

# **PUBLIC ATTITUDES TOWARDS DRIVER BEHAVIOR ON NIGERIAN ROADS**

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## **ABSTRACT**

As traffic accidents increase, so does that of injured persons, making this a serious public health problem that needs to be addressed immediately. Addressing this crisis is especially important for developing countries. To address this overwhelming challenge, factors affecting driving behavior need to be investigated in this present study. This present research investigates these objectives: one is to assess people's perceptions when it comes to driver behavior in selected states of Nigeria, including the Federal Capital Territory, and the other focuses on pinpointing specific driver behaviors that contribute to crashes.

This research employed a cross-sectional design. A purposive sampling method was used to select the study area, and data collection involved distributing questionnaires to 80 (2000) respondents in all selected states, including the FCT. Participants' comments on their view of driving behavior showed that 38.8% of drivers were generally reckless, 27.5% of drivers were impatient, 10% of drivers were indecent, and 2.5% of drivers were violent. Participants (76.3%) attributed this behavior primarily to driver aggression.

The findings also revealed anger as a significant factor influencing driver behavior, suggesting a link between emotions and traffic accidents. Participants identified additional contributors to driver attitude, including impatience, stress, desperation, lack of discipline, irritability, and incompetence in general. To change behavior in the right direction, it is recommended that interventions be developed aimed at improving emotional control. Drivers and technicians can

be provided with regular emotional control training within the scope of the driver's license renewal program.

## **INTRODUCTION**

Traffic accidents plague communities worldwide, with a pronounced effect on developing nations compared to developed countries. These accidents have claimed an estimated 1.35 million annually and caused significant non-fatal injuries to millions more (20 to 50 million), with most resulting in different disabilities (International Transport Forum, 2020).

The World Health Organization designates these traffic accidents as the cause of most deaths and injuries (World Health Organization, 2015). In Africa, the number of traffic accidents has been increasing. Despite having only 2% of world vehicles, there's a disproportionate 20% of global traffic deaths (World Health Organization, 2015). This statistic highlights the severity of the problem in this region. Promisingly, some progress has been made with a recent report by Nigeria's Federal Road Safety Commission (FRSC 2023) showing a decrease in traffic accidents in 2021 compared to the previous year. In 2021, there were 9,694 crashes resulting in 5,053 deaths. These numbers represent a decline of 387 from 2020, which saw 8,734 crashes and a death toll of 49,670.

Nigerian studies show that reckless driving is a significant factor contributing to road accidents (90%). Ukoji (2014) identified factors like speeding and other factors related to it, such as ignoring traffic rules such as traffic signs, drunk and dangerous driving, reckless overtaking, and fatigue as critical causes. The consequences of these accidents are manifested in terms of quality of life, social and economic well-being of people, and the national economy (Gudaji & Dankishiya, 2016). They have also been correlated with human, mechanical, and environmental aspects in research. The literature review also emphasizes the human factor component in the occurrence of accidents. Among them, it is worth noting the factors of the

driver: age, physical and mental health, education, alcohol consumption, and others (Eiksund, 2009; Odufuwa et al., 2017).

Given this data, it was also interesting to see how driver's aberrant driving behaviors seem to be superior and more immediate indicators of road crash risk compared to driving anger, according to Qu et al. (2014). Risky and aggressive driving actions, such as speeding or disregarding red lights, comprised approximately 94.4% of all road fatalities in China Qu et al. (2014). Research has demonstrated a correlation between driving rage and erratic driving behaviors (Zhang & Chan, 2016). Anger has been found to disrupt human cognitive functions such as attention (Schimmack & Derryberry, 2005) and judgment (Evans, 2008).

As a result, it leads to too much optimism and poor risk assessment (Evans, 2008), which generally means high chances of speeding or tailgating (Abdu et al., 2012). However, the relationship between road rage and resulting errors is not as evident according to Berdoulat et al. (2013), where some of the sources report a positive correlation between driving errors and road rage while others do not find any, which is also supported by Gonzalez-Iglesias et al.; Furthermore, the relationship between anger and conflict is much more complicated in reality according to Zhang et al.

