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Pedestrian Safety in South Africa: A Comprehensive Analysis

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ABSTRACT

Pedestrian safety remains a critical concern for road traffic authorities globally, including in South Africa, where pedestrian fatalities are alarmingly high. Numerous factors contribute to the elevated rate of pedestrian deaths in the country. One of the significant issues in South Africa is the lack of prioritization of pedestrian safety. The study analysed pedestrian safety in South Africa and identified factors contributing to pedestrian fatalities and measures to counteract them. This qualitative article utilized a non-empirical research design through a systematic review, relying entirely on secondary data. The systematic review thoroughly examined the collected literature. Key findings revealed that road users often disregard traffic rules, increasing their risk of involvement in road accidents, and are frequently distracted while on the road. Additionally, the study found that road traffic authorities do not adequately focus on pedestrian safety, and resource shortages further hinder their ability to respond effectively to road user safety. Based on these findings, several recommendations were made: it is advised that road users should be engaged in road safety campaigns to enhance their understanding of the importance of following traffic regulations. Moreover, it is recommended that road traffic authorities should be provided with sufficient resources to tackle the issue of pedestrian fatalities. Lastly, it is suggested that road traffic authorities should establish partnerships to address pedestrian safety. The study will assist policymakers, road safety strategists, road traffic authorities, the Department of Transport, and its agencies in dealing with pedestrian fatalities.

Keywords: Pedestrian, Safety, Law Enforcement, Road users, Road Traffic Accidents, South Africa

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INTRODUCTION

Each year, over 270,000 pedestrians lose their lives on the road across the globe and many of these individuals leave their homes for daily routines, such as attending school, going to work, or visiting friends, only to never return.[1] Additionally, millions more suffer injuries in traffic-related incidents while walking, with some sustaining permanent disabilities. These incidents not only cause immense grief and suffering but also bring economic challenges to the affected families and loved ones. Road traffic accidents continue to rank among the leading causes of death worldwide,[2] with pedestrians comprising a significant portion of these fatalities due to their inherent vulnerability. When struck by a vehicle,

[1] World Health Organisation, " Pedestrian Safety: A Road Safety Manual for Decision Makers and Practitioners," *WHO Library Cataloguing-in-Publication Data*, 2023.
[2] World Health Organisation, "Global Status Report on Road Safety 2018," 2018, https://www.who.int/publications/i/item/9789241565684.

pedestrians are often unable to protect themselves, leading to severe injuries or death at the accident scene. Furthermore, the widespread lack of understanding regarding pedestrian right of way among both motorists and pedestrians poses additional risks to those attempting to navigate roadways safely. Compliance with traffic laws by both drivers and pedestrians is crucial for enhancing pedestrian safety. This includes adherence to speed limits, drinking and driving laws, red-light signals, and pedestrian traffic control signals.[3] Achieving this level of compliance requires a collaborative effort among municipal police, road users, and other stakeholders dedicated to road safety. Historically, South African streets were designed for speed, prioritizing the rapid movement of vehicles for goods delivery and crime prevention.[4] However, this design has been exploited by motorists, putting pedestrians at increased risk of accidents. Consequently, many cities globally are reducing speed limits in densely populated areas.[5] South Africa should consider similar measures, as high-speed driving by motorists, even within their own communities, has led to numerous pedestrian fatalities. Additionally, some motorists engage in reckless driving behaviours, such as speeding and racing in unregulated environments, further endangering pedestrians. Speeding, especially in residential areas, remains a major contributing factor to pedestrian accidents, with many drivers ignoring road signs and traffic regulations. South Africa's history of segregated development underscores the need for enhanced pedestrian protection measures.[6] By adopting a multidisciplinary approach and implementing global best practices, it is possible to significantly reduce pedestrian fatalities and make roads safer for all users in Limpopo and beyond.

