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# Factors Contributing to Causes of Deaths and Injuries among Young Drivers' Crashes in Nigeria

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**Abstract**
Young drivers have high crash rates due to a combination of factors including inexperience, immature risk-taking behavior, and specific crash-causing errors like speeding, distraction, and failing to yield. Situational factors such as passengers' presence, alcohol and drug use, and lack of seat belt use also significantly increase risk. Addressing these multifaceted issues requires a deeper understanding of the combination of factors to develop effective interventions and countermeasures from the reported demographics.

**Keywords:** factors; deaths; injuries; contributing; crashes; young drivers; Nigeria.

## Introduction

In 2021, young drivers (typically aged 17-24) remained a high-risk group for road traffic crashes globally and in various regions, with their crashes often associated with risky behaviors such as speeding, distraction, and driving under the influence of alcohol or drugs. Specific data from collisions show that young drivers are overrepresented in collisions, particularly serious and fatal ones, and their crash risk is highest during the first year of driving. While exact global figures for 2021 are not provided, organizations like the WHO and UNICEF highlight road traffic injuries as a leading cause of death for children and young adults and continue to advocate for initiatives to reduce these incidents (WHO, 2021; UNICEF, 2021).

Young male drivers' crashes and injuries are often "preventable" mishaps from risky behaviors like speeding and impaired driving, exacerbated by factors such as driving at night and on rural roads, especially on weekends. Road traffic injuries are a leading cause of death for children and young adults aged 5-29 years. Males are typically 3 times more likely to be killed in road crashes than females (WHO, 2023; Atubi, 2023c).

In 2021, the WHO identified road traffic injuries as a leading cause of death for children and young people (ages 5-19) with efforts focused on achieving SDG Target 3.6, which aims to halve global road deaths and injuries by 2030. While many global data for young drivers are not specified for the 2021 calendar year, reports from 2021 onward show trends such as 39% of nighttime crashes involving young drivers between 2021 and 2023. A study in Lagos, Nigeria, in 2023 found that young drivers under 30 were at a higher risk of involvement in accident crashes (Atubi, 2023b).

In Nigeria alone, the Federal Road Safety Corps (FRSC) reports that over 6,205 lives were lost in road crashes in 2023, with young people making up more than 50% of those fatalities. These are not just numbers; they are students, graduates, workers, and future leaders whose lives were tragically cut short due to unsafe road practices and poorly planned transport infrastructure (Ahmadu-Suka, 2025). Despite accounting for just 1% of the world's motor vehicles, low- and middle-income countries (LMICs) contribute to 92% of global RTA fatalities, demonstrating the urgent need for intervention.

It was also reported by the WHO (2021) that 73% of all road accident deaths occur in young men aged 25 years and below. This is supported by Scott-Parker et al. (2013) that driving violations such as speeding, a form of risky behavior, are very common among young drivers. Fu et al. (2008) found that young drivers tend to tailgate vehicles in front of them, while Fernandes et al. (2010) showed that young drivers tend to overtake vehicles dangerously. Driver inattention among young drivers is another significant contributor to crashes (Neyens & Boyle, 2008). Inattention can also be caused by distractions, such as mobile phone usage, eating, drinking, and too many people in vehicles (Shope, 2006; Lipovac et al., 2017; Monfour et al., 2021; Atubi, 2022b; 2022c; 2023b; Atubi, 2023e). Such risky behaviors are also evident among young drivers in Nigeria. In a study conducted by Atubi (2023e; 2023f), it was found that young drivers in Lagos State, Nigeria, have higher risks of accidents owing to their risky driving behaviors. In addition, it was found that male drivers had a 10 times higher road mortality than the general population.

Driving is a complex activity that requires (i) cognitive functions, such as visual and perceptual stimuli and information processing, and (ii) physical tasks: vehicle control in response to a dynamic environment (Caffo et al., 2020). Several tools have been used to study and assess driving behavior, and actual road assessment is the ideal approach. However, this endeavor can be costly, stressful, and difficult to conduct for several reasons. One of the easiest and fastest exploratory research approaches is the use of self-reporting instrument tools. To study risky driving behavior, researchers worldwide have used self-report instrument tools such as the Driver Behaviour Questionnaire (DBQ) (Reason et al., 1990), Driver Attitude Questionnaire (DAQ) (Parker et al., 1996), Driving Skill Inventory (Lajunen & Summala, 1997), and Behavior of Novice Young Drivers Scale (BNYDS) (Scott-Parker et al., 2010). Self-reporting instrumental tools are preferred by researchers because they are easy to use and cheap (Wahlberg et al., 2011). Among these, DBQ is the most widely used.

