

Research Article

Reimagining Road Safety: Leveraging Technology to Combat Road Fatalities in Ghana

George Asekere , Vida Ampiah , Emmanuel Letsyo* ,
Ishmael Kwabla Hlovor

Department of Political Science Education, University of Education, Winneba, Ghana

Abstract

The paper investigates factors that could explain why improved police visibility, surface improvements on roads, and enhanced public education on road safety have failed to reduce accident fatalities in Ghana. This paper delves into the underlying factors contributing to the inefficacy of traditional safety measures and proposes a paradigm shift towards technology-driven solutions. Through a thorough analysis of the efficacy of existing strategies and insights gleaned from empirical research and data, this study offers novel recommendations to mitigate the alarming trend of road accidents in Ghana. The implications of this paper are discussed in an effort to inform policymakers and provide insight into how this issue can be addressed more efficiently. Primary data from field observation of 400 vehicles, semi-structured interviews with 25 police officers and drivers on duty, and secondary data from publications, including journal articles and credible online sources, constituted the basis for this study. The study findings reveal a systematic failure where road safety is compromised for personal gain, with both drivers and law enforcement officials implicated in perpetuating hazardous practices. Specifically, the study identifies financial incentives driving police negligence and drivers' disregard for traffic regulations fuelled by a culture of bribery. In light of these findings, we advocate for adopting technology-driven surveillance systems, such as CCTV cameras, as a cornerstone of an effective road safety strategy. Technological interventions offer a promising pathway to curb road traffic fatalities in Ghana by eliminating human discretion and mitigating corruption opportunities.

Keywords

Ghana, Police Visibility, Road Safety, Road Fatalities, Leveraging Technology, Reimagining

1. Introduction

The World Health Organization (WHO) accident analysis shows that approximately 1.35 million people die as a result of road traffic crashes yearly. Further, between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability as a result of their injury [27]. According to the WHO, over half of all road traffic fatalities and injuries involve vulnerable road users, such as passengers, pedestrians,

and cyclists (1). This notwithstanding, the chances of being killed or injured in a road accident are largely dependent on where one lives in the world [26]. The statistics show that the African continent suffers the worst rate of road traffic fatalities globally, with a fatality rate of 26.6 deaths per 100, 000 people, which is about three times that of Europe [27].

In Ghana, the National Road Safety Authority's report for

*Corresponding author: manuelletsyo@gmail.com (Emmanuel Letsyo)

Received: 13 November 2024; **Accepted:** 5 December 2024; **Published:** 11 February 2025



Copyright: © The Author(s), 2025. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

2022 noted that a total of 13,675 road traffic crashes were reported from January to November 2022. These crashes involved 23,529 vehicles of all categories (Private, Commercial, Motorbikes/cycles) and 16,410 casualties (2,171 fatalities/deaths and 14,239 injuries). Road accidents were thus the leading cause of death in 2022 in Ghana, a situation that is not different from the previous year. The fatality trend has since 2008 incrementally ranged between 12-15 per cent [11]. According to the Motor Traffic and Transport Department (MTTD) of the Ghana Police Service, Ghana recorded 10,294 road crashes, claiming 2,284 lives and injuring 10,721 in 2019. This was a significant increase from 2018 when 2,020 persons died from road crashes on Ghana's roads. In 2021, a total of 28,152 vehicles were involved in road crashes compared to 5,875 in 2020. The road crashes in 2021 led to the death of 2,924 persons compared to 2,589 in 2020, representing an increase of 12.94%. Also, the Motor Traffic and Transport Department of the Ghana Police Service noted that 15,680 people suffered various degrees of injury in 2021, compared to 15,517 injuries in 2020, representing an increase of 1.05%. Trend analysis shows that road traffic deaths in 2021 and 2022 had gone past the average projected figure of 2,000, respectively. This informed the decision of the Ghana Medical Association (GMA) to focus on road traffic fatalities in its 2021 annual conference, where the association described the phenomenon as extremely worrying. For the GMA, Ghana has recorded more deaths on the road than any disease - be it endemic or pandemic, including COVID-19.

It is important to study factors that could explain why improved police visibility, surface improvement of roads, and enhanced public education on road accidents would still not reduce accident fatalities, as it can help provide insight into how and why those methods may be ineffective in reducing fatal accidents. This can help guide policymakers in developing better strategies to reduce fatal car accidents in Ghana. It is against this backdrop that the study explores the factors that could explain the continued road traffic fatalities, despite improved police visibility, surface improvement of roads, and enhanced public education on road accidents, from the perspectives of traffic police officers and ordinary drivers. We contend that an understanding of the "seemingly mundane decisions made daily by millions of human drivers" and enforcers of the road traffic law is pivotal in designing appropriate responses to fatalities on the road [31]. Road fatalities related to risk-related behaviour, such as aggressive and risky driving and alcohol and drug use, are blamed on young and inexperienced drivers. In contrast, those related to psychoactive medications, heart-related conditions, as well as visual and cognitive impairments are blamed on older drivers [18].

