which stated that implementation of Traffic Laws and the demographic profile in terms of age of drivers are not significantly related and have no substantial impact.

The respondents sex. The finding of this study is similar to the study of Ferrer-Celicious and Naparota (2023) which stated that implementation of Traffic Laws and the demographic profile in terms of sex of drivers are not significantly related and have no substantial impact.

The respondents educational attainment. The finding of this study contradicts to the study of Ferrer-Celicious and Naparota (2023) which stated that implementation of Traffic Laws and the demographic profile in terms of educational attainment of drivers are not significantly related and have no substantial impact.

The respondents civil status. The finding of this study contradicts to the study of Ambak, Hashim, Yusoff, and David (2010) which stated that marital status has an effect on the implementation of wearing Motorcycle Helmet.

The respondents number of years driving. The finding of this study contradicts to the study of Ambak,

Hashim, Yusoff, and David (2010) which stated that Number of years Driving has an effect on the implementation of wearing Motorcycle Helmet.

Conclusion

The study shows that perceptions of motorcycle riders in RA 10054 "motorcycle helmet act of 2009" are well informed, demonstrating that respondents are aware of the Motorcycle Helmet Act of 2009. However, the respondents were "partly aware" of how difficult helmets are to wear. It suggests that understanding the law and protecting drivers are more important than comfort. As a result, motorcycle riders must be adequately protected against head injuries in order to lower their risk of suffering from one of the leading causes of death and disability.

Author's contribution: All authors involved in the conceptualization, data gathering and analysis of the paper.

References

- Adeomi. (2015). *Perception of Helmet Use among Motorcycle Riders in a Semi-Urban Community in Southwestern Nigeria*.
- Ambak. K., Hashim. H., Yusoff. I., & David. B. (2010). *An Evaluation on the compliance to safety helmet usage among motorcyclists in Batu Pahat, Johor*. International Journal of Integrated Engineering, 2(2).
- Batuhan. A. (2017). *Socio-Economic Factors Affecting The Compliance Of Habal-Habal Drivers To Republic Act 10054 In Metro Cebu* (Doctoral dissertation, University of San Carlos).
- Bedru. D. F., Teshome. Y., & Kebede. Z. B. (2022). *Helmet wearing behavior where people often ride a motorcycle in Ethiopia: A cross-sectional study*. PLoS ONE 17(1): e0262683.
- Ferrer-Celicious. M. N., & Naparota. L. (2023). *The Enforcement and Implementation of the Traffic Laws in Dipolog City*. International Journal of English Literature and Social Sciences (IJELS), 8(1).
- Jadaan. K. E., Al-Braizat. S., Al-Rafayah. H., Gammoh. Y., & Abukahli. (2017). *Traffic safety in developed and developing countries: A comparative analysis*. International Conference on Technics, Technologies, and Education Journal, 12(1).
- Larsen, A. (2017). *Visual Profile of Motorcycle-related Trauma in a Tertiary Hospital: Level of Awareness*. Pao Journal, 36(2). Lipsky. M. (1980). *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*. Russell Sage Foundation.
- McCartt. A. T., Mayhew. D. R., Braitman. K. A., Ferguson. S. A., & Simpson. H. M. (2009). *Effects*

of age and experience on young driver crashes: review of recent literature. *Traffic injury prevention*, 10(3), 209-219.

Napalang. M. S. (n.d.). *Addressing Motorcycle Safety through Regulations: Challenges and Issues in the Philippines*.

Ogombe. J. A. (2016). *Influence of road infrastructure interventions on implementation of pedestrian safety rules in the city of Kisumu, Kenya* (Doctoral dissertation, University of Nairobi).

Ogombe. J. A., Otieno. M., Mwangi. I., & Opiyo. T. (2014). *Integrated Road Infrastructure Interventions on Implementation of Pedestrian Safety Rules in the City of Kisumu, Kenya*. *International Journal of Business and Commerce*, 6(2).

Olakulehin. O. A., Adeomi. A. A., Oakanbi. O., Itie. C. J., Olanipekun. O. O., & Silori. O. (2015). *Perception and practice of helmet use among motorcycle riders in a semi-urban community in Southwestern Nigeria*. *Education*, 197(2), 99-0.

Varhelyi. A. (2017). Road Safety Management – The Need for a Systematic Approach. *The Open Transportation Journal*, 10, 137- 155.

Publisher's Note: DWIJMH stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



CC BY-NC-SA 4.0

Attribution-NonCommercial-ShareAlike 4.0 International

© 2023 by the authors. Published by Divine Word International Journal of Management and Humanities under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License <https://creativecommons.org/licenses/by-nc-sa/4.0/>