Addressing pedestrian safety is a crucial aspect of preventing road traffic injuries. Like other traffic incidents, pedestrian collisions are not inevitable but are both predictable and preventable.[7] The primary risks to pedestrians have been thoroughly documented and encompass a wide range of factors, including driver behaviours, particularly concerning speeding and alcohol consumption; inadequate infrastructure, such as the lack of dedicated pedestrian facilities like sidewalks, crossings, and raised medians; and vehicle design, where solid vehicle fronts pose significant dangers to pedestrians in the event of a collision. The inability of road users to comprehend and adhere to traffic rules presents a significant challenge for law enforcement officials across the country. The rate of road traffic fatalities in South Africa is alarmingly high, imposing a substantial burden on families, society, and the economy due to lost productivity, and skills, and the emotional toll on survivors and families who lose their breadwinners. Pedestrian fatalities remain a significant issue, accounting for 45.1% of all road user deaths in 2023, up from 43.0% in 2022.[8] These figures highlight the urgent need for enhanced measures to protect pedestrians. There is a clear need to intensify road safety initiatives, with a focus on the most vulnerable road users, such as pedestrians. Improving road safety requires a comprehensive, multi-sectoral approach that involves transportation, infrastructure development, public health, law enforcement, and education.[9] By fostering collaboration and implementing evidence-based strategies, governments, organizations, and communities can work towards reducing the impact of road traffic accidents and contribute to the broader goal of sustainable development. This article thus seeks to examine pedestrian safety in South Africa, identify existing challenges, and propose practical solutions based on international standards and procedures.

METHODOLOGY

The research methodology employed was qualitative in nature, focusing on the collection and contextual analysis of relevant information without the application of quantitative techniques. The researcher conducted a review of pertinent literature from July 2023 to July 2024 (a twelve-month projection), aiming to analyse the following aspects: the challenges that contribute to pedestrian fatalities in South Africa and the role of road traffic authorities in addressing this issue. Given the type of data required for

[3] Arrive Alive, *Pedestrian Safety in South Africa*, 2024, https://www.arrivealive.mobi/pedestrian-safety-advice.
[4] Arrive Alive, " Scholar Patrol and Road Safety," 2014, https://www.arrivealive.co.za/pages.aspx?i=2690.
[5] A. Walker, "How Bad Street Designs Kills Pedestrians," 2018, https://gizmodo.com/how-bad-street-design-kills-pedestrians-1582315776.
[6] Modipa Mmakwena, "Road Traffic Accidents in South Africa: Challenges and Solutions," *International Journal of Research in Business and Social Science (2147- 4478)* 12, no. 8 (December 11, 2023): 557–65, https://doi.org/10.20525/ijrbs.v12i8.2940.
[7] World Health Organisation, " Pedestrian Safety: A Road Safety Manual for Decision Makers and Practitioners."
[8] Road Traffic Management Corporation (RTMC)., *Annual Report* (Pretoria: RTMC, 2022).
[9] Statistics South Africa, "Road Transport Accident Deaths on the Increase in South Africa," 2022, https://www.statssa.gov.za/?p=17175.

the study, the discussion primarily relied on secondary data sources to gather relevant information. Through content and contextual analysis, the data collected from these sources were condensed and critically examined, allowing for the extraction of relevant and practical information. This approach utilized deductive synthesis to interpret the findings. According to the study's objectives, the synthesized analytical outcomes are presented in this research in various sections.

DISCUSSION

Challenges contributing to Pedestrian Fatalities

One of the primary causes of pedestrian-vehicle collisions is the combined error of both drivers and pedestrians. Factors such as alcohol consumption, jaywalking, speeding, and distractions from both drivers and pedestrians contribute significantly to the high incidence of pedestrian accidents each year. Research from the World Health Organization highlights that male pedestrians, particularly those aged 56 and older or those 14 years and younger, are more frequently involved in such collisions compared to other age groups.[10] Additionally, pedestrians under the influence of alcohol or drugs account for a notable percentage of pedestrian fatalities and injuries. Studies have shown that road users often fail to comply with traffic regulations, a behaviour that significantly contributes to the high rate of road traffic accidents in South Africa. Road safety is a shared responsibility; however, many road users neglect their role, placing undue expectations on traffic officials to handle all aspects of road safety.

Countries like Sweden and the Netherlands have made substantial progress in reducing pedestrian collisions, partly due to a higher level of public concern and involvement. Speeding is another critical factor contributing to the high rate of pedestrian fatalities. Drivers often disregard the rights of pedestrians, and the design of roads can also create confusion, further exacerbating the risk of accidents. Research indicates that fatal crashes are more likely to involve speeding drivers, particularly those who are intoxicated.[11] Additionally, young male drivers are disproportionately linked to fatal accidents involving both speeding and alcohol. The inconsistency in law enforcement, often due to unethical conduct within traffic authorities and among road users, further complicates the situation. The lack of body-worn cameras for traffic officials makes it challenging to monitor their activities on the road effectively. The literature suggests that consistent and sustained law enforcement can significantly reduce road accidents and fatalities.[12] As the number of dedicated road policing officers' decreases, the use of technology becomes increasingly crucial for effective enforcement. Speed cameras, for example, are a vital part of the technological toolkit for road safety. However, their deployment should be based on evidence to enhance road safety rather than create the perception of unfair enforcement.