Also, while an improvement in road markings, police checkpoints, speed humps, etcetera, have contributed to a reduction in road accidents in some advanced countries, including the UK, Switzerland, and China [18], a series of policies adopted by Ghana "tend to target the symptoms rather than the complex set of deep causes of the menace" [5]. We

argue that the selective application of road-traffic laws, interference in the work of the police by influential people, and an underestimation of the extent to which monetary consideration over human safety by traffic police officers and ordinary drivers is a reality in Ghana, are to blame for the continued rise in fatal car accidents in the country. Ghana has, over the years, employed the traditional traffic enforcement system involving police visibility as a way of enforcing traffic rules and regulations on the roadways [22]. We build on the road traffic fatalities literature by exploring the question: Why do road fatalities continue to be on the high despite policy response from the state in the form of improvements on the roads, police visibility, and safety education?

Studies on road traffic-related fatalities in Ghana have explored various aspects, but limited attention has been paid to what transpires between the driver and the police in the line of duty. For instance, fatigue, driving for long hours, driver workload, decreased performance emanating from the physical and mental stress of drivers, and overconfidence in driving have received much scholarly attention [1, 9, 10, 15]. The pattern and analysis of road traffic injuries in Ghana [2, 3], the effect of road safety education messages on carnage on the roads [4], the various risk factors among pedestrians [24], and the extent to which commercial motorcycle riders comply with road safety regulations have been investigated [13]. Other studies have linked road crashes to partisan politics [12], managerial inefficiencies, lack of collaboration among the major stakeholders in the road transport sector, corruption, and inadequate education [6, 17, 24]. Notwithstanding these investigations, few studies have focused on drivers' opinions and police expert views on the latent factors that may potentially contribute to the carnage on the roads in Ghana. The burden of this study is, therefore, to explore why road fatalities continue to be on the high despite policy response from the state in the form of improvements on the roads, police visibility and safety education, from the two front-line actors on the roads in Ghana-drivers and police officers.

This study was underpinned by the prospect theory to situate the research findings in a more meaningful way. This theory emerged in 1979 as a psychological theory of choice. The theory provides an understanding of how people's decisions are influenced by their attitudes toward risk, uncertainty, loss, and gain. It holds that individuals will evaluate their losses more in an asymmetric fashion. The prospect theory describes the actual conduct of individuals as being influenced by the possibilities of loss rather than the prospect of an equivalent gain. Thus, this theory helps explain the rationale behind decisions taken by people and how people use their mental shortcuts (heuristics) when making decisions [25]. The theory suggests that people are more concerned with avoiding losses than achieving gains. The estimation of gains and losses is made relative to a reference point, which is their present situation. Thus, decisions are either made to improve on the current situation or avoid loss of current gains. Generally, this theory posits that people will be more risk-averse

when it comes to avoiding losses than they will be when it comes to making gains.

The theory helps the study to understand how both police officers and drivers make decisions during their daily interactions. The study focuses on how drivers try to avoid losses or maximise gains in encounters with police officers on the road and how this behaviour undermines traffic law enforcement, leading to road traffic accidents. The theory also helps understand how police officers also try to avoid losses and make gains during the process of traffic regulation enforcement and these tendencies have contributed to accidents on the road. For the police, taking money from the drivers is gained while arresting the driver and, in the end, the driver is freed by the intervention of an influential person in society, which is a lose.

2. Materials and Methods

2.1. Study Design and Sampling Procedure

The paper relied on descriptive research design to interview traffic police officers and drivers along the Accra, Cape Coast, and Takoradi Highway, which links the Greater Accra, Central, and Western regions. The descriptive research design is appropriate for studies aimed at systematically obtaining information to describe a situation or phenomenon [8].

We adopted the convenient sampling strategy to approach drivers and police officers at various police checkpoints along the Accra-Cape Coast-Takoradi Highway; those who were willing and ready for face-to-face interviews were interviewed. We used the convenient sampling strategy because apart from it being less costly and time-consuming, it is the best option for participants in the line of duty.

2.2. Study Setting

The Accra - Cape Coast - Takoradi highway is a major route in the Coastal belt of Ghana, linking the national capital, Accra, to the Colonial Capital, Cape Coast. The same highway extends to Takoradi and Ghana's major cocoa-producing and trading neighbour, Cote d'Ivoire. In view of this, the highway attracts large numbers of both domestic and international vehicles on a daily basis. As a result of this, there is usually a heavy police presence on the road. The highway is known in Ghana as one of the major accident-prone roads, which poses greater death and injury threats to drivers, passengers, and commuters [6, 21]. Therefore, it did not come as a surprise when Ghana decided to construct its Trauma and Specialist Hospital in Winneba, a major town along the highway. [20] described the state of the road starting from Kasoa as a "single two-lane carriageway (31.1 km in length; 7.3 m wide with 2.5 m shoulders on both sides) section of the Accra-Cape Coast trunk road [a national route 1 (N1) road], which also forms part of the Trans-West African Highway

network. It has a design speed of 80 (at rolling terrain) to 100 kph (at flat terrain), and a 50 kph speed limit at populated areas" (Sam et al., 2019, p. 93). Many in Ghana described this highway as the deadliest in Africa, but the National Road Safety Authority denies this and instead states that the 'Accra-Cape Coast section of the route in the Central Region (Kasoa-Cape Coast) accounts for about 60 per cent of all crashes in the Central Region.

