ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

Uninsured Motorists' Risk Attitudes and Pedestrian Road Safety: Evidence from Metropolitan Lagos, Nigeria

Sunday Stephen Ajemunigbohun[1]*, Kudirat Adeola Banjo[2], Taiwo Olarinre Oluwaleye[3]

[1*]Faculty of Management Sciences, Lagos State University, Ojo, Lagos State, Nigeria. Email: sunday.ajemunigbohun@lasu.edu.ng

[2]College of Applied Social Sciences, Lagos State University of Science and Technology, Ikorodu, Lagos, Nigeria. Email: peaceadeolabanjo@gmail.com

[3]Faculty of Management Sciences, Ekiti State University, Ado-Ekiti, Nigeria Email: taiwo.oluwaleye@eksu.edu.ng

Citation: Ajemunigbohun, S. S., Banjo, K. A., & Oluwaleye, T. O. (2024). Uninsured Motorists' Risk Attitudes and Pedestrian Road Safety: Evidence from Metropolitan Lagos, Nigeria. Journal of Law and Social Sciences, 2(2), 1-17.

Received: October 11, 2024

Revised: November 10, 2024
Accepted: December 19, 2024
Published: December 30, 2024

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

Abstract

With the increasing prevalence of uninsured vehicles in urban areas, motorists' behaviors on pedestrian safety are crucial for developing effective road safety strategies. This study investigated the happenings around uninsured motorists' risk attitudes and pedestrian road safety in metropolitan Lagos, Nigeria. Using the survey approach cum the two-way sampling techniques comprised of purposive and convenience, data were gathered to analyze the behavioral dispositions of uninsured motorists and their implications on pedestrian road safety. The study adopted a structured questionnaire as a research instrument for data collection from a sample size of 209. The data analysis was descriptive statistics comprised of simple frequency percentages presented in tabular form and bar chart description. Findings revealed, based on pedestrian opinions, that uninsured motorists display riskier driving behaviors, such as speeding and reckless driving patterns, which were found prevalent among commercial uninsured motorists. In addition, insufficient implementation of insurance regulation and socio-economic factors contributed to the proliferation of uninsured vehicles. The study also showcased the descriptive analysis of uninsured motorists' risk attitudes towards pedestrian road safety. Further finding presented a descriptive analysis of pedestrians' road safety metrics on Lagos roads. Then, the study accentuates the urgent need for comprehensive policy intervention targeting uninsured motorists, including stricter insurance laws, public awareness campaigns, and enhanced infrastructure to improve pedestrian safety in urban environments, like metropolitan Lagos, Nigeria, and similar contexts in other African cities and beyond. Lastly, local communities should engage with other stakeholders in the transport industry to ensure a culture of road safety, promote responsible driving behavior, and encourage compliance with insurance regulations.

Keywords: Uninsured Motorists, Risk Attitudes, Pedestrian, Road Safety, Lagos Metropolitan

Introduction

The resulting outcome of vehicle mishaps in fatalities, injuries, and property destruction is a significant social mess (Blincoe et al., 2023; Ministry of Transport, 2021; Steinhauser & Lancser, 2022). One facet of the all-inclusive social upshots deals with the losses of accident casualties, mainly when an at-fault motorist has restricted pecuniary resources for indemnifying the injured party. One primary solution is the introduction of Motor Third-Party Liability Insurance (MTPLI), where monetary protection is provided to persons from unanticipated losses (Anna, 2018; Nkeng et al., 2020). Despite its advantages, most motorists have not acquired MTPLI considerably. One effect of the uninsured financially constrained motorists is the inability to compensate casualties for the accidental losses. This probably endeared a free-riding behavioral display that eventually resulted in society providing for the victims' losses.

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

Despite the lawful obligation for motorists to procure motor insurance, compliance is not flawless. The extent of defiance, that is, the percentage of uninsured motorists, differs depending upon each country in the globe. For instance, uninsured motorists are recorded at 14 percent in the United States (Malven, 2023), 5.1 percent in the United Kingdom (Marson & Ferris, 2023), 6.3 percent in Italy (Insurance Europe, 2019), less than 1 percent in Poland (Kosiorowski, 2022); about 65 percent recorded in South Africa (Coetzer, 2022); and around 77 percent in Nigeria (Iwunze, 2022). However, 92 percent of the global fatalities related to road occurrence were recorded in low- and middle-income countries, even though 60 percent of the global vehicles were unsafe for the African region (World Health Organisation (WHO), 2023).

