

A Quantitative Research of Assessment on the Anti-Distracted Driving Act Among Public Utility Vehicle in Tuguegarao City

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Abstract

The Philippines enacted Republic Act No. 10913, or the Anti-Distracted Driving Act (ADDA), which was implemented in May 2017 strictly prohibits all motorists, including Public Utility Vehicle (PUV) drivers, from using mobile communication devices or electronic entertainment gadgets while driving or even during temporary stops at traffic signals. With regard to this, the study assessed the level of awareness and implementation of Republic Act No. 10913, also known as the Anti-Distracted Driving Act (ADDA), among public utility vehicle (PUV) drivers and law enforcers in Tuguegarao City.

The research employed a quantitative descriptive design. Data were gathered from driver-respondents selected through stratified proportional random sampling across 49 barangays, and law enforcement personnel from the PNP-Highway Patrol Group and Public Safety and Security Office (PSSO) through total enumeration. Statistical tools used included weighted mean, frequency, percentage, one-way ANOVA, and tests of difference.

Additionally, the study revealed that while PUV drivers generally possess a high level of awareness regarding the law's main prohibitions, their compliance often drops during stationary stops at traffic lights. Results indicated significant differences in awareness levels when respondents were grouped by age, educational attainment, and driving experience.

Law enforcers demonstrated high institutional commitment to implementation, yet drivers experienced only "moderate street-level deterrence," suggesting a gap between legal knowledge and behavioral compliance. Enforcement is hindered by resource constraints, including manpower shortages, lack of monitoring equipment (such as CCTV and dash cams), and difficulties in detecting violations.

As such, effective implementation requires aligning the perspectives of enforcers and drivers while augmenting manual enforcement with technology. Proposed measures include the establishment of a Road Safety Task Force, increased enforcement deployment, city-wide awareness campaigns, and the procurement of monitoring equipment to enhance visibility and equity in enforcement.

Keywords: *Anti-Distracted Driving Act, RA 10913, Public Utility Vehicles, Road Safety, Tuguegarao City, Quantitative descriptive design*

I. INTRODUCTION

Distracted driving represents a threat to road safety, defined as any diversion of a driver's attention from the primary task of safely operating a vehicle through visual, manual, cognitive, or auditory means. Common examples include using mobile phones for texting or calls, adjusting the radio or navigation systems, eating or drinking, interacting with passengers during intense conversations, or attending to children in the vehicle. Even brief distractions can delay reaction time, reduce awareness of sudden hazards, and increase the risk of collisions, injuries, or fatalities.

Because of these risks, it is essential to strictly adhere to laws like the Anti-Distracted Driving Act. Complying with this law helps drivers stay focused, minimizes preventable accidents, and protects not only themselves but also passengers, pedestrians, and other road users. In fact, the regulation of driver behavior through legislation is a fundamental component of modern traffic governance and public safety policy.

These interruptions even lasting just a few seconds severely compromise essential driving skills by delaying reaction times to hazards by up to 50%, reducing peripheral vision and situational awareness, and impairing decision-making processes. Consequently, distracted driving contributes substantially to road traffic injuries and fatalities worldwide, ranking as a leading cause of death among young adults aged 15 to 29, with the World Health Organization documenting over 1.19 million annual road deaths where inattention plays a pivotal role (World Health Organization, 2023).

To counter these risks, the Philippines enacted Republic Act No. 10913, known as the Anti-Distracted Driving Act (ADDA), on July 21, 2016, with implementation beginning May 18, 2017. This comprehensive law explicitly prohibits all motorists whether operating private vehicles or public utility vehicles (PUVs) from using mobile communication devices (e.g., for texting, calling, or internet browsing) or electronic entertainment/computing gadgets (e.g., tablets for videos, games, or e-books) while driving on public roads, including during temporary stops at traffic signals, intersections, or congested areas.

This RA 10913 directly advances United Nations Sustainable Development Goal (SDG) Target 3.6, which commits nations to halving global road traffic deaths and injuries by 2030 through multifaceted interventions (United Nations, 2015). By restricting distractions, a modifiable risk factor responsible for 8 to 10% of serious crashes the law promotes safer, more sustainable transport systems, reduces healthcare burdens from preventable accidents, and aligns with broader SDG objectives for health (Goal 3), safe cities (Goal 11), and responsible consumption/production (Goal 12). In the Philippines, effective ADDA enforcement could significantly contribute to national targets, particularly amid rising urbanization and vehicle ownership that amplify distraction vulnerabilities.