This research investigates public perceptions of driver behavior in Nigeria's Federal Capital Territory, Abuja. It recruited participants who regularly drive, though not necessarily daily. The study has two main objectives: To assess public perceptions of driving behavior within Abuja. This objective aims to understand how the general public views the conduct of drivers on the roads, and the other objective is to identify driving behaviors linked to traffic accidents according to existing literature.

## **METHODOLOGICAL APPROACH**

### **Geographic Scope**

Ten Selected States for Study: Delta, Lagos, Ogun, Kano, Cross River, Imo, Enugu, Sokoto, Kogi, and Benue State.

### **Sampling Technique**

The present research is a cross-sectional study. Sampling was conducted purposively; Ten states were purposefully selected due to the majority consensus among drivers regarding driving errors. The questions were distributed at random, and the purpose of the study was explained to the participants before they filled out the survey.

### **Information Gathering**

This study employed a pre-tested, structured interviewer questionnaire to gather data from participants. The survey looks to obtain information on demographics, personal driving history, frequency, and perceptions toward drivers' attitudes for selected states.

### **Data Analysis**

Statistical analysis for this research was conducted using the Statistical Package for Social Sciences (SPSS) Software version 23. The analysis employed a combination of techniques to explore the data, including Frequency distributions, Cross-tabulations, and Chi-square tests. The Chi-square tests reported results with a significance level of 5% ( $p < 0.05$ ) and 95% Confidence intervals.

## **RESULTS**

### **Socio-demographic characteristics**

This study investigated the demographics of participants. Over half (52.5%,  $n = 42$ ) were female, and the remaining participants were male (47.5%,  $n = 39$ ). The most common age group was 31-40 years old (50.0%,  $n = 40$ ), followed by 41-50 years (26.3%,  $n = 21$ ), 20-30 years (15.0%,  $n = 12$ ), 51-60 years (7.5%,  $n = 6$ ), and over 60 years (1.3%,  $n = 1$ ).

In terms of education, 1.3% held a National Diploma (ND), 3.8% a Higher National Diploma (HND), 42.5% a Bachelor's degree, 47.5% a Postgraduate degree, 2.5% were Undergraduate students, and 2.5% had obtained their SSCE.

Professionally, the breakdown was 26.3% in the commercial sector, 41.3% in the public sector, 28.8% entrepreneurs, and 3.8% students. Notably, 93.8% ( $n = 75$ ) of the 80 participants reported having driving experience. Driving experience varied: 1.3% had less than a year, 15.0% had 1-5 years, 21.3% had 6-10 years, 17.5% had 11-15 years, 15.0% had 16-20 years, and 23.8% had over 20 years of experience.

In learning to drive, 27.4% reported being taught by family, 33.8% by a driving school, 17.5% self-taught, 6.3% by friends, and 8.8% by other drivers. Regarding driving frequency, 75% drove daily, 11.3% every other day, 6.3% rarely, and 1.3% weekly.

### **Statistical Association Test**

This study analyzed relationships between variables using the Pearson Chi-square test. No significant associations ( $p > 0.05$ ) were found between gender, driving ability, driving experience, driving frequency, and learning to drive (Table 1). However, education level showed a significant relationship with participants' ability to drive ( $p < 0.05$ ) (Table 2). This is supported by the fact that all participants with National Diplomas (ND), Higher National Diplomas (HND), and Postgraduate degrees held driver's licenses (100%). Similarly, 94.1% of those with Bachelor's degrees could drive. Conversely, only 50% of undergraduate students and none of the SSCE participants reported they could not drive. Interestingly, education level itself was not significantly linked to driving ability ( $p > 0.05$ ).

Profession also had a significant association with driving frequency ( $p < 0.05$ ) (Table 2). There was an additional significant relationship between education level and driving frequency ( $p < 0.05$ ).