However, studies (such as Acerra et al., 2023; Uhegbu & Tight, 2021; Vitalis et al., 2022) have attested that intercontinental, over three thousand pedestrians are being affected day-to-day by road mishaps, logged nothing below 50 million and 3.5 million respectively for both injuries and death. In 2021, Pedestrian fatalities were said to have increased by 13 percent compared to 11 percent in 2020 in the United States (National Highway Traffic Safety Administration, (NHTSA), 2021). In Europe, Poland recorded the highest percentage of pedestrian fatalities, followed by Romania, Portugal, Croatia, Bulgaria, and Italy (European Commission, 2023

Problem Statement

In Africa, road safety remains a big problem. Despite being the lowest in motorization and road infrastructure, Africa experiences a high casualty rate, Segui-Gomez et al., 2021). Unsafe road incidences emanating from motorists' insubordination of road safety regulations, many at times, endanger their lives and pedestrians in numerous countries of the globe.). In Africa, 40 percent of fatalities were recorded to be pedestrians in terms of injuries and deaths (Segui-Gomez et al., 2021). To this end, this study emphasizes the need to examine the significant effects of uninsured motorists' risk attitudes on pedestrians' road safety disposition in the Lagos metropolis.

Research Objectives

In specific terms, the objectives are to examine pedestrians' knowledge of the existence of uninsured motorists on Lagos roads, ascertain pedestrians' thoughts of risk exposures on Lagos roads, provide a descriptive analysis of uninsured motorists' behavioral dispositions among pedestrians within the Lagos metropolis, and present a descriptive analysis of pedestrians' road safety metrics within the Lagos metropolis.

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

Literature Review

Uninsured Motorists and Policy Coverage

According to the Insurance Research Council (2023), uninsured motorists (UM) are drivers operating motor vehicles without possessing liability insurance policy to indemnify others for bodily injuries or physical damage to property resulting from accidents whereby they were at fault. However, a more effective solution is **uninsured (and underinsured) motorist** coverage that indemnifies policyholders when an at-fault motorist has no liability insurance when the motorist is a hit-and-run driver (Insurance Information Institute, 2021). An earlier study by Kramer et al. (2012) stipulated that UM policy, therefore, is to provide indemnification to motor insurance policyholders for personal injuries or property damage suffered in a catastrophe necessitating an operating motorist who is at fault and/ or one who does weird third-party motor liability insurance. Edmonds (2015) averred that underinsured motorist (UIM) coverage is comparable to UM coverage, except that the insurance procured by the person who caused the accident is inadequate to copiously compensate the injured party(ies) for their losses.

Uninsured Motorists and Risk Attitudes

The accidental risks of insured motorists are uncertain. Some studies (such as (Hsu et al., 2018; Yarmukhamedov, 2020) indicated that uninsured motorists constitute higher risks of engendering misfortune compared to insured motorists, whereas others (such as (Coetzer, 2022; Brobeck et al., 2013) revealed that uninsured motorists are more incentivized to be careful on the road to avert costly accidents and legal redress for noncompliance with compulsory motor insurance. Yarmukhamedov (2020) reinstated that uninsured motorists are a high-risk element and a considerable threat to traffic safety. However, threats to traffic safety motivating motorists' risk attitudes have been echoed in many continents, such as Europe (Alonso et al., 2022; Brooks & Williams, 2023); Asia (Dinh et al., 2022; Tanglai et al., 2022); South America (Narveaz et al., 2019); and Africa (Abdul-Azeez & Ajemunigbohun, 2022; Bantjes et al., 2024). According to Glanz et al. (2016), risk attitude is defined as people's education regarding risk avoidance or preference when making decisions in an uncertain situation. Motorists' risk attitudes are the level of risk exposures encountered by motorists, including third-party risks (Magri et al., 2019).

Uninsured Motorists and Asymmetric Information

In selecting appropriate motor insurance policies and their providers, a potential motor insurance policyholder would desire to have access to and ponder upon information relating to the financial performance of a motor insurer, its conditional terms, and historical records of quality claims to be able to decide on his/her choices of motor insurance policies. According to Feinman, as cited in Ajemunigbohun et al. (2022), an information inequality existed that had reduced the motor insurance policyholders' capacities to predict insurers'

performance, hence influenced by moral hazard and adverse selection. An adverse selection dispute that high-risk motorists only purchase insurance might be inapt as motor insurance is at least partly obligatory (Yarmukhamedov, 2020). However, the existence of an alternative type of adverse selection, where high-risk motorists may desire high insurance coverage, cannot be erased. Therefore, due to the concern for accident costs, Moral hazard, which may also be compelling, is passed on to an insurer (Avraham & Porat, 2023). This, then, differs from the subsisting argument of the uninsured motorists. Based on the adverse selection theory, risk motorists may procure insurance and be cautious on the road (De Donder et al., 2022); this suggests that the insured motorists' risk of instigating an accident is unspecified.