2.3. Data Collection

The data collection for the study was conducted over eight months, starting from August 2022 to May 2024, at various sites (between Broadcasting near the Kasoa tollbooth in the Greater Accra region and Cape Coast in the Central region. It included field observation which involved note-taking and face-to-face. In total, we conducted semi-structured interviews with 25 participants comprising 15 drivers and 10 police officers on the road. It is established that data saturation can be attained with twelve interviews [8, 30]. In addition, we engaged in field observations involving 400 vehicles at four sites - Broadcasting-Kasoa, Buduburam-Dominase, Winneba-Apam junction, and Mankessim - Cape Coast stretches - all along the Accra - Cape Coast - Takoradi highway in the Greater Accra and Central regions. The 15 drivers were all regular users of the highway studied, while the 10 police officers were deployed from the Motor Traffic and Transport Department (MTTD) of the Ghana Police Service. The interviews and field observation helped form the basis for comprehending the problem from the perspective of the driver and the police on the road.

The researchers approached the police on duty and explained the study's objectives to them before commencing the interview with those who were willing. Although all ten police officers initially directed the researchers to their superior officers in their respective police stations, 7 granted the interviews on the road, while 3 granted the interviews later at a venue chosen by the police officers. All of the police officers insisted on very strict anonymity, which the researchers willingly assured. Similarly, the drivers were approached at the checkpoints, and after explaining the objectives to them, those willing granted the interviews. Out of the 15 drivers who agreed to take part in the interviews, 8 of them asked the researchers to meet them at various locations on later dates on the grounds that they did not want to waste the time of passengers on the road, while 7 drivers granted the interviews at the check-points (all had been arrested at the point for various offences). The interview sessions on the road with both the police officers and the drivers lasted between 3-10 minutes, while those at 'off the scenes' (chosen venues by participants) lasted between 30-45 minutes.

At the various observation sites, the researchers stood unobtrusively along the highway (about 2-3 m away) and observed the phenomenon of interest to enable accurate recording of the interested factors. The observation times were

8–10 AM, 2–5 PM, and 7–8 PM to coincide with the busy morning rush hours, the relaxed (off-peak period) afternoon when the roads were less busy, and the busy evenings. These periods were chosen based on pre-test observations on August 1, 2022. We noticed during the pre-test stage that while the police did not waste much time with drivers in the mornings, the opposite was the case in the afternoons and nights. Also, the evening interaction between the police and the drivers was more ‘friendly’ than in the mornings and afternoons. Recklessness on the part of drivers, such as wrongful overtaking on portions such as sharp curves, was done irrespective of the time. The use of very high headlights and poor or no headlights were noted in the evenings only.

A semi-structured interview guide, a structured observation checklist, and a notepad were the major instruments used for data gathering in the field. The observation checklist contained variables such as the sex of the driver, vehicle (private or commercial), visible vehicle defect, and kind of recklessness. The study observed all ethical considerations. Participation in the study was voluntary, and participants gave their written or oral consent before being interviewed. We also obtained an introductory letter from the University of Education, Winneba, to the Police before commencing the data collection. Also, we anonymized all participants; hence, the real names of the participants were not used.

2.4. Data Analysis

Based on the key questions that guide the study and the observations, the study adopted reflexive Thematic Analysis (TA) in the analytic process. The purpose here was to fathom the complexities of the challenge and not a generalisation. The choice of themes was deductively based. In line with the guidelines espoused by [7], data analysis was done in systematic order: The systematic coding ensured that the defining concepts were extracted, categorised, and defined, and the themes relating to the perspective of the driver and police officers on fatalities on the road. The researchers got familiarised with the data corpus as transcribed after a series of reading and noting the initial salient ideas. We then teased out features of the data that were relevant to the objective of the study. This was the basis of the codes we generated and used in the analysis. It must be noted that the researchers discussed the themes to ensure that they reflected the coded extracts. The final stage was to produce a report by relating the data extracted to the research objectives [7]. The topic guide for the interviews focused broadly on ‘how and why fatalities are recorded despite police visibility, improved roads and safety education.

Aside from the primary data, secondary data were gathered and analysed from relevant published and unpublished official documents from credible sources such as journal articles, chapters in books, books, reports from the police service, the Road Safety Authority and media reports. We gleaned from these materials by using “an intellectual process” of gener-

ating insights from the secondary data and applying them to supplement the primary data in relation to our objectives [14].

3. Findings and Discussions

Analysis and discussions of the findings in this section were based on themes relating to the researchers’ observation of the actions of the drivers and police on the road over the three months that data collection took place.

3.1. Demographic Information

A total of 400 vehicles were observed in the study. Additionally, 25 people, comprising 15 commercial drivers and 10 police officers, were interviewed. Out of the number, only 5 (made up of only police officers) were females, constituting 20%. In Ghana, it is public knowledge that more men than women drive on the highways, hence it was not surprising that all the drivers were males. The data was collected on the main Accra-Cape Coast-Takoradi Highway, spanning three regions-Greater Accra, Central, and Western. This road is the longest and busiest along the Coast of Ghana and connects two of Ghana’s main Harbours - Tema Harbour and Takoradi Harbour. Besides, the road links Ghana to Cote d’Ivoire, the two largest cocoa-producing countries in the world. While all the police officers had formal education (minimum Senior High School Certificate and maximum Master’s Degree), 5 of the commercial drivers had no formal education, while 10 had between Junior and Senior High School education.