## Participants Perceptions of Drivers

In this study, participants characterized the demeanor of drivers in Abuja as varying from careless to amusing; 38.8% of the participants reported that drivers in Abuja are predominantly careless, with an additional 27.5% believed to be simply impatient and 10% lacking decency. In comparison, 2.5% were described as aggressive. Additionally, 6.3% of respondents observed that Abuja drivers display a reasonable level of decency, and 1.3% found them amusing (Table 3). This was echoed by participants, who attributed these behaviors primarily to driver aggression (76.3%).

Questions	Gender		$\chi^2$ (sig)	Age					$\chi^2$ (sig)
	Male	Female		20 - 30	31 - 40	41 - 50	51 - 60	>60	
Can you drive?			2.259 (0.133)						1.453 (0.835)
Yes	34 (89.5)	41 (97.6)		11 (91.7)	38 (95.0)	20 (95.2)	5 (83.3)	1 (100.0)	
No	4 (10.5)	1 (2.4)		1 (8.3)	2 (5.0)	1 (4.8)	1 (16.7)	0 (0.0)	
Total	38 (100.0)	42 (10.0)		12 (100.0)	40 (100.0)	21 (100.0)	6 (100.0)	1 (100.0)	
Driving Experience			4.730 (0.450)						42.302 (0.003)
<1	1 (2.9)	(0.0)		(0.0)	0(0.0)	(5.0)	(0.0)	(0.0)	
1 - 5	4 (11.8)	2 (16.0)		3 (27.3)	7 (18.4)	2 (10.0)	0 (0.0)	1 (100.0)	
5 - 10	8 (23.5)	7 (22.7)		6 (54.5)	9 (23.7)	1 (5.0)	0 (0.0)	0 (0.0)	
11 - 15	9 (26.5)	4 (18.7)		(9.1)	11 (28.9)	2 (10.0)	0 (0.0)	0 (0.0)	

16 - 20	4 (11.8)	2 (16.0)		(9.1)	5 (13.2)	6 (30.0)	0 (0.0)	0 (0.0)	
>20	8 (23.5)	9 (25.3)		(0.0)	6 (15.8)	8 (40.0)	5 (100.0)	0 (0.0)	
Total	34 (100.0)	1 (10.0)							
How did you learn how to drive?			5.019 (0.285)						13.150 (0.662)
Family member	11 (32.4)	1 (26.8)		4 (36.4)	10 (26.3)	7 (35.0)	1 (20.0)	0 (0.0)	
Driving School	9 (26.5)	8 (43.9)		3 (27.3)	12 (31.6)	8 (40.0)	3 (60.0)	1 (100.0)	
Self-taught	9 (26.5)	5 (12.2)		0 (0.0)	9 (23.7)	4 (20.0)	1 (20.0)	0 (0.0)	
A friend	3 (8.8)	(4.9)		(9.1)	3 (7.9)	(5.0)	(0.0)	(0.0)	
Driver	2 (5.9)	5 (12.2)		3 (27.3)	4 (10.5)	0 (0.0)	0 (0.0)	0 (0.0)	
Total	34 (100.0)	1 (100.0)							
How often do you drive?			2.349 (0.504)						6.169 (0.907)
Daily	29 (85.3)	31 (75.6)		0 (90.9)	31 (81.6)	5 (75.0)	3 (60.0)	(100.0)	
Every other Day	4 (11.8)	5 (12.2)		0 (0.0)	5 (13.2)	(15.0)	1 (20.0)	(0.0)	
Rarely	1 (2.9)	4 (9.8)		(9.10)	1 (2.6)	(10.0)	1 (20.0)	(0.0)	
Weekly	0 (0.0)	1 (2.4)		0 (0.0)	1 (2.6)	0 (0.0)	0 (0.0)	0 (0.0)	