Average speed cameras (ASC) are generally more accepted by motorists and can contribute to better compliance with speed limits. The House of Commons Transport Committee advocates for the expanded use of ASCs to improve road safety.[13] Traffic officials face several challenges in enforcing laws against motorists driving under the influence of alcohol and enforcing speed limits. These challenges include a limited number of officers available for patrols, an insufficient number of cameras monitoring traffic lights, uncooperative witnesses during accidents, and corruption within traffic enforcement agencies. Furthermore, there is a noticeable lack of law enforcement visibility in high-accident areas, particularly at night, when many road users engage in illegal activities such as speeding, driving without a license, and driving while intoxicated. The scarcity of policing resources makes it difficult to cover the entire road network, leading road users to believe that the likelihood of being caught is low. Therefore, there is a critical need to focus on changing road user behaviour through road safety campaigns.

Texting while walking and driving

[10] World Health Organisation, " Pedestrian Safety: A Road Safety Manual for Decision Makers and Practitioners."
[11] Supa Quick, " Speeding- Why It's so Risky," 2023, https://www.supaquick.com/blog/how-speed-influences-car-accidents#:~:text=An increase of 1 km,–5%25 for fatal crashes.
[12] T. Mphela, "The Impact of Traffic Law Enforcement on Road Accident Fatalities in Botswana," 2011, http://www.jtscm.co.za/index.php/jtscm/article/view File/77/73.
[13] House of Commons Transport Committee, " Road Traffic Law Enforcement: Second Report of Session 2015–2016," 2015, https://publications.parliament.uk/pa/cm201516/cmselect/cmtrans/518/518.pdf.

Cell phone usage while walking has become an increasingly hazardous issue on the roads, leading to a growing number of accidents. The rise in injuries among pedestrians using or texting on their cell phones while walking is a concerning trend across various age groups.[14] Engaging in road use while distracted significantly increases the risk of traffic accidents. The study's findings indicate that road users often text while walking and driving, actions that violate the Road Traffic Act. According to the South African National Road Traffic Act, drivers are prohibited from using any hand-held communication devices, including cell phones, microphones, or other communication tools, while driving. Despite this, many road users disregard this law, endangering both themselves and others. When individuals focus on their phones, their awareness of their surroundings diminishes, heightening the risk of accidents, such as missing a changing traffic light or a vehicle altering its course, which can lead to pedestrian accidents.[15]

Furthermore, pedestrians who text while walking are less likely to adhere to safety measures, such as staying within crosswalk lines. The study also revealed that the frequent use of cell phones by pedestrians and drivers alike is becoming more common, resulting in an increase in crosswalk incursions and hit-and-run incidents due to distracted driving.[16] This behaviour is a significant contributor to the rising number of pedestrian fatalities. The research also indicates that road traffic authorities lack the capacity to effectively address the issue of pedestrian fatalities. Many pedestrians cross roads at unauthorized locations, a problem exacerbated by inadequate law enforcement. Monitoring pedestrian behaviour is notably more challenging than monitoring motorists.

According to the Road Traffic Act, pedestrians and cyclists are prohibited from using freeways, and those caught walking along or across freeways can face arrest. Any reckless pedestrian behaviour on roadways is criminalized, including jaywalking, which can result in fines for those walking while intoxicated. However, the study found that this law is not strictly enforced, as jaywalking remains common, putting both motorists and pedestrians at risk. Pedestrians are expected to comply with all traffic signals and utilize pedestrian bridges where available, even if it requires walking a longer distance. Appel, Krisch, Stein, and Weber compared the behaviour of pedestrians using cell phones while walking to that of "smartphone zombies," noting that people often use their phones while walking despite being aware of the dangers to themselves and others.[17] The authors suggested that virtual communication might replace the need for physical companionship, thus compromising safe walking practices. According to various studies, as many as 84% of respondents talk on the phone, and 79% text or use social networks while walking on the street or sidewalk.[18] Moreover, observations indicate that between 22% and 37% of pedestrians use cell phones while crossing at crosswalks, a behaviour possibly influenced by the coordination of pedestrians and vehicles through traffic lights, which reduces pedestrian caution. Some of the challenges are discussed below:

a. Jaywalking

Walking is an excellent way to exercise, travel, or enjoy the outdoors, but it's essential to avoid risky behaviours like crossing streets outside of designated crosswalks.[19] Such actions can lead to severe accidents, injuries, and even fatalities. Essentially, pedestrian-vehicle collisions occur when the environment allows for potential interaction between pedestrians and moving vehicles. Jaywalking, which involves crossing streets outside of marked crosswalks or ignoring traffic signals, might seem like a minor offense but can have serious repercussions if an accident occurs.[20] When pedestrians engage in

[14] J. Sajewicz, "Texting on a Smartphone While Walking Affects Gait Parameters," 2023, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10002373/.
[15] State Farm, "Dangers of Texting While Walking for Pedestrian Safety," 2024, https://www.statefarm.com/simple-insights/family/texting-while-walking#:~:text=If you're looking down,to cell phone pedestrian accidents.
[16] Sajewicz, "Texting on a Smartphone While Walking Affects Gait Parameters."
[17] Markus Appel et al., "Smartphone Zombies! Pedestrians' Distracted Walking as a Function of Their Fear of Missing out," *Journal of Environmental Psychology* 63 (June 2019): 130–33, https://doi.org/10.1016/j.jenvp.2019.04.003.
[18] Damian Frej et al., "Smartphone Use in Traffic: A Pilot Study on Pedestrian Behavior," *Applied Sciences* 12, no. 24 (December 10, 2022): 12676, https://doi.org/10.3390/app122412676.
[19] Graham Feest, " Is Jaywalking a Traffic Violation?," 2020, chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.grahamfeest.com/wp-content/uploads/2020/09/is-jaywalking-considered-a-traffic-violation.pdf.
[20] J. Butler, "Impact of Jaywalking on Pedestrian Accident Claims," 2024, https://butlerfirm.com/blog/impact-of-jaywalking-on-pedestrian-accident-claims/.

jaywalking, they disrupt the normal traffic flow, leading to situations where drivers may not anticipate their presence, making it difficult to stop in time. This behaviour significantly increases the risk of accidents by placing pedestrians in unexpected and hazardous positions on the road.

Contrary to the common belief that drivers are solely responsible for road accidents, pedestrians also have a crucial role in maintaining road safety and preventing accidents.[21] Defensive drivers who follow traffic laws often face challenging situations when involved in accidents with pedestrians, as pedestrians, being more vulnerable, tend to suffer severe injuries, leading to the assumption that the driver is fully at fault. However, by engaging in jaywalking, pedestrians endanger not only themselves but also other road users, increasing the likelihood of traffic accidents. Utilizing designated crosswalks is the safest way to cross streets and significantly reduces pedestrian fatalities. However, some pedestrians prefer taking shortcuts, crossing roads at random points instead of using the provided safe crossings. Road traffic accidents are among the most undesirable incidents for any road user, yet they occur frequently.[22] Unfortunately, despite their frequency, many motorists do not learn from their mistakes. While most road users are aware of general traffic rules and safety measures, it is a small percentage of users who cause the majority of accidents and crashes. Human error remains the leading cause of these incidents, with jaywalking being a significant contributor to pedestrian fatalities.

b. Law enforcement in pedestrian safety

Globally, road traffic crashes (RTCs) are responsible for an estimated 1.35 million deaths and 50 million injuries annually, with over 90% of these incidents occurring in low- and middle-income countries (LMICs).[23] The economic impact of these fatalities and injuries is significant, costing close to USD 1.7 trillion and exceeding 6.5% of the GDP in LMICs.[24] Although road safety showed some improvement in 2020, partly due to the lockdowns imposed during the COVID-19 pandemic, much more needs to be done to achieve a substantial reduction in global fatalities.[25] The statistics suggest that many road users fail to comply with traffic regulations, and inadequate law enforcement contributes to this issue. Often, road users only adhere to the rules when they see traffic officials present. Pedestrians, in particular, often break the law by crossing roads in non-designated areas, increasing their risk of involvement in traffic accidents. Effective law enforcement is crucial in promoting road safety by ensuring that traffic regulations are followed and offenders are penalized. Law enforcement agencies are responsible for making sure that road users obey laws related to speed limits, traffic signals, and signs.[26] By enforcing these laws, they help to deter reckless driving and other dangerous behaviours, which can prevent accidents and save lives.