The majority of the vehicles (57.5%) were for commercial purposes, conveying human beings, goods, and services, while 17.5% were private vehicles.

3.2. Dealing with Aggressive and Risky Driving: Arrest Versus Education

One major reason for police visibility on the road is to ensure orderliness [19]. This could be achieved by strictly enforcing the law or through education and sensitisation. The study found that drivers who were aware of a police checkpoint reduced their speed levels when approaching the police checkpoint. It was observed that the police stopped/arrested more commercial vehicles than private vehicles on the road for aggressive driving. The explanation was that many of the private vehicles had good documents (mainly driver’s licenses, insurance and road-worthy certificates) despite the risky and aggressive driving by some of such drivers. However, the researchers noted that many of the private vehicles were not stopped because the police suspected that they were ‘big men’ or ‘big women’, so arresting such is tantamount to fetching water with hand-woven baskets. This amounts to the selective application of the road traffic laws. A police officer noted:

“I know that most of the people who use these V8 are MPs, ministers, or top political and traditional figures. We you arrest them; it may even lead to your transfer. We have been

in police work for long enough to know of some colleague officers who got transferred for attempting to arrest big men' (R.2).

While various reasons accounted for arrest on the road, the majority (45%) of drivers were stopped/arrested for using expired documents such as driver's licenses/insurance and road-worthy certificates. About 30% (120) of the vehicles were stopped/arrested for excessive speeding, while 12.5% were stopped because the police just wanted to be sure that everything was right with drivers and passengers. For such, researchers observed that the police only asked where they were from and where they were headed. The police then advised them to obey road signs and wished them a safe journey. A police officer on duty at one of the checkpoints explained that advising the drivers and educating them on the consequences of their actions on the road was more effective than arresting and processing them to court. In his view, the problem was attitudinal and needed behavioural change. This suggests some good cooperation between the police and drivers with the ultimate aim of behavioural change. The findings thus corroborate earlier research findings that when the police demonstrate fairness, the likelihood of maximum cooperation from drivers would be enhanced [23]. One of the drivers interviewed said they preferred the advice and education.

"Some of the road signs, we don't understand, and some of them are not clear, especially the road markings. Sometimes too, your light may spoil while you are on the road. It does not mean that you set off with defective lights, so education is important because we also have families and don't want to die on the road" (R.1).

The above notwithstanding, there is empirical evidence that many commercial drivers who ply some roads in Ghana have defective vehicles, expired road-worthy and insurance certificates, as well as a driver's license [20, 24]. More than half of the vehicles that were stopped and found to have expired licenses were speeding, overloading, or had expired papers were either cautioned, delayed between thirty minutes to one hour of pleading or were given police extract to be processed for court. For such, the police took their driver's license from them. One police officer affirmed this:

"After arresting the culprits, we take their license and issue them chits. After which they are given a processed form to fill. We then write their statement and process them before the court. Sometimes, we summon the culprits to court. Even yesterday, we had five (5) people who were processed and will soon appear before the court. Chief inspectors do have the mandate to keep the license of drivers. The owner of the license will only be given back their license after the court proceedings" (R.2).

It was also observed that some drivers simply shook the hands of the police, exchanged 'something', and left. Interestingly, some gave their licenses to the police, and after the police opened the license wallet, they seemed to have picked the 'something' (money) from it and handed it back to the driver or his mate. While the drivers said they put money

inside such license wallets, the police denied it, despite the fact that our researchers saw many instances where police took money from drivers. A police officer noted:

"The police, we work with them every day, so we understand ourselves. Sometimes, as a driver, you know the police just want money, and if you don't 'do something', they will waste your time on the road, so when I face such a situation, I put something small in the license and give it to the officer. Such is better than wasting our time" (R.3).

Other drivers advanced similar arguments, although some of the police consistently denied such claims, citing a lack of evidence on the part of the drivers. There were instances where defaulting drivers were seen begging the police to take money to free them after breaching road traffic rules. This was evident when one trailer driver with defective lighting was spotted by the researchers begging the police officer on duty to take money, but the police refused. There were other instances that either the police officer asked offending drivers to pay money or threatened to process them for court.

At one of the night visits at a checkpoint near the Winneba roundabout from the Accra side of the road, three tricycle (popularly called aboboya) drivers that plied the road had been arrested for not having the required driver's license. One of the police officers (below the rank of an Inspector) told them to either pay 'something', or he will process them for court. Another interesting observation was that some police officers on night duty literally begged private vehicle drivers for money. They researchers heard the officers using words like, 'Boss, your boys are hungry' or boss, it is the weekend, anything for the boys? Etcetera. Our evidence lends support to an earlier finding that suggests that some police personnel intimidate drivers and extract and demand money from them, sometimes without basis [11, 16].

