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The epidemic of texting and driving in Nigeria: A literature review of accidents on the highways

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Abstract

Driver distraction is an important risk factor for road traffic injuries. There are different types of driver distraction, usually divided into those where the source of distraction is internal to the vehicle – such as tuning a radio, or using a mobile phone, and those external to the vehicle – such as looking at billboard or watching people on the side of the road. This proper focuses on the use of mobile phones while driving, in response to concern among policy – makers that this potential risk to road safety is increasing rapidly as a result of the exponential growth in the use of mobile phones more generally in society. It aims to raise awareness about the risks of distracted driving associated with mobile phone use, and to present counter measures that are being used by Federal Road Safety Corps to tackle this growing problem in Nigeria.

Keywords: Texting; Driving; Vehicle; Mobile phones; Nigeria; Hand-free

1 Introduction

Road trauma continues to rate as a severe social and economic issue globally, despite recognition of the significance of it and the need to reduce the burden of death, injury and other costs. Contrary to the success in many developed countries road safety still needs continuing efforts to be maintained and further improved. The full extent of road trauma's economic and social consequences defies description or estimation, with the average cost to governments alone approximating 3% of Gross Domestic Product (GDP), and up to 5% in some cases (WHO, 2015; Hughes, Anund and Falkmer, 2016).

Driving involves constant and complex coordination between vision, mind and body. Drivers' distraction refers to those instances when a driver's attention is divided from the primary task of driving the vehicle in a way that compromises safe driving performance. These distractions can degrade driving performance and even cause fatal accidents. Visual distraction and manual distraction can be directly observed through the external behaviours of drivers, such as glancing at billboards or texting/dialing a number from a cellular phone (Regan, Lee and Young, 2008).

Distractions happen daily on roads and freeways, putting every motorist at risk of an accident that could result in serious personal injury or death. Moreover, research has also concluded that, when controlling for driving conditions and time on task the impairments associated with using a mobile phone while driving can be as profound as those associated with driving while under the influence of alcohol. This suggests that it is equally important for one to stay focused and attentive when maneuvering an automobile, as it is to avoid drinking and driving (Regan et al, 2008; Atubi, 2023).

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Three major types of distraction have been widely studied: visual, manual and cognitive (Hammoud, 2008). These distractions deflect drivers' vision and cognitive resources away from the driving control task. These distractions can degrade driving performance and even cause fatal accidents. Visual distraction and manual distraction can be directly observed through the external behaviours of drivers such as glancing at billboards or releasing steering wheel to adjust the radio or texting.

Anything that takes your attention away from driving can be a distraction. Sending a text message, talking on a cell phone, using a navigation system, and eating while driving are a few examples of distracted driving. Any of these distractions can endanger you, your passengers, and others on the road. At 55 miles per hour, sending or reading a text is like driving the length of a football field with your eyes closed. There is no question that texting while driving is extremely dangerous and irresponsible. Vehicle accidents are a large contributor to the annual death toll in Nigeria, casing over 28,195 deaths in 2019 alone (FRSC, 2020).

People who text while driving are 6 times more likely to get into an accident than those who drive while intoxicated. In short, you are less likely to get into an accident while driving drunk than you are while texting behind the wheel.

The unbridled use of mobile phones in Nigeria has led to the death of many, and not a few people are getting worried. In many parts of Nigeria, it is common to see young men and women making calls or composing messages on their phones while walking along major roads. Some have died or sustained injuries after being bit by vehicles. Some others have been killed as they listened to music through ear phones on rail tracks, unaware of an oncoming train (Mpamugoh, 2020).

Reports from emergency agencies indicate that in 2018 alone, they responded to at least 50 cases of road accidents in different parts of the country. The accidents were caused by victims fiddling with their phones while walking, texting or driving. While some have lost their lives following such incidents, several more continues to live with the injuries.

The rising trend explains why there are calls globally including Nigeria to heighten and strengthens the enforcement on defaulters to cut down the rising spate of avoidable road traffic crashes especially in low and middle income countries which account for a greater portion of global crash index.

Texting while driving has also a serious menace on Nigerian roads, especially among younger drivers. Studies conducted by foreign institutions showed that drivers on mobile telephones reduce their visual seaming of the road ahead or slower to respond to hazards, and recently developed apps that supposedly aid texting behind the wheel offer little protection to drivers.

2 Conceptual Framework

2.1 Manual Distraction

The capacity of a driver to keep his/her hands on the wheel at all times while driving is inversely related with a certain type of driver distraction called manual distraction. Manuel distraction is anything external to the driver that may take his/her hands off the wheel for whatever reason. Examples would range from the driver fixing his/her hair to shifting radio stations (Hammond, 2008; Gutierrez, Canillas and Edgardo, 2011). When the driver is manually distracted, his attention is focused on the manual task at hand rather than on the road. As a result, driving errors are committed and important stimuli coming from the road are ignored.