Enforcement agencies can also identify and apprehend drivers who violate traffic laws, issue fines, and prosecute offenders, thereby sending a clear message that reckless driving is unacceptable. The goal of enforcement strategies is to enhance compliance with traffic laws, particularly those that are most likely to improve pedestrian safety in areas where crashes are prevalent or likely to occur due to high exposure of both pedestrians and motorists.[27] While much of the focus is on enforcement at pedestrian crossings, it is reasonable to extend enforcement efforts to other risky driving behaviours, such as speeding, distracted driving, impairment, and red-light running, as these measures also improve pedestrian safety. Strong, evidence-based road safety laws are essential,[28] but their effectiveness depends on sustained and well-funded enforcement efforts that shape road user behaviours and encourage

[21] Ryan Injury Attorneys, "Jaywalking Caused Road Accidents," 2024, https://ryanllp.com/blog/jaywalking-caused-road-accidents/.
[22] A. Saxena et al., "Six Sigma Methodologies on Road: Case Study on Road Accidents," 2014, https://www.slideshare.net/anujarora3304/case-study-on-road-accidents-copy.
[23] Blair Turner, Soames Job, and Sudeshna Mitra, *Guide for Road Safety Interventions: Evidence of What Works and What Does Not Work* (World Bank, 2020).
[24] World Bank, "Guide for Road Safety Opportunities and Challenges: Low-and Middle-Income Countries Country Profiles " (Washington, DC., USA.: World Bank, 2019), https://openknowledge.worldbank.org/handle/10986/33363.
[25] International Transport Forum, *Road Safety Annual Report 2021: The Impact of Covid-19* (Paris: OECD Publishing, 2021).
[26] E. Bernard, "The Role of Law Enforcement in Promoting Road Safety: Enforcing Traffic Regulations and Punishing Offenders," 2023, https://medium.com/@harveyhargreav4/the-role-of-law-enforcement-in-promoting-road-safety-enforcing-traffic-regulations-and-punishing-c9b72c0410d2.
[27] National Highway Traffic Safety Administration, "High Visibility Enforcement at Pedestrian Crossings," 2014, https://www.nhtsa.gov/book/countermeasures-that-work/pedestrian-safety.
[28] Road Safety Toolkit, " Enforcement," 2022, https://toolkit.irap.org/safer-people-treatments/enforcement/.

compliance. Traffic rules are more likely to be obeyed if people believe that violations will lead to detection and undesirable consequences like fines or license revocation. Law enforcement is also key to preventing pedestrian accidents, which involves ticketing both motorists and pedestrians who violate traffic laws, responding to pedestrian accidents, and investigating their causes.[29] Upholding traffic regulations, including speed limits, signals, and road signs, can reduce pedestrian accidents and enhance overall road safety.

Traffic enforcement is most effective when it is visible and publicized, as this reinforces the expected behaviours and raises the perceived likelihood of legal consequences for non-compliance.[30] Moreover, enforcement campaigns should target both drivers and pedestrians, beginning with communication and outreach efforts that announce, describe, and publicize the campaign through community meetings, media coverage, social media, mass emails, and signage. Traffic enforcement plays a critical role in modifying road user behaviours, as many individuals tend to follow traffic rules when they know law enforcement is present. However, traffic authorities need adequate resources to implement these measures effectively. Unfortunately, there are not enough policing resources to cover the entire road network, and road users are aware that the risk of being caught is low. To bring about lasting improvements in road safety, these issues must be rigorously addressed and enhanced. Ensuring a meaningful reduction in the high percentage of road users who do not comply with traffic rules should be a priority for South African road traffic authorities.

c. Intoxicated Pedestrians

The risks associated with walking and driving under the influence are equally dangerous, as alcohol diminishes motor skills, reflexes, and decision-making abilities, leading to poor judgment and slow reaction times.[31] Intoxicated pedestrians are particularly vulnerable they may stumble into the street, jaywalk without looking for oncoming traffic, or move too slowly to avoid an approaching vehicle. Data from the Department of Transport indicates that over 6,000 intoxicated pedestrians have been injured since 2011.[32] This behaviour not only endangers the pedestrians themselves but also poses significant risks to motorists, who may be forced to react unpredictably to a pedestrian suddenly crossing the road or staggering into their path, thereby increasing the likelihood of a collision. The Automobile Association Foundation highlighted that intoxicated pedestrians may present as much danger on South African roads as drunk drivers.[33]