3.3. We Understand Ourselves: One Game, Different Tactics

Indiscipline among all categories of drivers is common in Ghana. The challenge of low wages, stiff competition, the desire to make daily sales or risk losing the vehicles to other drivers, and bribe-demanding police officers are some of the reasons advanced for indiscipline among commercial drivers in Ghana [5].

The study found that indiscipline on the road is on the ascendency, and both drivers and traffic police officers are aware. The presence of the police on the road was not enough to prevent recklessness on the part of the drivers, largely because the drivers have a certain notion that when arrested, they could pay their way through. Besides, the drivers appear to 'speak one voice' in an effort to outsmart the police, so when one sees the police on the road, he notifies others he meets to reduce excessive speeding and aggressive driving such as wrongful overtaking:

"We do this work together, so we help ourselves. When the police come to the road and arrest one driver, other drivers

will hint to oncoming vehicles of the presence of the police so that when they are closer to the place, they will slow down to avoid being arrested. If we don't do that, how can we make our sales? When a policeman stops you, you have to pay something, or they will delay you such that you will lose more money than the 10 or 5 Ghana cedis that you would have paid, so yes, we know ourselves" (R.4).

Even though the police are aware of this behaviour of the drivers, there is very little they can do, given the inadequate number of police officers in the country, to make their visibility impactful on the roads. For instance, on three occasions, the researchers observed that no police personnel were on the Winneba - Apam junction stretch of the highway (about 20 km) between 12 noon and 2 PM. Besides, the state has, over the years, not been able to provide the police with appropriate logistics to counter the 'smart drivers', so the police literally make use of what they have.

"The drivers have their own rules, my brother. Arrest them here, and they will do the very thing that caused the arrest as soon as they move the vehicle. We are doing our best as officers on the road, but it boils down to attitudinal change on the part of the drivers. Look, if we arrest a driver for speeding and the next moment he repeats the mistake, what can we do? Sometimes, we chase them but see our patrol car. Can it chase a V8 amid the risk involved? (R.5).

While one expects that passengers will check on indiscipline drivers, they are largely helpless. In one of the observation rounds, we joined a 207 Benz bus from Winneba to Mankessim (The vehicle was from Accra to Takoradi), and when the driver was doing wrongful overtaking, despite the road marks indicating that one cannot do overtaking, researcher George drew the attention of the driver. Surprisingly, other passengers jump to the defense of the driver. While the driver's response was *'enye wo na wobekyereme driving'*; meaning you are not the one to teach me how to drive, a female passenger interpreted it to mean interference. In her words, *please have patience and think positively. It is the Lord who protects us on the road. Get it right, my brother; without God, the driver cannot be careful enough. You just joined the vehicle, and you know more than all of us, or do you think those of us inside don't love our lives? If you know how to drive, why didn't you drive yourself? We came from Accra, and our God will certainly take us to Takoradi safely.*

The study also found that the relationship between the police officers and the drivers on the highway was neither hostile nor cordial. While this is good for effective detection and possible mitigation of challenges that could lead to car accidents [29], this was not really the case. Much depended on the extent to which the drivers and police officers did find common grounds after the former breached road traffic rules and regulations; they 'exchanged something'; a handshake from the police which results in taking money from a driver or his mate. There were instances where passengers advised and pleaded with drivers who had offended road traffic regulations to give money to the police. Some passengers have the per-

ception that the prime reason why the police are strict on the roads is because of the money they will get from the drivers. It was surprising to observe that, some passengers rather got angry with the drivers for the delay in giving money to the police officer on duty.

Passengers do not only jump to the defence of reckless drivers, but sometimes, they arrogantly interfere when the police arrest an offending driver. We observed on June 20 2024, near Winneba, when a gentleman inside a commercial vehicle called a senior police officer to talk to the police on duty to allow the vehicle to go. The researchers had further interaction with the policeman that evening:

"Well, you observed for yourself. That is why when a driver or passenger says I should talk to someone on the phone, I will not. In this case, I chose to talk, and it was a superior police officer who happened to own the vehicle. He asked about the offense and directed that I warn him and let him go. Well, I had to oblige. Sometimes, the interference comes from all angles. See the trailer there, I arrested (pointing to a parked long-distance vehicle) it because it had only one light, and the driver said the car was for a big man. I have arrested it, so the big man may have to handle this case at a higher level. So, we do our part; we arrest many of them, and they go to court, but the fines are not deterrent enough. That is beyond the police" (R.1).

3.4. Order from Above

The study found that interferences from both the police service and other institutions play a role in hindering the effectiveness of the police on the road. While the duty police may be ready to enforce the law, they are sometimes disabled due to such interferences:

"Sometimes, you arrest a driver, and a senior officer calls you and pleads that you forgive him or her. The senior officer may not even be from your command, but, as you know, police work requires that we obey the command. There are times, too, that your colleagues will call to say the vehicle belongs to a police officer, so allow. These are worrying, but that is the reality" (R.7).