The problem of manual distraction while driving can be explained by code interference in the visuo-spatial working memory of the driver. Tasks that impose high load on spatial working memory should not be done simultaneously with other tasks that requires the same resources (Wickens and Hollands, 1999).

2.2 Visual Distraction

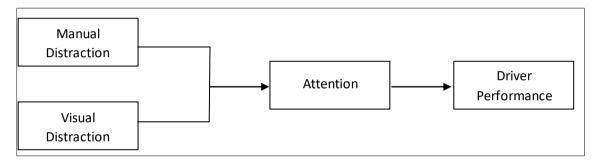
Too many distractions may affect the driver's ability to concentrate on looking at the road (Sheridan, 2004). Vision is key to a person's perceptive capabilities since visual impairment hampers the person's capacity to perceive the environment around him. In a driver's case, it is tantamount to him/her seeing what's in front of the car at all times. It should also follow that the driver gets to occasionally see what's behind or beside his/her vehicle through the use of the rear view and side mirrors.

Visual distraction is defined as any type of distraction that takes the driver's eyes off the road. Unlike other types of distraction, visual distractions could prove to be more costly in the event that perception, attention and working memory is compromised by some underlying factors such as low vigilance, driver drowsiness and drink driving among others.

2.3 Attention

Attention is the cognitive process of selectively concentrating on one aspect of the environment while ignoring other things. According to Almen (2002), attention may be captured involuntarily by salient features of the environment, and it happens quite often that the attention drifts away and the driver gets distracted. In avoiding car accidents, it is crucial to find a way to control the driver's attention in a way that would keep the focus on driving and minimize unwanted capturing.

Distraction is attention to irrelevant stimuli or actions, and this implies a definition of what is relevant or irrelevant for a given goal, which in this case is driving from point A to point B (Castro, 2009). It is imperative for a driver to be able to keep his mind on the primary task at hand especially since in such cases as driving, failure to do so could lead to accidents. Keeping attention at a high level would help in controlling the cognitive performance of drivers, and thus could help in minimizing risks, preventing accidents and injuries, and ensuring that the driver is able to get from point A to point B in a safe manner (See Fig. 1.)



Source: Adapted from Gutierrez, Canillas and Edgardo, 2011)

Figure 1 Conceptual Model

3 The Risk of Texting and Driving in Nigeria

It is no secret that texting and driving is dangerous. In fact, it is one of the most dangerous things a person can do while behind the wheel. Every year, thousands of people are killed or injured in car accidents caused by texting and driving.

There are a number of reasons why texting and driving is so dangerous. First, it takes a driver's attention away from the road when a driver is focused on sending or reading a text message, he or she is not paying attention to the task of driving. This can lead to serious accidents.

Secondly, texting and driving can cause a driver to lose control of his or her vehicle. A car that is being driven while the driver is texting is more likely to cause an auto accident.

It seems hardly a day goes by without hearing something in the news about an accident caused by texting and driving, in Lagos, Abuja, Kano, Port Harcourt, Enugu etc. The fact is that while operating a vehicle is a form of "distracted" driving, which is a term used to describe any activity that diverts attention away from what should be the primary task at hand: driving.

Texting and driving is one of the riskiest behaviours drivers can engage in behind the wheel. When you send or read a text, you may only take your eyes off the road for a few seconds. But according to the National Highway Traffic Safety Administration (NHTSA, 2023) five distracted seconds at a speed of 55 mph is the same as driving an entire length of a football field with your eyes shot.

There are numerous dangers of driving and texting, but perhaps the most important to highlight is that drivers who do this put themselves and others at great risk of car accidents, injuries or even death while on the road (FRSC, 2020).

Studies also show that using your phone to send a text while driving can have the same effect on your reaction times as drinking four beers in an hour and then driving. What that means is that it can be just as dangerous to text and drive as it is to drive while intoxicated (Cameron, 1982; Greefield, 1997; Akande and Ajao, 2006; Bener et al, 2009).

Your recovery time on the road can also be affected when you take your eyes off the road to use your phone, it can take up to 27 seconds for your eyes to recover and reorient to the road and for the mental distraction to end. The phenomenon, called the hangover effect, can occur anytime you text and drive-even if you wait until a traffic light or stop sign to do it.

Statistics show that a significant percentage of accidents occur when the driver is distracted which includes texting and driving. According to 2021 Federal Road Safety Commission (FRSC) data, cell phone use or texting while driving was a factor in: 9% of the distracted driving accidents that resulted in fatalities; 3% of distracted driving injury crashes, or about 9,026 accidents in total; 9% of all police – reported distraction affected crashes or about 16,246 accidents in total.