In the Philippines, ADDA aligns with global road-safety strategies, applying to private motorists and public utility vehicle drivers to ensure safe transport systems. Enforcement falls to the Land Transportation Office (LTO), Philippine National Police–Highway Patrol Group (PNP-HPG), and local traffic units, which monitor compliance, issue citations, and run educational campaigns. However, legislation's effectiveness depends not just on statutes but on drivers' understanding,

acceptance, and adherence.

Despite existing studies documenting awareness on compliance under RA 10913, some literature and study lacks comprehensive assessment specifically targeting public utility vehicle (PUV) drivers in Tuguegarao City. Hence, it was for this reason that this study assessed the level of awareness on the Anti-Distracted Driving Act among public utility vehicles in Tuguegarao City.

Statement of the Problem

This study assessed the level of awareness on the Anti-Distracted Driving Act among public utility vehicles in Tuguegarao City.

Specifically, it sought to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
 - 1.1 Age;
 - 1.2 Civil Status;
 - 1.3 Highest Educational Attainment;
 - 1.4 Religious Affiliation;
 - 1.5 Ethnic Affiliation;
 - 1.6 Years of Driving Experience
2. What is the level of awareness on the Anti-distracted Driving Act among public utility vehicles as assessed by the drivers-respondents relative to:
 - 2.1 Punishable Acts;
 - 2.2 Penalty (includes fines & suspension of the license);
 - 2.3 Exemptions
3. Is there a significant difference between assessment of the level of awareness on anti-distracted driving act when grouped according to their profile variables?
4. What is the level of implementation of the two groups of respondents on the anti-distracted driving act relative to:
 - 4.1 Punishable Acts ;
 - 4.2 Penalty (includes fines & suspension of the license);
 - 4.3 Exemptions
5. What is the comparison assessment of the two groups of respondents on the level of implementation of the anti-distracted driving act?
6. What are the challenges of the law enforcement in the implementation of the anti-distracted driving act?
7. What measures can be proposed to address the challenges of implementation of the anti-distracted driving act?

Hypothesis

This study was guided by a null hypothesis that:

There is no significant difference between assessment of the level of awareness on the anti-distracted driving act when grouped according to their profile variables.



Significance of the Study

To the Drivers, this may enhance PUV drivers' awareness and understanding of the provisions of the Anti-Distracted Driving Act, particularly the restrictions on the use of electronic devices while operating a motor vehicle. Increased awareness may encourage greater adherence to traffic regulations and promote safer driving behavior. The study may also provide drivers with clearer information that can guide responsible gadget use on the road.

To the Educators, this may serve as reference material for educators, particularly those in the field of criminal justice, social sciences, and civic education. The information may help them integrate discussions on road safety, responsible technology use, and traffic laws into classroom instruction and community extension activities, thereby strengthening students' awareness of legal and safety responsibilities.

To the Land Transportation Office (LTO), this may provide the LTO with empirical data regarding drivers' awareness, implementation perceptions, and adherence patterns. These findings may support the enhancement of information campaigns, licensing seminars, and instructional materials related to safe and lawful device usage while driving.

To the Local Government Unit of Tuguegarao City, this may serve as a basis for development or strengthening of local traffic-safety programs, ordinances, and public information initiatives. The study may assist the local government in identifying areas where community awareness and compliance efforts can be further reinforced.

To the Philippine National Police – Highway Patrol Group (PNP-HPG), this may help the PNP-HPG evaluate current enforcement visibility and communication strategies.

To the Public Safety and Security Office (PSSO), this may provide useful information that supports the PSSO in carrying out its enforcement duties and public-safety responsibilities.

To the Researchers and Future Researchers, this study may contribute to the existing body of knowledge on traffic safety, policy implementation, and driver behavior. It may serve as baseline data for related investigations focusing on road-safety legislation, compliance behavior, and enforcement assessment. It may guide subsequent researchers in designing methodologies, identifying variables, and expanding investigations in a similar or broader view.

Scope and Delimitation of the Study

Limitations of the study pertain to assessing the Anti-Distracted Driving Act (RA 10913) implementation among drivers in Tuguegarao City. It focused solely on the level of awareness and implementation of the Act's provisions. Other traffic laws, accident statistics, and vehicle conditions were excluded from the scope.

The respondents consisted of driver-respondents and law enforcement personnel within Tuguegarao City. Driver-respondents were primarily tricycle drivers from the city's 49 barangays, selected through stratified proportional random sampling. Meanwhile, 17 personnel from the



PNP-Highway Patrol Group and 65 personnel from the Public Safety and Security Office were included through total enumeration.