The above sentiments either embolden recalcitrant drivers to perpetuate recklessness on the road or turn off the police to be firm in enforcing the law. The duty officers get convinced that they are not applying the law equitably because they arrest only those without links to big men in society. This amounts to interruption and distraction in the work of the police officers:

"If I arrest you and later my superior calls me and directs that I forgive you, it makes you, the driver feel that I am a wicked person. Human as we are, sometimes we feel like also forgiving those who do not have big men to plead for them. That is what people who do not understand police work accuse us of taking money. It is not about money; it is about our conscience" (R.8).

It emerged that the 'order from above' sometimes comes

from people you least expect to do that. Some politicians, chiefs, pastors, Imams, and senior journalists, among others, were said to be among those who interfere with the work of the police.

"If I am a police officer on duty and the chief calls to say the vehicle, I have arrested is for him, you know what that means? How about the pastor calling to ask for forgiveness? As for the politicians, they are the major problem. They simply call to give orders. You know, as police, we are under the various Metropolitan/Municipal and District Security Councils, and these are chaired by the Chief Executive Officers who are politicians" (R.8).

The story was not all gloomy. We found that some police officers insist on strict enforcement of the law and do not yield to pressure from above. Such arrest offenders regardless of the powers behind them:

"I am here to enforce the law. My commander has never called me to prevent me from arresting or pleaded that I forgive drivers who break the law. I must admit that other people call, but usually, it is the driver who will call and tell you someone wants to talk to you. I don't entertain such. I tell such people that if there is anything, it should be channelled through my commander" (R.14).

The study further noted that some of the drivers who get arrested on the road are freed when they get to the police station. Some of the police officers on the road described such as unfortunate but added that there is little they can do beyond the arrest. Some drivers admitted that they were freed at the police station, although they all expressed concern about the delays. Many others who were arrested also faced the full rigours of the law; they were prosecuted and, most of the time, fined.

3.5. The Road Lords

Road traffic fatalities in Ghana are among the top ten most traumatic experiences of families of victims and affect the psychosocial well-being and quality of life of those who survive [28]. There is a consensus that the major causes of road traffic frailties include the poor nature of roads, carelessness of road users, especially drivers, stress, unskilled drivers, inadequate road signs, speeding, lack of education, and gross indiscipline. The study found that despite the presence of the police on the road, some drivers are 'unstoppable'. Such drivers have been described in this paper as 'road lords'. The researchers observed a very disturbing trend among the 'road lords' on the road throughout the study period. These road users believe they are above the law.

Interestingly, the police appear very helpless about this category of drivers. Drivers who use V8 were the topmost culprits. There were varied explanations given as to why police officers on the road do not stop and inspect these cars. One police officer opined that top government officials use the V8 vehicles for official duties. To corroborate this point, he cited MPs as an example of top officials who ply the road with V8 vehicles when attending officials' duty. He further explained that the Ghana Coat of Arms has been embossed on

such vehicles to signal that they belong to top government officials. This suggests an admission by the police that some people are above the law.

On the contrary, our team observed several instances where V8 vehicles without the Ghana Coat of Arms drove above the legal speed limit of 50 km/h upon reaching towns. Apart from excessive speeding, such road users do wrongful overtaking with impunity. The road traffic regulations and the speed gun/reader used by the police were basically meant for all other vehicles except V8 vehicles. Another police officer said that they do not also stop and inspect the said vehicles because the users of these vehicles have a strong connection with top politicians. The police officers, per their admissions, agreed that the V8 vehicles are above the law regarding road traffic user regulations. At the Winneba - Dominase police checkpoint, the researchers observed a nasty exchange between one of such V8 drivers when the police on duty attempted to stop the V8. Interestingly, the driver sped off with disdain and impunity. When asked whether such are above the law, the police officer on duty noted:

"That is how they treat us. They don't respect us. In fact, they won't even slow down when approaching a checkpoint. They use serine anyhow, but, my brother, you know the politics involved. Such may be MPs, ministers, governing party executives, or other influential people connected to power. Well, we are in it doing our part. But there are a few of them who will stop when a police officer stops them" (R.23).

Beyond these V8 vehicles, the researchers observed that a specific brand of Ford buses that ply the Accra-Cape Coast-Takoradi Road exhibit a very high level of indiscipline. The drive aggressively, do reckless over-taking at the least opportunity, excessive speeding with disdain, and use very high lights in the night. Figure 1 shows one of such vehicles overtaking an articulated truck at a sharp curve despite the road signs indicating no overtaking at that intersection. Behind it is a V8 also overtaking, a move that got a pregnant woman by the road very worried because there was a vehicle from the opposite direction (Figure 1).



Source: Filed survey, 2024.

Figure 1. Wrongful overtaking.



Source: Filed survey, 2024.

Figure 2. Wrongful overtaking.

These kinds of dangerous overtaking have led to fatalities on this road, but that has not scared indiscipline drivers. From [Figure 2](#), it is clear that an articulated truck was trying to overtake another articulated truck at a sharp curve while an oncoming vehicle happened to be another articulated truck. Researchers observed while taking the picture that if the oncoming articulated truck had not veered dangerously off the road (because of the presence of a deep gutter with green trees, as seen in the picture), there would have been a fatal accident. A police officer remarked that the problem goes beyond law enforcement because the police cannot be all over the roads at all times. She thinks that the solution lies in attitudinal change on the part of drivers and passengers. According to her, sometimes, when a police officer stops such drivers, they remind them of the danger associated with their actions:

“You said the drivers say we bother them with their papers because we want money from them. No. Rather, we seek to ensure that they have insurance and road-worthy documents. We advise them on the consequences of their actions. Look at how overtaking led to the death of over 15 people at Dominase in March this year. If the vehicles involved had no authentic papers, it means there is no insurance for the dead and the injured” (R.11).