## Contributing Factors to Young Driver Crash Risk

Many factors influence young drivers' behavior (see Figure 1). These factors include social and situational influences, exposure-related influences, and the characteristics of young drivers. Among the young driver characteristics influencing crash risk, there are several further factors including core and modifiable attributes, situational assessment and decision-making skills, as well as driver behavior (Williamson, 1999). While the model is not new, it comprehensively represents the factors that influence novice driver behavior. The original figure was adapted by Lyndel et al. (2014) to include socio-economic status, mobile phone use, and fatigue in social and situational factors.

### *Social and Situational Factors Influencing Young Driver Behavior*

Social and situational factors such as socio-economic status, passengers, impairment, mobile phone use, fatigue, social group, and peers affect the crash risk of novice drivers.

### *Socio-Economic Status*

Drivers of all ages, including young drivers, who belong to lower socio-economic groups experience higher crash risks (Males, 2009; Adany et.al, 2021; Cook et al., 2020; Javid et al., 2022).

### *Passengers*

The presence of passengers similar in age to the young driver increases the risk of crashing. Chen (1999) identified that young drivers between 16 and 19 years old were more likely to experience a fatal crash if they carried one or more passengers, and the more passengers that were carried in a vehicle, the higher the crash risk. There are a number of proposed reasons for this increased crash risk. It is possible that the presence of passengers may distract young drivers, leading to driving errors and thus increasing their crash risk (Begg et al., 2001). Alternatively, passengers may encourage drivers to conform to the prevailing norms of their social group. While a driver may choose to drive in a risky manner on a given occasion, the support of their passengers will encourage this behavior to continue.

### *Alcohol and Drugs*

Alcohol increases crash risk for all drivers, including young drivers. One study suggested that where alcohol drink driving was reported of a factor, adolescent drivers were 3.3 times more likely to sustain a severe injury (Voas et al., 2009; Vachal & Malchodi, 2014; Morris et al., 2002; Atubi, 2023d).

### *Peer Pressure*

Peer pressure can significantly affect teenage behavior, including driving habits. Teens are more likely to take risks such as speeding and engage in dangerous driving habits when friends are riding with them. This social influence can lead to distracted and reckless driving, increasing the likelihood of accidents.