Data were gathered using survey questionnaires that measured awareness and implementation levels. A descriptive research design was employed, utilizing statistical tools such as weighted mean, frequency, percentage, one-way ANOVA, and tests of difference. Additionally, the assessment covered awareness of prohibited device use, exemptions, and authorized apprehending bodies. It also examined implementation aspects including punishable acts, penalties (fines and license suspension), and exemptions.

II. RESEARCH METHODOLOGY

The following sections consisted of methodology: research design, participants, instrument, procedure, and data analysis.

Research Design

This study employed a quantitative descriptive research design. The quantitative descriptive research design was employed to assess the demographic profile of drivers and law enforcers in Tuguegarao City in terms of age, civil status, highest educational attainment, religious affiliation, ethnic affiliation, and years of driving experience. The design was further utilized to determine the level of awareness among PUV drivers regarding the Anti-Distracted Driving Act relative to punishable acts, penalties (fines and license suspension), and exemptions. It also facilitated analysis of significant differences in awareness levels when respondents were grouped according to their demographic profile variables through one-way ANOVA and tests of difference.

Additionally, the descriptive design was utilized to assess the level of implementation of the Anti-Distracted Driving Act as assessed by both driver-respondents and law enforcers across punishable acts, penalties, and exemptions using weighted means. It also enabled comparison of assessments between the two respondent groups on implementation levels through t-tests, identification of law enforcement challenges, and proposal of targeted intervention measures to address implementation gaps.

Respondents of the Study

The focus is on drivers from Tuguegarao City's 49 barangays, along with law enforcement personnel. Drivers from each barangay were selected through Stratified Proportional Random Sampling, composed of 381 driver-respondents. Additionally, the study included the total population of 17 personnel from the PNP-Highway Patrol Group (PNP-HPG) and 65 personnel from the Public Safety and Security Office (PSSO) through total enumeration, composed of 463 total respondents.

Stratified proportional random sampling ensured representative driver selection for assessing awareness levels of the Anti-Distracted Driving Act, while total enumeration captured comprehensive law enforcement perspectives on implementation effectiveness. These methods appropriately represented all relevant subgroups directly involved in RA 10913 enforcement.



Data Gathering Tool

Primary data collection tool for this study was a structured survey questionnaire developed specifically for assessing the implementation, awareness, and adherence to the Anti-Distracted Driving Act (Republic Act No. 10913). The questionnaire was carefully constructed based directly on the actual provisions of the law, including prohibited activities (e.g., making or receiving calls, sending or reading messages, browsing the internet, gaming, watching videos, and using electronic devices for calculations), exemptions (e.g., hands-free calls, law enforcement duties, roadside emergencies), and the schedule of penalties (monetary fines, license suspension, revocation, and aggravated cases). This direct alignment with the law ensured that all survey items were legally accurate, relevant, and reflective of the Act's objectives.

The survey questionnaire was divided into three main parts:

Part I is the demographic and background information from respondents to provide context for interpreting awareness and adherence levels;

Part II is on the level of awareness among drivers regarding RA 10913 provisions, including Punishable Acts, Penalties (fines and license suspension), and Exemptions allowed under the law.;

Part III is the level of implementation, specifically covering Punishable Acts, Penalties (fines and license suspension), and Exemptions.

Integrity of the questionnaire was ensured through careful design and alignment with RA 10913, making the instrument both reliable and valid for the study's goal. Each item was drafted to directly reflect the legal text, thereby eliminating interpretation bias and ensuring that respondents' answers accurately measured their knowledge, compliance, and perceptions of enforcement. This law-based survey tool provided a strong foundation for evaluating RA 10913 implementation in Tuguegarao City.

Data gathering Procedure

Before conducting the study, the researcher submitted a formal letter to the University President through the Chairman of the Institutional Review Board, duly noted by the Academic Dean, requesting permission to pursue the research, obtain data gathering permits, and secure ethical clearance.

Additional letters of request were addressed to the City Mayor for endorsement to the Tricycle Regulation Unit to obtain the total population of registered public utility tricycles (PUTs) and their operators in Tuguegarao City. Similar requests were sent to the heads of the PNP-Highway Patrol Group (PNP-HPG) and Public Safety and Security Office (PSSO) to secure respondent population data and approval for questionnaire administration.

Upon receiving permissions, the researcher personally explained the study's purpose and obtained informed consent from willing participants. Questionnaires were then personally distributed and retrieved to ensure proper handling and data security. Ample time was provided for respondents to complete the surveys, promoting truthful and accurate responses.