Source: Filed survey, 2024.

Figure 3. Fatal accident as a result of wrongful overtaking.

The fatal accident at Dominase on the main Accra-Cape-Coast Road occurred when the driver of one of the vehicles attempted to overtake the others in front of him at a sharp curve. However, the driver, unfortunately, rammed into the cars travelling in the opposite direction, leading to the fatalities ([Figure 3](#)).



Source: Filed survey, 2024.

Figure 4. Another accident resulting from wrongful overtaking.

According to the Dominase Police, the crash involved a Toyota Hiace with 15 participants. The other car was a Renault with three Apam Senior High School (SHS) students from Accra to Apam. The police commander attributed the cause to recklessness and argued that if all the drivers had followed their lanes, the fatal crash would have been avoided.

We noticed that both the drivers and the police officers are worried about fatalities on the road but agree that it takes the collective effort of the state and all other relevant stakeholders in the transportation sector to address the problem.

4. Conclusion and Recommendations

Various studies have been conducted on road traffic fatalities in Ghana, and the causes for such numerous accidents are general—human error, defective vehicles, bad roads, drunk driving, and speeding, among others. Our study limited the discourse on accident analysis to the perspective of the police and drivers on the road because we believe there is a need to diagnose targeted problems in order to have them realistically addressed. The paper concludes that replacing the human interaction between drivers and police officers with CCTV cameras on the roads would be the beginning of the solution to the perennial nightmare of road traffic fatalities in Ghana. The problem is largely a social one, exacerbated by monetary consideration as the police interact with the drivers. The driver prefers to ‘do something’ financially to avoid delay in the form of arrest and prosecution, as that will short have chained them from making the desired sales to avoid losing the vehicle to another driver. Also, the interaction between the police officers and the drivers is based on power play – a political problem that traces its roots to policymakers and resource allocation. As

such, police visibility is not enough to reduce excessive speeding, wrongful overtaking, overloading, partiality in the application of the road traffic law, bad roads, etcetera. These challenges have been driven by indiscipline on the part of drivers who have the conviction that money can set them free when arrested by the police for breaking road traffic regulations and police corruption. This is further exacerbated by external interference in the work of the police from various quarters, including senior police officers, traditional, political or religious leaders, top present or former government officials, corrupt police officers, and reckless drivers whose motivation for money outweighs the threats of death which result from indiscipline on the road. These have largely rendered the road traffic police officers less effective and reduced their relevance to arresting, mostly, drivers who have no connection to power.

Also, the absence of dual carriage roads is a major contributing factor to fatalities on the roads, especially the Accra-Cape Coast-Takoradi Highway. The net effect is that lives are lost, productivity reduced and health complications worsened.

The study recommends the following: (1) The police officers should be empowered to assert their authority on the roads to deal with all offenders, irrespective of religious, political, or traditional influence. This will reduce the situation where known recklessness is perpetuated by powerful people on the road whose conduct continues to pose a threat to lives on the road, (2) the state should resource the police administration to buy and install more CCTV cameras along all major highways so that reckless drivers can be arrested and prosecuted, (3) there should be a deliberate policy to train all drivers before renewing their licenses, (4) drivers who are guilty of road offences should be barred from driving for a reasonable period of time to be determined by the courts, (5) the road and highways authority should make road signs more visible and ensure that only approved speed humps are allowed on major highways. These will help reduce carnage on the roads.

Abbreviations

CCTV	Closed-Circuit Television
GMA	Ghana Medical Association
MPs	Member of Parliament
MTTD	Motor Traffic and Transport Department
TA	Thematic Analysis
WHO	World Health Organisation

Acknowledgments

The authors would like to thank all of the drivers and police officers who took time out of their busy schedules to participate in the study.