Every inebriated pedestrian who poses a risk to themselves equally jeopardizes the safety of vehicular traffic. When a driver is unable to avoid a drunk pedestrian, the lives of those within the vehicle and surrounding vehicles are put at risk. It is plausible that a single intoxicated pedestrian could cause a fatal accident involving an entire minibus or bus full of passengers. Unfortunately, there is often little evidence to prove the presence of a drunken pedestrian in such incidents. Modipa suggested that while there are measures to prevent accidents involving intoxicated pedestrians, these are unlikely to significantly reduce the overall number of pedestrian casualties.[34] A possible exception could be the enforcement of a statutory blood alcohol limit in public places. Nonetheless, enhancing the safety of intoxicated pedestrians will likely require broader efforts to make the environment safer for all pedestrians, regardless of their sobriety.

Modipa further noted that multiple factors contribute to pedestrian fatalities, including significant alcohol consumption by both drivers and pedestrians, the time of day, and the age and sex of the pedestrian.[35] Alcohol consumption and the time of day are often interrelated, as individuals are more

[29] Lightfoot Law, "The Role of Law Enforcement in Preventing Pedestrian Accidents," 2023, https://www.lightfootlawdc.com/blogs/the-role-of-law-enforcement-in-preventing-pedestrian-accidents/.
[30] National Highway Traffic Safety Administration, "High Visibility Enforcement at Pedestrian Crossings."
[31] Joye Law Firm, "South Carolina Pedestrian Accident Lawyer," 2024, https://www.joyelawfirm.com/accidents/pedestrian-accident-lawyers/.
[32] R. Massey, "One in Seven Pedestrians Hurt on the Roads 'Is Drunk': More than 6,000 'intoxicated Walkers' Are Injured in Past Three Years," 2014, https://www.dailymail.co.uk/news/article-2869398/One-seven-pedestrians-hurt-roads-drunk.html.
[33] FIA Foundation for the Automobile and Society, Global Road Safety Partnership and World Bank. World Health Organization, " Pedestrian Safety: A Road Safety Manual for Decision-Makers and Practitioners" (Geneva: WHO, 2013).
[34] Modipa Mmakwena, "Exploration of Distracted Road Users in Road Traffic Accidents in South Africa," *International Journal of Social Science Research and Review* 5, no. 9 (2022): 62–74.
[35] Mmakwena, "Road Traffic Accidents in South Africa: Challenges and Solutions."

likely to walk or drive while intoxicated during specific times of the day and days of the week. One measure expected to have a significant and immediate impact is reducing speed limits, particularly in busy areas with high pedestrian traffic.[36] Patek and Thoma observed that alcohol consumption is typically higher on weekend evenings than at other times.[37] It is well established that alcohol impairs judgment, encourages risky behaviour, slows reaction times, and affects coordination and vision. Alcohol use, especially among pedestrians, is a substantial factor in pedestrian fatalities. Unsurprisingly, a large proportion of pedestrian fatalities (40%) occur on weekend evenings between 8 pm and midnight.[38] The elevated risk for pedestrians in fatal crashes may be due to the inherent complexity of drivers and pedestrians sharing road space at vastly different speeds and the greater injury severity that pedestrians suffer in such incidents.[39] This complexity is further compounded by the unpredictability of pedestrian behaviour, especially in poorly designed or inadequately lit areas that lack sufficient infrastructure for walking and crossing.[40] Impairment from alcohol or drug use is a common contributing factor among cyclists, pedestrians, and drivers involved in fatal road traffic crashes.[41]