After retrieval, responses were meticulously tallied, computed, and analyzed using appropriate statistical tools. Supplementary documentary data from the Land Transportation Office (LTO) were incorporated to validate findings and strengthen the study's conclusions.

Statistical Tools

Frequency Count and Percentage were used to analyze demographic profile of the respondents relative to their age, civil status, highest educational attainment, religious affiliation, ethnic affiliation, and years of driving experience. The design was further utilized to determine the level of awareness among drivers regarding the Anti-Distracted Driving Act relative to punishable acts, penalties (fines and license suspension), and exemptions.

Weighted Mean was used to assess respondents' level of awareness across three dimensions (punishable acts, penalties, exemptions). A 4-point Likert scale categorized awareness from "Not Aware" to "Highly Aware," enabling standardized measurement and subgroup comparisons, as indicated below:

4-Point Likert Scale for Level of Awareness

Numerical Scale	Numerical Range	Descriptive Interpretation
4	3.25–4.00	Highly Aware
3	2.50–3.24	Aware
2	1.75–2.49	Slightly Aware
1	1.00–1.74	Not Aware

Analysis of Variance (ANOVA) was employed to determine the significant difference between the profile of the respondents and their awareness on the level of Anti-Distracted Driving Act.

Independent Sample T-test was used to determine the comparative assessment of the two groups of respondents on the level of implementation of the Anti-Distracted Driving Act. Below is the scale used in the study:

4-Point Likert Scale for Level of Implementation

Numerical Scale	Numerical Range	Descriptive Interpretation
4	3.25–4.00	Highly Implemented
3	2.50–3.24	Implemented
2	1.75–2.49	Moderately Implemented
1	1.00–1.74	Not Implemented

Frequency and Rank was utilized in determining the challenges faced by law enforcement on RA 10913.

III. RESULT and DISCUSSION

Summary of Findings

1. Profile of the Respondents

- Majority of the respondents are aged 26-35 years old, married, high school graduates, Roman Catholic, Itawes, and with 6-10 years of driving experience.

2. Level of Awareness of the Driver-Respondents regarding the Anti-Distracted Driving Act

- Relative to RA 10913, respondents demonstrated a "Highly Aware" level across all three dimensions: Punishable Acts, Penalties, and Exemptions.

3. Correlation between the Assessment of respondents on the Level of Awareness on the Anti-Distracted Driving Act when grouped according to their profile variables

- There is a significant difference in the level of awareness when drivers were grouped by Age, Educational Attainment, and Years of Driving Experience.
- There is no significant difference in awareness levels when respondents are categorized by Civil Status, Religious Affiliation, or Ethnic Affiliation.

4. Level of Implementation of the Two Groups of Respondents on Anti-Distracted Driving Act

- Relative to RA 10913, Law enforcers consistently rated all dimensions: Punishable Acts, Penalties, and Exemptions as "Highly Implemented".
- Relative to RA 10913, Drivers rated all dimensions "Moderately Implemented".

5. Comparison of the Assessment of the Two Groups of Respondents on the Implementation

- There is a significant difference between driver-respondents and law enforcers in their assessments of the implementation of Fines and Exemptions.
- There is no significant difference between the two groups in their assessments of Suspension and Enforcement, indicating a shared understanding of the procedural aspects of these categories.

6. Challenges in the Implementation of RA 10913 among Law Enforcement Respondents

- Relative to the Challenges in the Implementation of RA 10913 among Law Enforcement Respondents, they selected Lack of manpower for traffic monitoring, Difficulty in detecting distracted driving violations, Limited monitoring equipment, Lack of cooperation from drivers, and Insufficient public awareness of the law as primary barriers.

IV. CONCLUSION

Based on the findings of this study, the researcher concludes that RA 10913 implementation depends on aligning views between law enforcers and drivers. While enforcers demonstrate high institutional commitment across punishable acts, penalties, and exemptions, drivers experience

moderate street-level deterrence, highlighting that awareness alone insufficiently translates to behavioral compliance without visible, consistent apprehension.

The study also reveals that resource constraints such as manpower shortages, detection difficulties, and equipment limitations—undermine enforcement efficacy, despite strong awareness among mid-career PUV drivers. This means road safety does not depend solely on legal knowledge but on technological augmentation and inter-agency coordination to enhance monitoring visibility and equity.

Furthermore, the significant differences in awareness by age, education, and driving experience suggest that programs must fit different driver groups. This implies city-wide campaigns and PUV-specific training should target weak areas like distractions at stops and device placement rules.