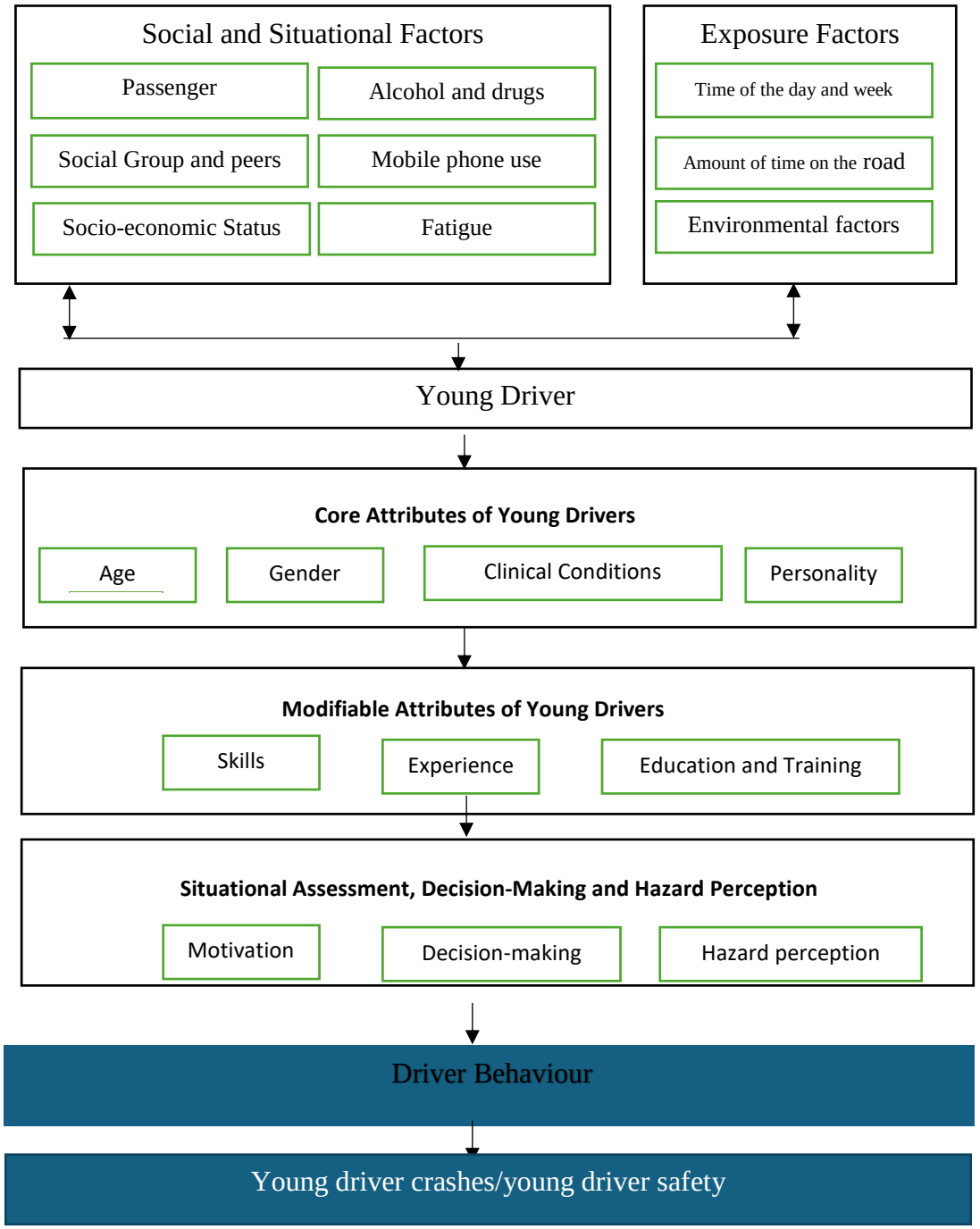


**Figure 1.** Factors Relating to Young Driver Safety
Source: Adapted from Lyndel et al., 2014.

***Mobile Phone Use***

Research has suggested that mobile phone use while driving severely reduces performance, with young drivers more likely to use mobile phones while driving (Atubi, 2023b). In addition, it was found that young drivers are more likely to be fatally injured if they are distracted by a mobile phone while driving (Neyens & Boyle, 2008).

***Fatigue***

Many teenagers must juggle schoolwork, household chores, extracurricular activities, and social activities. In addition to this, most teenagers get less sleep than they need. These factors can create often more than a developing mind can handle. This can make it harder for young drivers to stay alert on the road. In fact, driving while fatigued can be just as dangerous as driving while intoxicated. Within a sample of 17-25-year-old drivers, 67.3% reported driving while fatigued between one and ten times in the previous month (Harbeck & Glendon,

2013). Another study found that young people are less likely than older drivers to drive while sleepy, but if they do attempt to drive sleepy, they were also less likely to pull over and rest (Watling, 2014).

***Exposure Factors Influencing Young Driver Behavior***

Driving patterns that influence crash risks have been reported to be affected by the amount of time spent on the road, as well as the time of day, the day of the week, and the environment. Young drivers have been found to have a higher crash rate than other age groups after controlling for their greater exposure.

These factors affect the crash risk of a young driver.

***Core Attributes***

The core attributes of the young driver are relatively fixed or enduring and are hence unlikely to change due to external influences. These attributes include age, gender, personality, and clinical conditions.

Younger drivers have higher crash risks than older drivers, with research indicating that the youngest group of drivers have the highest risk. This higher crash risk has been found to be due to a lack of experience and a propensity to drive in high-risk situations (McKnight & McKnight, 2003).

Gender appears to be an important factor in young driver crash risk. Young male drivers had a higher propensity to take risks than young female drivers. A study in Lagos State identified that male drivers traveled more kilometers per year than female drivers (Atubi, 2023d; Atubi, 2023e). The same study identified that males of all ages have higher crash rates than females.

Personality factors, such as sensation-seeking, aggressiveness, and egocentrism, have also been found to affect the crash risk of young drivers.

***Modifiable Attributes***

The modifiable attributes of young drivers include skill and experience as well as the levels of education and training received. Driving skill relates to the ability to operate a vehicle in traffic and reflects both an individual's cognitive and psychomotor abilities. Young drivers need to develop the ability to operate a motor vehicle with minimal cognitive resources. However, it takes more than skill to drive safely. Young people must be able to apply their skills and make judgments depending on the situation.

***Situational Assessment, Decision-Making, and Hazard Perception***

Driving requires the driver to use a set of multifaceted, interconnected, and simultaneous competencies, including psychomotor, cognitive, and perceptual proficiencies.