d. Distracted Road Users

Distractions while on the road can be categorized into visual, manual, and cognitive types, each significantly contributing to driver errors.[42] A driver or pedestrian becomes distracted when their focus shifts away from the road, often due to the use of technology, which is particularly dangerous and often prohibited during driving or walking because it diminishes attention. For instance, distractions can make road users less vigilant, potentially leading to fatalities. Although smartphones have made it easier to stay connected, they also present severe safety risks when used to check text messages, emails, phone calls, or other mobile applications while driving, leading to alarmingly high rates of distraction.[43] Road users engaging with their phones whether to talk, text, or browse the internet are less able to stay in their lane, notice changes in their surroundings, and respond promptly. Additionally, drivers using phones are more prone to speeding and failing to maintain a steady pace.[44] The tendency of road users to use cell phones while on the road increases their risk of involvement in traffic accidents due to distractions that lead to poor decision-making.[45] Research indicates that drivers who send or read text messages are more likely to drift out of their lane, with steering control being 91% worse for texting drivers compared to those fully concentrating on the road. Distracted drivers are eight times more likely to crash.[46] The National Road Traffic Act, Act 93 of 1996, specifically Regulations 308A and 308B, forbids drivers from using communication and electronic devices like in-vehicle televisions while driving. Regulation 308A explicitly states that no one shall drive a vehicle on a public road while:

- Holding a cellular or mobile phone or any other communication device in one or both hands or with any part of the body;
- Using or operating a cellular or mobile phone or other communication device unless it is affixed to the vehicle or integrated into the vehicle's fixtures and remains affixed during operation;
- If using a device adapted to be affixed to the driver's person as headgear, it must be used in a manner that allows operation without holding it with hands or any part of the body.

[36] T.P. Hutchinson, C.N. Kloeden, and V.L. Lindsay, " Accidents to Intoxicated Pedestrians in South Australia," *CASR Report Series (CASR061)* (Centre for Automotive safety research. The University of Adelaide, Australia., 2009).
[37] Gregory C Patek and Todd G Thoma, "Commentary: Pedestrian Fatalities—a Problem on the Rise," *Annals of Emergency Medicine* 62, no. 6 (2013): 613–15.
[38] Arrive Alive, *Pedestrian Safety in South Africa*.
[39] World Health Organization, " Pedestrian Safety: A Road Safety Manual for Decision-Makers and Practitioners."
[40] Charles DiMaggio et al., "Spatial Analysis of the Association of Alcohol Outlets and Alcohol-Related Pedestrian/Bicyclist Injuries in New York City," *Injury Epidemiology* 3, no. 1 (December 4, 2016): 11, https://doi.org/10.1186/s40621-016-0076-5.
[41] Live Tanum Pasnin and Hallvard Gjerde, "Alcohol and Drug Use among Road Users Involved in Fatal Crashes in Norway," *Traffic Injury Prevention* 22, no. 4 (May 19, 2021): 267–71, https://doi.org/10.1080/15389588.2021.1887854.
[42] Kristie L. Young and Paul M. Salmon, "Examining the Relationship between Driver Distraction and Driving Errors: A Discussion of Theory, Studies and Methods," *Safety Science* 50, no. 2 (February 2012): 165–74, https://doi.org/10.1016/j.ssci.2011.07.008.
[43] Edgar Snider & Associates., "Texting and Driving Accident Statistics," 2021, https://www.edgarsnyder.com/car-accident/cause-of-accident/cell-phone/cell-phone-statistics.html.
[44] Youth for Road Safety, " Multitasking Is a Myth," 2022, http://www.youthforroadsafety.org/road-safety/distracted-driving.
[45] Mmakwena, "Exploration of Distracted Road Users in Road Traffic Accidents in South Africa."
[46] TimesLive, " Texting While Driving Can Be More Dangerous than Being Drunk," 2021, https://www.timeslive.co.za/motoring/features/2021-01-05-texting-while-driving-can-be-more-dangerous-than-being-drunk/.

Consistent enforcement of these regulations by traffic officials is crucial to curbing texting while driving, which significantly raises the risk of traffic accidents. Pedestrians, particularly those engaging in jaywalking, must be given priority in law enforcement. The act also prohibits pedestrians from crossing freeways, as these roads are designed for high-speed vehicles. However, pedestrians are often seen crossing busy roads in non-designated areas. Addressing this issue should be a priority for traffic officials, as pedestrian fatalities are a significant concern. Road safety campaigns, particularly in high-risk areas, could effectively disseminate these safety messages. Globally, road traffic accidents cause 1.35 million deaths annually, with 22% of these fatalities involving pedestrians.[47] Notably, pedestrian fatalities are more prevalent in Lower-Middle Income Countries (LMICs), accounting for 42% in Ukraine, 46% in Ghana, 29% in Sri Lanka, and 17.8% in India, compared to developed nations. In 2021, pedestrian-related crashes in developed nations were 12%, 15%, 35%, 24%, and 17% in Australia, France, Japan, the UK, and the US, respectively.[48] These statistics underscore the critical importance of pedestrian safety, not only in LMICs but also in developed countries.[49]