Pedestrian Safety and Road Infrastructure

Walking is a vital form of transport for most African people. Despite its crucial role, there is a negligible investment in pedestrian infrastructure (Frimpong, 2022; Mesfin & Denbi, 2022; Rowangould & Corning-Padilla, 2019). It was further stressed that roads in many African cities are without sidewalks, congested roads with motorists and vendors, poor road markings, absence of streetlights, and pedestrians grappling for spaces. However, as Frimpong (2022) emphasized, predictions are that five hundred and fourteen thousand (514,000) pedestrian road fatalities will occur in Africa by 2030. According to Kitosi (2023), subsisting government policies must be drawn to enhance road infrastructure and sustain road safety. Pedestrian safety is one of municipal transport's most stimulating glitches. Therefore, it should be mutually pondered upon in line with the motorized transport system in many cities (Nkurunziza et al., 2023).

Theory of Planned Behaviour (TPB) as Applicable to Uninsured Motorists' Behaviour and Pedestrian Road Safety

This theory was advocated to elucidate the behavioral desire of humanity and its espousal verdicts. It is thus called the theory of reasoned action, with an assumption that human character is wholly reflective and the intimated commitment, compressed by idiosyncratic norms, attitudinal expressions, and perceived behavioral control (Fishbein & Ajzen, 1975; Zeweld et al. (2017). Under this hypothetical context, intent is a one-sided function of human disposition, subjective norms, and supposed control. Attitudinal expressions are individual expressions of positive or negative and favorable or unfavorable expressions on specific factors, reasons, and environments (Hashemiparast et al., 2016; Zainal et al., 2023). For subjective norms, the focus was on perceived social pressure that shapes and helps shape an individual's judgment of performing a specific behavior (Li et al., 2023). Perceived behavioral control is concerned with a human evaluation relating to his/her precise behavior contingent upon their strength, either in an easy or hard manner (Hong et al., 2022). This aspect of the theory explains a situation where an individual pedestrian intends to cross the road when his/her thought was that it would be easy when there are chances of actions leading to a road accident. Then, an experience can affect

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

his/her expectations and the present obstacle faced. All the constructs making up the TPB measure behavioral intentions, which predict the exact behavioral performance of individual uninsured motorists and pedestrians on the road.

Research Methods

This study employed a survey methodology based on quantitative methods to provide a deeper understanding of pedestrians' perceptions of the behavior of uninsured motorists, with implications for road safety in Lagos. This design facilitated the delineation and execution of the study to anticipate outcomes and establish a connection with real-world contexts (Creswell & Creswell, 2018). The sample consisted of pedestrians on Lagos highways during peak and off-peak hours. Lagos State was selected because it is a commercial and economic center for the West African States (Osho & Adishi, 2019). The data collection instrument was a structured questionnaire.

The sample consisted of two hundred and nine (209) participants whose views were represented in the data analysis. This survey method was selected based on suitability for the specified research design, cost-effectiveness, extensive sample representation, ease of supervision, and applicability to similar subjects (Asenahabi, 2019). The study utilized two-way sample strategies, comprising purposive and convenience sampling. Purposive sampling necessitated pedestrians' judgment and skill for the instruments' distribution. The data gathering technique for convenience sampling considered the researchers' preparedness and the availability of respondents.

The study examined validity tests, including theoretical, content, internal, and external validity. Furthermore, test-retest reliability was employed to assess the subjects in this study on two occasions to ensure consistency of results (Fallon, 2016). The reliability test yielded a Cronbach alpha exceeding the acceptable threshold of 0.7 for the road safety measures affecting motorists' behaviors in Lagos City. These results aligned with statistical assumptions regarding the scale's validity and the inviolability of its internal consistency. The alpha values aligned with the statistical assumptions regarding the scale's validity (Leavy, 2017).

Descriptive Analysis of Participants' Responses

Table 1: Demographic Information of Participants

Variable	Response	Frequency (%)
Gender	Male	121 (57.9%)
	Female	88 (42.1%)
Age	18 but less than 30	30 (14.4%)
	30 but less than 40	115 (55.0%)
	40 but less than 50	56 (26.8%)

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

	50 but less than 60	08(3.8%)
Marital Status	Single	132 (63.2%)
	Married	69 (33.0%)
	Separated	08 (3.8%)
Educational Qualification	SSCE/GCE/OND	77 (36.8%)
	HND/BSc	106 (50.8%)
	Postgraduate	18 (8.6%)
	Professional Certificate	08 (3.8%)

Source: Field Survey (2024)

Table 1 provided substantial insights into the composition of the examined population. The gender distribution indicated a near-equal representation, with 57.9 percent classified as male and 42.1 percent as female. The age distribution statistics indicated a varied age range among the sample. The primary age categories of participants were 30 to under 40 years, 40 to under 50 years, and 18 to under 30 years, accounting for 55.0 percent, 26.8 percent, and 14.4 percent, respectively. Reduced proportions were observed in the older demographic, with 3.8 percent from the 50 and above cohort. This distribution indicates that active categories prevail within the sample. The marital status disclosed a significant aspect of the demographic profile. A majority, including 63.2 percent, were categorized as single, while 33.0 percent were likewise single. Separated individuals constitute a negligible segment, representing 3.8 percent of the sample. The educational qualifications of the sample population exhibited varied levels of attainment. A substantial portion, including 50.8 percent, holds HND/BSc qualifications, followed by 36.8 percent with SSEC/GCE/OND qualifications, while the remaining 12.4 percent comprises postgraduate and professional certificate holders.