***Driver Behavior***

The final factor that increases the crash risk of young drivers is their driving behavior. The ways in which drivers behave on the road, including violations of road rules, errors, and lapses, may increase their crash risk (Atubi, 2023d; Atubi, 2023e). Self-reported risky driving behaviors by young drivers were linked with a 50% increased risk of crashing. Young drivers were most likely to exceed the speed limit, drive too close to other vehicles and signal poorly.

## Focus on Youths and Road Safety in Nigeria

The Federal Road Safety Commission (FRSC) is actively engaging Nigerian youths to lead road safety efforts, recognizing their crucial role in preventing crashes and fatalities, which disproportionately affects the 5-29 age group. Initiatives like the 2025 **Road Safety Youth Hang-out** focus on empowering youths to use their digital skills and influence for positive peer campaigns and innovative solutions, reflecting the theme “safer roads”, brighter future “youths leading the change.”

Road safety in Nigeria is considered a crisis, with a high death rate per population surpassing both global and African averages. The focus by the Federal Road Safety Corps (FRSC) includes:

**Targeted Interventions**: The FRSC is making efforts to engage with the youths, recognizing their influential position in society and their decision-making.

**Campaigns and Tools:** They are encouraging the use of the FRSC mobile app and advocating for youths to leverage social media to promote positive peer influence and spread road safety messages.

**Enforcements:** The FRSC is also conducting enforcement actions, such as arresting drivers and prosecuting them for traffic violations, to discourage unsafe practices.

**Innovation and Solutions:** The FRSC, in collaboration with others like VIA, supports youth-led initiatives to develop practical solutions for safer mobility.

**Early Habit Formation:** By educating young people, the FRSC aims to build a foundation for safer driving, passenger, and pedestrian behavior that lasts into adulthood.

**Future Leadership:** The FRSC views youths as future drivers, policy makers, and community leaders, preparing them to contribute positively to traffic safety by understanding its importance early.

## Strategies for Young Drivers' Crashes

To prevent young driver crashes, implement Graduated Driver Licensing (GDL) programs with stages that progressively grant privileges while limiting high-risk activities like night driving and passenger limits. Supplement GDL with persuasive communication campaigns targeting unsafe behaviors such as speeding, impaired driving, and mobile phone use. Also, encourage the use of safe vehicle features like airbags and anti-lock brakes, mandate seatbelt use, and teach defensive driving skills through a combination of professional and parental instruction.

### *Strategies*

A three-stage program where full license privileges are granted as young drivers gain supervised experience and demonstrate safe behavior.

- **Learner Stage:** Supervised driving.
- **Intermediate Stage:** Restrictions on nighttime driving and the number of young passengers allowed.
- **Full Privilege Stage:** Unrestricted driving after gaining sufficient experience.

Targeting young males and focusing on unsafe behaviors.

### *Communication Campaigns*

Use persuasive and emotional messages to highlight the dangers of speeding, distracted driving (like mobile phone use), and impaired driving. Target young males and pre-driving adolescents with these campaigns.

### *Enforcement and Penalties*

Enforce speed limit laws and laws against aggressive driving.

### *Vehicle Technology*

Mandate or encourage the use of features such as airbags, anti-lock brakes, electronic stability control, and intelligent speed adaptation systems.

### *Driver Education*

Combine professional instruction with parental involvement to teach vehicle handling, traffic mastery, and safe driving attitudes.

### *Policy Implications and Recommendations*

**Parental Involvement:** Parents should restrict night driving, high-speed driving, and the number of passengers in the vehicle until their child gains more experience.

**Seatbelt Use:** Always buckle up as seatbelt use is lower among young drivers, and intelligent seatbelt reminder systems can help.

**Defensive Driving:** Teach young drivers to practice defensive driving, anticipate potential hazards, and allow ample time to respond safely to situations.

**Vehicle Choice:** Advice parents to make safer vehicles available to their teens, considering the types of vehicles that are safer for novice drivers.

**Mobile Phone Use:** Emphasize that mobile phones should only be used for emergencies while driving.

**Drive in Diverse Conditions:** Encourage training for poor weather and road conditions to prepare young drivers for various scenarios.

## Conclusion

Young driver crashes are a complex issue stemming from a combination of developmental, behavioral, social, and situational factors. Effective prevention strategies must therefore be multifaceted, combining robust education, comprehensive Graduated Driver Licensing (GDL) programs that address experience and restrictions on passengers, and interventions that target risk-taking behaviors and peer influence.

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