Summary

Road traffic accidents are among the most undesirable events for any road user, yet they occur frequently. Road traffic accidents are a major, but neglected global public health problem, requiring intensive efforts for effective and sustainable prevention. Of all the systems that people must deal with daily, road transport is the most complex, the most dangerous. It is a fact that pedestrian fatalities in South Africa are unacceptably high and they place an enormous burden on families, society and the economy in terms of lost productivity capacity, lost skills, as well as pain and suffering of survivors, the next of kin and loved ones who are left without breadwinners. Unfortunately, too many road users have an extremely bad attitude towards safe road use, and all the education and enforcement in the world will not stop those who are intent on playing by their own rules and without a change of attitude among road users and, more importantly, a respect for the law, efforts to prevent road traffic fatalities and crashes will fail.

RECOMMENDATIONS

To bring about the necessary changes, the government should prioritize implementing the National Development Plan (NDP), which guides South Africa's economic and geographical initiatives. Based on the study's findings, several recommendations were made: first, road users should be provided with road safety campaigns to increase awareness about the importance of adhering to traffic rules. Additionally, road traffic authorities should be equipped with adequate resources to tackle pedestrian fatalities effectively. It is further recommended that these authorities form partnerships to enhance pedestrian safety in South Africa. The media should collaborate with government bodies and international organizations to communicate traffic safety messages, ensuring road users are well-informed about proper road conduct, as even one death is too many. By keeping road safety at the forefront, the media can help spread awareness through targeted messages about speeding, drinking and driving, seatbelt use, and traffic distractions. They can also broadcast and host programs and talk shows featuring experts discussing road safety issues.[50] In order to combat pedestrian fatalities effectively, road traffic authorities should consider the following actions: implementing high-visibility enforcement and public information campaigns aimed at both motorists and pedestrians, identifying high-risk zones and conducting educational outreach in these areas, and forming strategic partnerships with local universities and community organizations to promote pedestrian safety.[51]

[47] World Health Organisation, " Road Traffic Injuries," 2018, http://www.who.int/mediacentre/factsheets/fs358/en/.
[48] M. B. Lin and S, W. Cheng, "Different Smartphone Tasks and Traffic Complexity Affect Pedestrian Awareness of Co-Existing Road Objects and Cerebral Oxygenation during Shared Space Walking," *Transportation Research Part F: Traffic Psychology and Behavior* 103 (2024): 460–79.
[49] World Health Organisation, "Global Status Report on Road Safety 2018."
[50] K.A. Deepa, "Road Accidents – Its Root Causes and Financial Repercussions on Family and Society: A Study with Reference to Kerala. The University Grants Commission South West Regional Office Bangalore.," 2016.
[51] Governors Highway Safety Association, " Pedestrian Traffic Fatalities by State," 2015, http://www.ghsa.org/sites/default/files/2016-11/spotlight_ped2015.pdf.

CONCLUSION

The study has analysed pedestrian safety in South Africa and identified factors contributing to pedestrian fatalities and measures to counteract them. The unfortunate reality is that many road users fail to learn from their mistakes on the road. While most individuals are aware of the general rules and safety measures, a small segment of road users are responsible for causing accidents and crashes. Common contributors to pedestrian fatalities include over-speeding, driving under the influence, driver distractions, running red lights, and neglecting safety equipment like seatbelts and helmets. Authorities must address these challenges by consistently enforcing the law and eliminating corruption, which undermines efforts to reduce road traffic accidents, as outlined in the United Nations Decade of Action for Road Safety 2021-2030. The National Development Plan 2030 also emphasizes the need for a safe and secure road traffic environment. It's of paramount importance for road traffic authorities in South Africa to prioritise pedestrians as they pose too many risks on the road. These risks lead to injuries and fatalities on the road. Moreover, there is a lack of educational programmes, enforcement and engineering interventions in addressing pedestrian safety. Road traffic accidents are preventable, road users need to adhere to the rules of the road and traffic officials need to enforce the law consistently to curb carnages on the road.

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