Table 2: Participants' Demographic Information

Variable	Response Label	Frequency	Percentages (%)
How do you perceive risks on Lagos roads?	Low	28	13.4
	Average	70	33.5
	High	35	16.7
	Very high	76	36.4
Have you experienced road mishaps on Lagos roads at any point?	Not at all	53	25.4
	Rarely	94	45.0
	Frequently	62	29.6
Are you exposed to risks on Lagos roads?	Yes	190	90.9
	No	19	9.1

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

How often do you think motorists endanger pedestrians on Lagos roads?	Not at all	09	4.3
	Rarely	50	23.9
	Frequently	150	71.8
How can you scale motorists' risk attitudes on Lagos roads?	Poor	39	18.2
	Average	97	46.4
	Fair	65	31.1
	Good	09	4.3
Are you aware of uninsured motorists on Lagos roads?	Yes	162	80.6
	No	47	19.4
Who among these motorists may not possess motor insurance policies on Lagos roads?	Private vehicles	12	5.7
	Company vehicles	05	2.4
	Long haul vehicles (trucks)	18	8.6
	Commercial vehicles	143	68.4
	Government vehicles	14	6.7
	Others	17	8.2

Source: Field Survey (2024)

Table 2 gave substantial insights into the composition of the analyzed representation. The participants' responses on how they perceive risks on Lagos roads indicated that while 13.4 percent expressed 'low' responses, 33.5 percent were recorded for 'average,' and 53.1 percent showed 'high' responses. This is an indication that Lagos roads are not safe for pedestrians. Regarding participants' experiences on Lagos road mishaps, 25.4 percent implied 'not at all.' While 45 percent rarely experienced it, 29.6 percent indicated a 'frequent' risk occurrence on Lagos roads. This is an indication that road mishaps occurred but on rare occasions. As for those participants' responses to their risk exposures on Lagos roads, while 90.9 percent expressed a 'Yes' response, 9.1 percent gave a 'No' reaction. As for motorists endangering pedestrians on Lagos roads, 4.3 percent was recorded for 'not at all.' While 23.9 percent expressed rare judgments, 71.8 percent revealed that pedestrians frequently face danger. As for the scale of motorists' risk attitudes, the majority of the pedestrians rated motorists' risk attitudes as average and fair, with 46.4 percent and 31.1 percent, respectively. As for the pedestrians' awareness of uninsured motorists on Lagos roads, 80.6 percent recorded 'Yes,' while 19.4 percent said 'No.' As for the pedestrians' knowledge of motorists who do not possess motor insurance policies on Lagos roads, commercial vehicles were recorded highest with 68.4 percent, followed by long haul vehicles (8.6 percent), others (8.2 percent), government vehicles (6.7 percent), private vehicles (5.7 percent), and company's vehicles (2.4 percent). This indicates that most commercial vehicles are hazardous to pedestrians' safety on Lagos roads.

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

Table 3: Uninsured Motorists' Behavioural Dispositions

Variable	Response Label	Frequency	Percentages (%)
Do motorist's risk attitudes put pedestrians at high risk on Lagos roads?	Yes	176	84.2
	No	33	15.8
Are you aware that motor insurance protects pedestrians on Lagos roads?	Yes	162	80.6
	No	47	19.4
Do you think most motorists hold motor insurance for pedestrians' road safety?	Yes	58	27.8
	No	151	72.2
Does government regulation of third-party motor insurance guarantee pedestrians' road safety?	Yes	44	21
	No	165	79

Source: Field Survey (2024)

In Table 3 (Fig. 1), the uninsured motorists' behavioral dispositions towards pedestrians' road safety survey items for which data were collected from all participants were *motorists' risk attitudes put the pedestrians at high risks, motor insurance protects pedestrians, motor insurance possession for pedestrians' road safety, and government regulation of MTPLI guarantees pedestrians' road safety.* The participants responded to the various items, 84.2 percent of which demonstrated their acceptance of *motorists' risk attitudes putting pedestrians at high risk,* while 15.8 percent expressed their indifference. *Motor insurance protects pedestrians*; 80.6 percent of responders supported this issue, and 19.4 percent indicated discontent. As for *motor insurance possession for pedestrians' road safety*, 27.8 percent of all participants agreed, while 72.2 percent disagreed. For *government regulation of MTPLI guarantees pedestrians' road safety,* 21 percent concurred, but 79 percent articulated dissent. The mean and standard deviation scores corroborated the results for all surveyed items. This indicates that pedestrians' evaluations of the survey items were normally distributed and centered around the mean. The descriptive statistics on uninsured motorists' behavioral attitudes toward road safety indicate that all metrics similarly evaluate the participants' assessments.