Financial Disclosure Statement

The authors received no specific funding for this work.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Abdelwanis, N. (2013). Characteristics and contributing factors of emergency vehicle crashes [PhD Thesis]. Clemson University.
- [2] Ackaah, W., & Adonteng, D. O. (2011). Analysis of fatal road traffic crashes in Ghana. *International Journal of Injury Control and Safety Promotion*, 18(1), 21–27.
- [3] Afukaar, F. K., Antwi, P., & Ofosu-Amaah, S. (2003). Pattern of road traffic injuries in Ghana: Implications for control. *Injury Control and Safety Promotion*, 10(1–2), 69–76.
- [4] Blantari, J., Asiamah, G., Appiah, N., & Mock, C. (2005). An evaluation of the effectiveness of televised road safety messages in Ghana. *International Journal of Injury Control and Safety Promotion*, 12(1), 23–29.
- [5] Boateng, F. G. (2020). “Indiscipline” in context: A political-economic grounding for dangerous driving behaviors among Tro-Tro drivers in Ghana. *Humanities and Social Sciences Communications*, 7(1), 1–5.
- [6] Boateng, F. G. (2021). Why Africa cannot prosecute (or even educate) its way out of road accidents: Insights from Ghana. *Humanities and Social Sciences Communications*, 8(1), 1–11.
- [7] Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3.
- [8] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- [9] Custalow, C. B., & Gravitz, C. S. (2004). Emergency medical vehicle collisions and potential for preventive intervention. *Prehospital Emergency Care*, 8(2), 175–184.
- [10] Delavary Foroutaghe, M., Mohammadzadeh Moghaddam, A., & Fakoor, V. (2020). Impact of law enforcement and increased traffic fines policy on road traffic fatality, injuries and offenses in Iran: Interrupted time series analysis. *PLoS One*, 15(4), e0231182.
- [11] Dotse, J., Nicolson, R., & Rowe, R. (2019). Behavioral influences on driver crash risks in Ghana: A qualitative study of commercial passenger drivers. *Traffic Injury Prevention*, 20(2), 134–139.
- [12] Frimpong, A., Babah, P. A., Mensah, R. O., Obeel, C., Acquah, A., & Acheampong, J. W. (2021). The Socioeconomic Significance of the Okada Phenomenon in Ghana and Implications on Politics: A Comparative Analysis of the Mahama and Akufo-Addo Eras in 2020 Electioneering Campaign. *Journal of African Interdisciplinary Studies*, 5(2), 35–45.
- [13] Hagan, D., Tarkang, E. E., & Aku, F. Y. (2021). Compliance of commercial motorcycle riders with road safety regulations in a peri-urban town of Ghana. *PLoS One*, 16(3), e0246965.

- [14] Irwin, S., & Winterton, M. (2011). Debates in qualitative secondary analysis: Critical reflections.
- [15] Kahn, C. A., Pirrallo, R. G., & Kuhn, E. M. (2001). Characteristics of fatal ambulance crashes in the United States: An 11-year retrospective analysis. *Prehospital Emergency Care*, 5(3), 261–269.
- [16] Norman, I. D., Dzidzonu, D., Aviisah, M. A., Norvivor, F., Takramah, W., & Kweku, M. (2017). The incidence of money collected by the Ghana police from drivers during routine traffic stops and ad hoc road blocks. *Advances in Applied Sociology*, 7(05), 197.
- [17] Pal, C., Hirayama, S., Narahari, S., Jeyabharath, M., Prakash, G., & Kulothungan, V. (2018). An insight of World Health Organization (WHO) accident database by cluster analysis with self-organising map (SOM). *Traffic Injury Prevention*, 19(sup1), S15–S20.
- [18] Rolison, J. J., Regev, S., Moutari, S., & Feeney, A. (2018). What are the factors that contribute to road accidents? An assessment of law enforcement views, ordinary drivers' opinions, and road accident records. *Accident Analysis & Prevention*, 115, 11–24.
- [19] Rowe, M., Jones, M., Millie, A., & Ralph, L. (2022). Visible policing: Uniforms and the (re) construction of police occupational identity. *Policing and Society*, 1–16.
- [20] Sam, E. F. (2015a). Don't learn safety by accident: A survey of child safety restraint usage among drivers in Dansoman, Accra. *Journal of Transport & Health*, 2(2), 160–165.
- [21] Sam, E. F. (2015b). Don't learn safety by accident: A survey of child safety restraint usage among drivers in Dansoman, Accra. *Journal of Transport & Health*, 2(2), 160–165.
- [22] Sam, E. F., Akansor, J., & Agyemang, W. (2019). Understanding road traffic risks from the street hawker's perspective. *International Journal of Injury Control and Safety Promotion*, 26(1), 92–98.
- [23] Tankebe, J., Boakye, K. E., & Amagnya, M. A. (2020). Traffic violations and cooperative intentions among drivers: The role of corruption and fairness. *Policing and Society*, 30(9), 1081–1096.
- [24] Teye-Kwadjo, E. (2017). Risk factors for road transport-related injury among pedestrians in rural Ghana: Implications for road safety education. *Health Education Journal*, 76(7), 880–890.
- [25] Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453–458.
- [26] Wegman, F. (2017). The future of road safety: A worldwide perspective. *IATSS Research*, 40(2), 66–71.
- [27] WHO, C. O. (2020). World health organisation. Responding to Community Spread of COVID-19. Reference WHO/COVID-19/Community_Transmission/2020.1.
- [28] Wilson, P., Dzansi, G., & Ohene, L. A. (2020). 'I don't want to think about it': Psychosocial experiences of road traffic accident survivors in Ghana. *International Emergency Nursing*, 53, 100935.
- [29] Xie, Z., Li, L., & Xu, X. (2022). Real-time driving distraction recognition through a wrist-mounted accelerometer. *Human Factors*, 64(8), 1412–1428.
- [30] Yin, R. K. (2017). Case study research and applications: Design and methods. Sage publications.
- [31] Zgonnikov, A., Abbink, D., & Markkula, G. (2022). Should I Stay or Should I Go? Cognitive Modeling of Left-Turn Gap Acceptance Decisions in Human Drivers. *Human Factors*, 00187208221144561.