In this day and age, Nigerians are highly aware of the perils of texting and driving. Still – despite most people acknowledging the dangers of sending texts, taking phone calls, and checking email while driving – many people still do it anyway.

FRSC (2018) has banned texting while driving. Nevertheless, distracted driving accidents at the hands of technology continue to be an issue. Even though the statistics on cell phone use while driving are thought to be under – reported by authorities the data collected regarding distracted driving says it all. On a daily basis, more than 15 persons are subject to fatality as a result of either being distracted or being involved in a traffic accident with another distracted driver on the road.

However, the United States has the unwanted lead in this problem, far exceeding similar accidents in other countries around the world. In the United State, over 3,100 people were killed and about 424,000 were injured on crashes involving a distracted driver in 2019. about 1 in 5 of the people who died in crashes involving a distracted driver in 2019 were not in vehicles – they were walking, riding their bikes, or otherwise outside a vehicle (NHTSA, 2019).

4 Driving and Texting Laws in Nigeria

The Federal Road Safety Corps (FRSC, 2018) has warned that Nigerians should not use mobile telephones in any form while behind the wheel, including whether or not their devices carry hands – free kits. The road safety has enforced its policy against a direct use of mobile telephones by drivers for several years but most drivers switched to hands – free as the most convenient way to circumvent the offence, and traffic officers hardly pull drivers with earphones. The delay in enforcing prohibition of hands – free while driving has led many to assume that the option was safe in Nigeria and it was even the first choice in a list on road safety tips for drivers.

Expert studies around the use of hands – free by Nigerian drivers remained largely scanty, but scientists in foreign institutions have concluded that the option was not safe, and some found it could be dangerous as being twice above alcohol limit (Ogundipe, 2018).

Even the use of wireless or hands – free sets was not allowed and were not exempted from the "No use of phone while driving law". Making or receiving phone calls while driving vehicles is an offence. Punishment included a fine of N4,000 naira and/or imprisonment for six months (Bukar, 2021).

15 percent of injury crashes were the result of distracted driving. There is a 400 percent increase of time spent with eyes off the road while texting. The risk of a crash or near – crash increases by 95 percent when reaching for or dialling a phone.

Texting and driving has become a recent issue in today's world. Many teens, as well as adults, have formed habit of texting while driving. Texting while driving is distracting and the possibilities of getting into a car accident while texting and driving are higher than if you are not. Texting and driving has gotten so ridiculous the government has realized this is an ongoing problem that is causing accidents. In attempting to prevent this, new laws have been passed making the use of cell phones while driving or car illegal. However, too many people do not respect or pay attention to this law which put many people lives at risk. There are several disadvantages of texting while driving, including jail time/prison, fatal crashes, and loss of lives. Some of the injuries may be broken bones or the loss of a body part, also may lead to comas. These fatal crashes may put people in hospital for weeks to months. Some people may end up in a temporarily or permanently paralyzed state.

5 Distracted Driving is Preventable

5.1 What Drivers can do

- do not multitask while driving. Whether its adjusting your mirrors, selecting music, eating making a phone call, or reading a text or email do it before or after your trip, not during.
- You can use apps to help you avoid cell phone use while driving. Consider trying an app to reduce distractions while driving.
- Turn off your notifications while driving to avoid unnecessary distractions
- Pull over if you need to make a call or send a text.
- Install a phone holder in your car to keep your GPS at eye level while driving.

5.2 What passengers can do

- Speak up if you are a passenger in a car with a distracted driver. Ask the driver to focus on driving
- Reduce distractions for the driver by assisting with navigation or other tasks.

5.3 What parents can do

- Talk to your teen or young adult about the rules and responsibilities involved in driving. Share stories and statistics related to teen/young adults drivers and distracted driving.
- Remind them driving is a skill that requires the driver's full attention.
- Emphasize that texts and phone calls can wait until arriving at a destination.
- Familiarize yourself with the federal road safety's graduated driving licensing system and enforce its guidelines for your teen.
- Parents should set a good example by disregarding their phones while their children are in the car.

Seemingly small changes in your driving habit could be the difference, between life and death. Commit to driving safely – your text messages might be important but getting to your destination safely is even more important

6 Conclusion

Enough people die in car accident each year to wipe out the population in just two human life cycles – with distracted driving being a major contributor to those deaths. But many experts agree that the beginning of a distracted driving solution is the drivers themselves. Our culture has become deeply obsessed with technology and our phones. Learning to curb those impulses, whether it be turning your phone off or placing it in the backseat, can train drivers to get into the habit of leaving their phones alone while operating a motor vehicle.

Compliance with ethical standards

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