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

Figure 1: The graphical model explains the uninsured motorists' behavioral dispositions towards pedestrians' road safety on Lagos roads

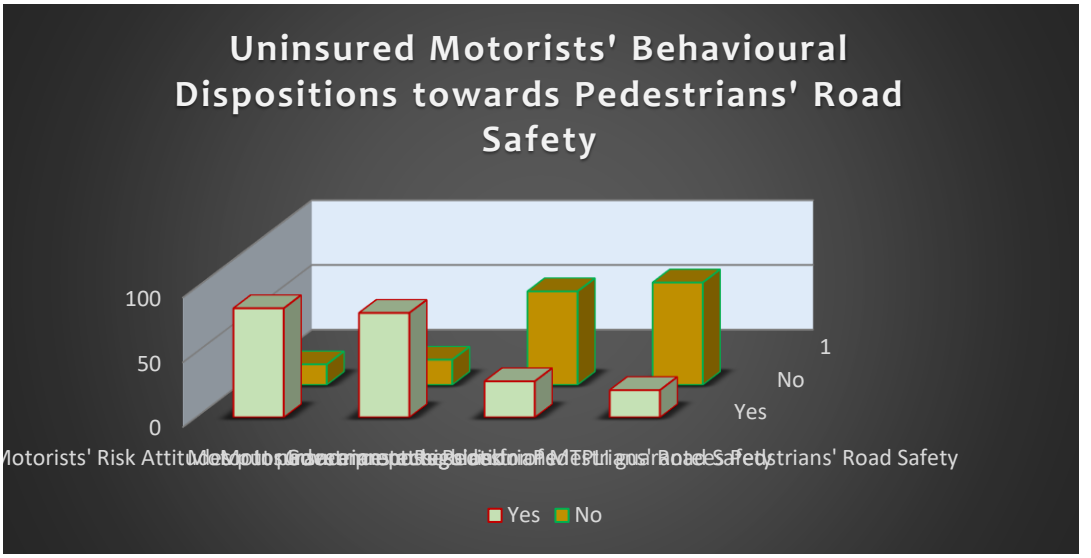


Table 4: Pedestrians' Road Safety Metrics

Variable	Response Label	Frequency	Percentages (%)
I enjoy a safe walking route on Lagos roads	Yes	48	23
	No	161	77
I use sidewalks on Lagos roads to ensure safety and compliance with traffic regulations.	Yes	147	70.3
	No	62	29.7
I do not like walking when facing traffic on Lagos roads, even if the sidewalks are not available	Yes	103	49.3
	No	106	50.7
I obey all signs and signals on Lagos roads in order to avoid traffic penalty	Yes	204	97.6
	No	05	2.4
I only cross on Lagos roads at any designated locations	Yes	158	75.6
	No	51	24.4
	Yes	179	95.2

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

I do stay on easily identifiable paths whenever I am on Lagos roads at night to get to where I had intended to be	No	30	4.8
I wear bright colors during the day and reflective tape at night whenever I am on Lagos roads in order to avoid being hit by a vehicle	Yes	73	34.9
	No	136	65.1
I usually watch for vehicles turning or backing up on Lagos roads to ensure safe trips.	Yes	184	88.0
	No	25	12.0
I avoid taking drugs and alcohol whenever I plan to walk on Lagos roads to journey safely on the pathways	Yes	199	95.2
	No	10	4.8
I endeavor to walk defensively whenever I am on Lagos roads to ensure safe trips and avoid reckless motorists	Yes	192	91.9
	No	17	8.1

Source: Field Survey (2024)