Indeed, for RA 10913 to achieve lasting impact in Tuguegarao City, local government units, PNP, LTO, and transport associations must prioritize the proposed multi-stakeholder task force, technology procurement, and public education. In this way, anti-distracted driving enforcement surpasses compliance, fostering self-regulated road safety culture that sustains behavioral change amid urban mobility demands.

V. RECOMMENDATION

Based on the conclusion drawn from this study, the following recommendations are hereby drawn:

1. Drivers may use the findings to deepen their understanding of RA 10913 rules, especially electronic device limits while driving, to improve compliance and adopt safer habits through clearer gadget guidelines;
2. Educators may draw from the findings as reference material in criminal justice, social sciences, and civic education classes, integrating road safety and traffic law discussions into lessons and community activities to build students' legal awareness;
3. Land Transportation Office (LTO) may apply the data on awareness and compliance to strengthen campaigns, licensing seminars, and materials promoting safe device use;
4. Local Government Unit of Tuguegarao City may base traffic-safety programs, ordinances, and info drives on the findings to target community awareness gaps;
5. Philippine National Police – Highway Patrol Group (PNP-HPG) may review enforcement visibility and communication using the findings;
6. Public Safety and Security Office (PSSO) may leverage the findings to support enforcement duties and safety efforts;
7. Researchers may build on the findings as baseline data for studies on road-safety laws, compliance, and enforcement;



8. Future Researchers may use the findings to guide methods, variables, and expanded work on distracted driving and policy implementation.

REFERENCES

- Evangelista, J., et al. (2025). Awareness and compliance of delivery riders to the Anti-Distracted Driving Act (RA 10913). Retrieved from https://www.researchgate.net/publication/396245564_Awareness_and_Compliance_of_Delivery_Riders_to_Anti-Distracted_Driving_Act_of_2016_Known_as_Republic_Act_No_10913
- Cruz, M. C. A. (2020). Public awareness and implementation challenges of the Anti-Distracted Driving Act. Retrieved from <https://verafiles.org/articles/implementation-issues-hound-day-1-anti-distracted-driving-la>
- Daria, R., et al. (2020). Level of implementation of the Anti-Distracted Driving Act. <https://www.coursehero.com/file/25635971/daria-thesisdocx/>
- Griffin-Taylor, S. (2023). Real reminders: How signage affects distracted driving law compliance (Doctoral dissertation, Walden University). Retrieved from <https://scholarworks.waldenu.edu/dissertations/14147/>
- Kamid, A., et al. (2024). Motorcycle riders' training, behaviors, and road safety practices. Retrieved from <https://www.researchgate.net/publication/380436892>
- Pinera, J., & Casiw, G. (2024). Traffic Law Enforcement in the Province Of Cagayan: An Assessment. *International Journal Of Advanced Research In Management And Social Sciences*, 13(11), 85-97
- Pinera, J. B., & Casiw, G. M. (2024) Road Safety Design Standards: A Traffic Management Approach In The Province Of Cagayan. *International Journal Of Advanced Research In Management And Social Sciences*, 13(5), 1-14
- Pinera, J., & Casiw, G. (2020). Enforcement and Compliance with Traffic Rules in the Province of Cagayan. *Journal of Advanced Research*, 12, 962-967.
- Jomel B. Pinera (2020) Knowledge and Compliance with Traffic Rules Among Drivers in Cagayan *International Journal of Advanced Research Vol 30 Issue No.8 Pages 1022-1028*
- Tabuñar, L. (2019). Predictors and risk perceptions of cell phone use while driving. Retrieved from <https://www.davidpublisher.com/index.php/Home/Article/index?id=39854.html>
- Legal Bases and Government Documents Republic of the Philippines. (2016). Republic Act No. 10913: Anti-Distracted Driving Act. Retrieved from <https://www.officialgazette.gov.ph/2016/07/21/republic-act-no-10913/>
- Republic of the Philippines. (2019). Republic Act No. 11313: Safe Spaces Act. Retrieved from <https://www.officialgazette.gov.ph/2019/04/17/republic-act-no-11313/>



Republic of the Philippines. (2016). Republic Act No. 10844: Department of Information and Communications Technology Act. Retrieved from <https://www.officialgazette.gov.ph/2016/05/23/republic-act-no-10844/>

Republic of the Philippines. (1930). Act No. 3815: Revised Penal Code Retrieved from <https://www.officialgazette.gov.ph/1930/12/08/act-no-3815-s-1930/>International Sources

World Health Organization. (2023). Global status report on road safety. Retrieved from <https://www.who.int/publications/i/item/9789240064971>

United Nations. (2015). Sustainable Development Goals. Retrieved from <https://sdgs.un.org/goals>