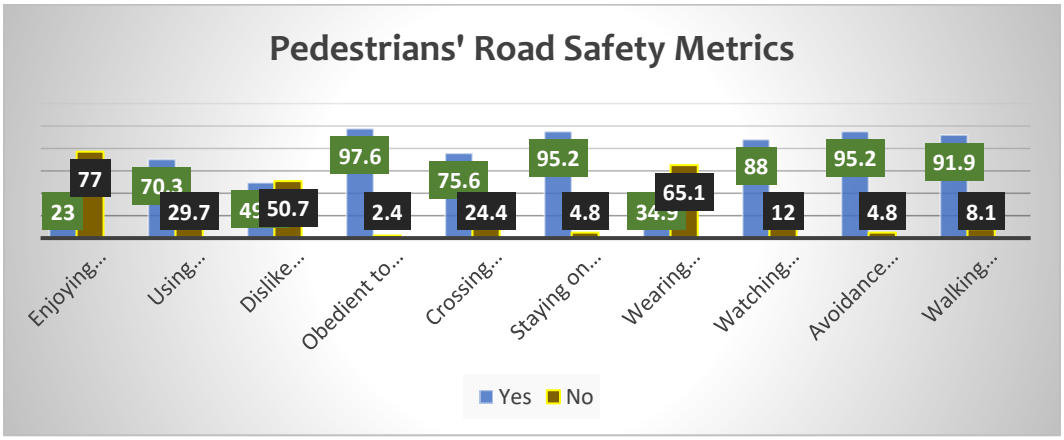
In Table 4 (Fig. 2), the uninsured motorists' behavioral dispositions towards pedestrians' road safety survey items for which data were collected from all participants were *enjoying safe walking, using the sidewalks, disliking facing traffic, being obedient to signs and signals, crossing designated locations, staying on the easily identifiable path, wearing bright colors, watching turning/back up vehicles, avoidance of drugs/alcohol, and walking defensively*. The participants responded to the various items, with 23 percent demonstrating their acceptance regarding *enjoying safe walking*, while 77 percent indicated their disagreement. While participants expressed 70.3 percent support for using sidewalks, 29.7 percent showed displeasure. As for *dislike of facing traffic*, 49.3 percent of the participants expressed their concurrence, and 50.7 percent disapproved. For *obedience to signs and signals*, 97.6 percent concurred, whilst 2.4 percent articulated their dissent. For *crossing designated locations*, while 75.6 percent of responders expressed support for this issue, 24.4 percent indicated their discontent. As for *staying on an easily identifiable path*, 95.2 percent of all participants agreed, while 4.8 percent disagreed. For *wearing bright colors*, 34.9 percent agreed, while 65.1 percent disagreed. For *watching turning/backup vehicles*, 88.0 percent agreed, while 12.0 percent disagreed. For the *avoidance of drugs/alcohol*, while 95.2 percent of responders expressed support for this issue, 4.8 percent indicated their discontent. As for *walking defensively*, 91.9 percent of the participants agreed, while 8.1 percent disagreed. The mean and standard deviation

ISSN (Print): 2959-9970 ISSN (Online): 2959-877X

Journal of Law and Social Sciences
University of Turbat

scores corroborated the results for all surveyed items. This indicates that pedestrians' evaluations of the survey items were normally distributed and centered around the mean. The descriptive statistics on pedestrians' road safety metrics indicate that all metrics exhibit similar evaluations across the participants' assessments.

Figure 2: The graphical model explains the pedestrians' road safety metrics on Lagos roads



Conclusion and Recommendations

The study's findings underscore the significant effect of uninsured motorists' risk attitudes on pedestrian road safety in metropolitan Lagos, Nigeria. Uninsured motorists display riskier driving behaviors, posing a considerable threat to pedestrians. Inadequate enforcement of insurance regulations and socio-economic factors further exacerbate the problem, contributing to the proliferation of uninsured motorists on the roads. Further confirmation of the descriptive analysis of uninsured motorists' risk attitudes and pedestrians' road safety metrics was presented in the study. The descriptive evidence showcased the divergent opinions of the pedestrians who participated in the study.

Consistent with the findings, the study advised that governmental authorities should intensify the implementation of insurance legislation to guarantee that all motorists on the road possess proper insurance coverage, achievable through increased monitoring, penalties for defiance, and leveraging technology for effective enforcement. However, launching targeted public awareness campaigns is vital to enlighten motorists about the essence of insurance and its implications for road safety. Government and other stakeholders should collaborate to invest massively in road infrastructure, such as sidewalks, pedestrian crossings, and traffic signs, to enhance pedestrian safety and mitigate the risks posed by uninsured motorists. Insurance practitioners, especially motor

insurance providers, should synergize their efforts to improve the accessibility and affordability of insurance for motorists, particularly low-income individuals, by creating flexible payment options and subsidizing insurance premiums. Lastly, local communities should engage with other stakeholders in the transport industry to ensure a culture of road safety, promote responsible driving behavior, and encourage compliance with insurance regulations.

References

Abdul-Azeez, I.F., & Ajemunigbohun, S.S. (2022). Risk control strategies and motorists' risk attitudes for road safety compliance in Lagos State, Nigeria. *FUOYE Journal of Finance and Contemporary Issues, 3*(2), 1-20.

Ajemunigbohun, S.S., Sogunro, A.B., & Oluwaleye, T.O. (2022). Claims handling process attributes: Perceptions of motor insurance policyholders in Lagos, Nigeria. *Journal of Corporate Governance, Insurance, and Risk Management, 9*(1), 136-154.

Acerra, E.M., Lantieri, C. Vignali, V., Puzzini, M., Andrea, S. (2023). Safety road: The analysis of driving behavior and the effects on the infrastructural design. *Transportation Research Procedia, 69,* 336-343.

Alonso, F., Esteban, C., Fans, M., & Useche, S.A. (2022). Difference in assessing safe and risky driving behaviors: Pedestrian versus drivers. *Sage Open, 12*(2), 1-12.

Anna, S. (2018). Functions of the bonus-malus system in motor vehicle owners or third party liability insurance *for economic and Environmental Studies, 18*(2), 925 – 942.

Avraham, R., & Porat, A. (2023). The dark side of insurance. *Review of Law and Economics, 19*(1), 13-45.

Asenahabi, B.M. (2019). Basics of research design: A guide to selecting appropriate research design. *International Journal of Contemporary Applied Research, 6*(5), 76-89.

Bantjes, J., du Plessis, S., Jansen, A., & Slabbert, P. (2024). Pedestrian safety: Motorists' attitudes to the law and driving practices in South Africa. *South African Journal of Science, 120*(1/2), 1-10.

Blincoe, L., Miller, T. Wang, J.S., Swedler, D., Coughlin, T., Lawrence, B., Guo, F., Klauer, S., & Dingus, T. (2023). The economic and social impact of motor vehicle crashes, 2019. *Report No. DOT HS 813403.* National Highway Traffic Safety Administration.

Brobeck, S., Best, M., & Feltner, T. (2013). *Uninsured drivers: A societal dilemma in need of a solution.* USA: Consumer Federation of America.

Brook, C., & Williams, L. (2023). People are people: A comparative analysis of risk attitudes across Europe. *International Journal of Finance and Economics*, 1–22.

Coetzer, B.A. (2022). *Usage-based insurance: Nudging towards responsible driving. M.Com Transport Economics*, Faculty of Economics and Management Sciences, Stellenbosch University, April.

Creswell, J.W. Creswell, D.J. (2018). *Research design: Qualitative, quantitative, and mixed methods approach. 5th ed.* New Delhi: Sage Publications India Pvt Limited.

De Donder, P., Leroux, M., & Salanie, F. (2022). *Advantageous selection without moral hazard, with an application to lifecare annuities.* Retrieved from https://iriaf.univ-poitier,fr/wp-content/uploads/sites/69/2022/06/Vendredi_S3_1_01_De-Donder_Leroux_Salanie.pdf

Dinh, D.D., Vu, N.H., Mcllroy, R.C., Plant, K.A., & Stanton, N.A. (2020). Effect of attitudes towards traffic safety and risk perceptions on pedestrian behaviors in Vietnam. *International Association of Traffic and Safety Sciences, 44*(3), 238–247.

European Commission (2023). *Facts and figures – pedestrian – 2023.* Retrieved from https://road-safety.transport.ec.europa.EU/document/download/58883bdc-4312-4665-a424-d5796658e14f_en?filename=ff_pedestrians_20230213.pdf

Fallon, M. (2016). *Writing quantitative research.* Rotterdam: Sense Publishers.

Fishbein, M., & Azjen, I. (1975*). Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

Frimpong, L.K. (2022). Enhancing pedestrian safety through adequate pedestrian-friendly infrastructure in African cities. *Spotlight On: Urban Health.* Retrieved from: https://www.urbanet.info/enhancing-pedestrian-safety-through-effective-pedestrian-friendly-infrastructure-in-African-cities/

Glanz, B.I., Greeke, E., LaRussa, A., Stuart, F., Rintell, D.J., Chitmis, T., & Healy, B. C. (2016). Risk attitudes and risk perceptions in individuals with multiple sclerosis. *Multiple Sclerosis Journal-Experimental, Translational and Clinical,2,* 1–11.

Hashemiparast, M., Nedjat, S., Negarandeh, R., Montazeri, A., Garmaroudi, G., & Sadeghi, R. (2016). Pedestrian road crossing behavior: Development and Psychometric evaluation. *Traffic Injury Prevention, 18*(3), 281-285.

Hong, J., Guo, P., Chen, M., & Li, Y. (2022). The adoption of sustainable supply chain management and the role of organizational culture: A Chinese perspective. *International Journal of Logistic Research and Applications, 25*(1),52–76.

Hsu, Y., Chou, P., & Shiu, Y. (2018). Examining the relationship between vehicle insurance purchase and the frequency of accidents. *Asia Pacific Management Review, 21*,231-238.

Insurance Europe (2029). *Europe motor insurance markets.* Brussels: Insurance Europe.

Insurance Research Council (2023). Uninsured motorists, 2017 – 2022. Available at: https://insurance-research.org/research-publication/uninsured-motorists-2

Iwunze, R. (May, 2022). *77 percent of vehicles on Nigeria's roads are uninsured – NIA*. Vanguard Newspaper. Available at: https://www.vanguardngr.com/2022/05/77-of-vehicles-on- Nigeria-roads-uninsured-nai/

Kitosi, P. (2023). Measures for pedestrian safety management in major transport corridors: The case of Kinondoni in Dar es Salaam. *Open Access Library Journal, 10,1*-13.

Kosiorowski, M. (2022). *Entering Poland by car and the insurance obligation: A guide for Ukrainian citizens.* March 2. Retrieved from https://codozasady.pl/upload/2022/03/entering-poland-by-car-and-the-insurance- obligation.pdf.

Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, art-based, and community-based participatory research approaches.* New York: The Guilford Press.

Li, X., Dai, J., Zhu, X., Li, J., He, J., Huang, Y., Liu, X., & Shen, Q. (2023). Mechanisms of attitude, subjective norms, and perceived behavioral control influence the green development behavior of construction enterprises. *Humanities and Social Sciences Communications,10*(266), 1–13.

Magri, A., Farrugia, A., Valletta, F., & Grima, S. (2019). An analysis of the risk factors determining motor insurance premium in a Small Island State: The case of Malta. *International Journal of Finance, Insurance, and Risk Management, 9*(1/2), 63-85.

Malvern, P.A. (2023). *IRC estimates that 14 percent of U.S. drivers will be uninsured in 2022*—United States of America: Institute of Risk Management.

Marson, J. & Ferris, K. (2023). When is an insured vehicle an uninsured vehicle? *The Modern Law Review, 86*(2), 551-563.

Mesfin, T.R., & Denbi, T.J. (2022). Assessment of pedestrian infrastructures of road transport: A case study of Jimma Town. *Journal of Sustainable Development of Transport and Logistics 7*(2),41-52.

Ministry of Transport (2021). *Social cost of road crashes and injuries – June 2020 update*. Wellington: Ministry of Transport.

Narvaez, Y.V., Sierra, V.P., Cardenas, P., Ramos, L.R., Gonzalez, B.Z., Martinez, J.I., & Aranda, D.M. (2019). Road risk behaviors: Pedestrian experiences. *Traffic Injury Prevention, 20*(3), 3030-307.

National Highway Traffic Safety Administration (2021). *Traffic safety facts 2021 data.* Washington: U.S. Department of Transportation.

Nkeng, G.E., Wounba, J.F., Fondzenyuy, S.K., Shingo, U.D., & Luna, P. (2020). The role of insurance companies on road traffic safety in Cameroon. *International Journal of Engineering and Innovation Technology, 10*(5), 1–13.

Nkurunziza, D., Tafahimi., R., & Irumva, A.F. (2023). Pedestrian safety: Drivers stopping behaviors at crosswalks. *Sustainability, 15*(16),1-17.

Osho, S.G., & Adishi, O. (2019). The effects of macroeconomic variables on Lagos State economy: As Lagos's economy goes, so does Nigeria'sdoes Nigeria's. *Journal of Economic and Development Studies, 7*(1), 1–9.

Rowangould, G., & Corning-Padilla, A. (2019). Evaluating how the quality of pedestrian infrastructure affects the choice to walk. *Project No. 18PPUNM02,* Transportation Consortium of South-Central States, Lead University: University of New Mexico.

Segui-Gomez, M., Addo-Ashong, T., Raffo, V., & Venter, P.C. (2021). *Road safety data in Africa: A proposed minimum set of road safety indicators for data collection, analysis, and reporting.* Washington: The International Bank for Reconstruction and Development.

Steinhauser, R. & Lancsar, E. (2022). Social cost of road crashes: Report for the Bureau of Infrastructure and Transport Research Economics. *No. 00120c,* The Australian National University.

Tanglai, W., Chen, C., Rattanapan, C., & Laosee, O. (2022). The effect of personality and attitude on risky driving behavior among public van drivers: Hierarchical modeling. *Safety and Health at Work, 13,*187-199.

Uhegbu, U.N., Tight, M.R. (2021). Road user attitudes and their reported behavior in Abuja, Nigeria. *Sustainability, 13,* 1-16.

Vitalis, N., Runyoro, A.K., Selemani, M. (2022). Assessing factors for the occurrence of road accidents in Tanzania using panel data analysis: Road safety perspective. *Journal of Transportation Technologies, 12,* 123-136.

Yarmukhamedov, S. (2020). How risky are uninsured drivers? *Journal of Transportation Safety & Security, 12*(2), 263 – 274.

World Health Organisation (December 2023). *Road traffic injuries.* Retrieved from: https://www.who.int/news-room/fact-sheet/details/road-traffic-injuries.

Zainal, S.K., Borhan, M.N., Yazid, M.R., & Ibrahim, A.M. (2023). Applying the theory of planned behavior in pedestrian safety: A literature approach. *Journal of Engineering, 35*(3),539-549.

Zeweld, W., Huylenbroeck, G.V., Tesfay, G., & Speelman, S. (2017). Farmers' behavioral intentions towards sustainable agricultural practices. *Journal of Environmental Management, 187,* 71-81.