How would you describe Abuja Drivers?			6.368 (0.383)						16.579 (0.866)
Reckless	13 (39.4)	18 (47.4)		4 (36.4)	12 (32.4)	12 (70.6)	3 (60.0)	0 (0.0)	
Inpatient	10 (30.3)	12 (31.6)		3 (27.3)	14 (37.8)	3 (17.6)	1 (20.0)	1 (100.0)	
Indecent	3 (9.1)	5 (7.0)		2 (18.2)	4 (10.8)	1 (5.9)	1 (20.0)	0 (0.0)	
Fairly decent	2 (6.1)	3 (7.9)		2 (18.2)	2 (5.4)	1 (5.9)	0 (0.0)	0 (0.0)	
Average	2 (6.1)	0 (0.0)		0 (0.0)	2 (5.4)	0 (0.0)	0 (0.0)	0 (0.0)	
Aggressive	2 (6.1)	0 (0.0)		0 (0.0)	2 (5.4)	0 (0.0)	0 (0.0)	0 (0.0)	
Hilarious	1 (3.0)	0 (0.0)		0 (0.0)	1 (2.7)	0 (0.0)	0 (0.0)	0 (0.0)	
Do you think Abuja drivers are angry or aggressive?			1.080 (0.431)						3.376 (0.497)
Yes	27 (71.1)	34 (81.0)		10 (83.3)	28 (70.0)	16 (76.2)	6 (100.0)	1 (100.0)	
No	11 (28.0)	8 (19.0)		2 (16.7)	12 (30.0)	5 (23.8)	0 (0.0)	0 (0.0)	
If yes, what do you think is responsible for their anger?			4.745 (0.577)						25.207 (0.119)
Don't Know	1 (3.8)	2 (6.7)		0 (0.0)	3 (9.4)	0 (0.0)	0 (0.0)	3 (5.4)	
Easily irritated	3 (11.5)	5 (16.7)		2 (25.0)	3 (9.4)	2 (16.7)	1 (25.0)	8 (14.3)	
Impatient	4 (15.4)	10 (33.3)		2 (25.0)	9 (28.1)	3 (25.0)	0 (0.0)	14 (25.0)	
Stress	6 (23.1)	5 (16.7)		3 (37.5)	7 (21.9)	1 (8.3)	0 (0.0)	11 (19.6)	

Incompetence	6 (23.1)	4 (13.3)		1 (12.5)	2 (6.3)	5 (41.7)	2 (50.0)	10 (17.9)	
Desperation	5(19.2)	4 (13.3)		0 (0.0)	8 (25.0)	0 (0.0)	1 (25.0)	9 (16.1)	
Lack of discipline	1 (3.8)	0 (0.0)		0 (0.0)	0 (0.0)	1 (8.3)	0 (0.0)	1 (1.8)	
Do you think this anger problem can be solved?			0.916 (0.525)						10.013 (0.908)
Yes	38 (100.0)	0 (0.0)		2 (100.0)	39 (97.5)	1 (100.0)	6 (100.0)	1 (100.0)	
No	1 (98.8)	1 (2.4)		0 (0.0)	1 (2.5)	0 (0.0)	0 (0.0)	0 (0.0)	

*Table 1: Association Between Driving, Age, and Gender*

	Level of Education						$\chi^2$ (sig)
	OND	HND	Degree	P. Graduate	SSCE	Undergraduate	
Can you drive?							39.341 (0.002)
Yes	1 (100.0)	3 (100.0)	32 (94.1)	38 (100.0)	0 (0.0)	1 (50.0)	
No	0 (0.0)	0 (0.0)	2 (5.9)	0 (0.0)	2 (100.0)	1 (50.0)	
Driving Experience							17.370 (0.629)
< 1	0 (0.0)	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	1 (1.3)	
1 - 5	0 (0.0)	1 (33.3)	5 (15.6)	5 (13.2)	1 (100.0)	12 (16.0)	
5 - 10	1 (100.0)	0 (0.0)	8 (25.0)	8 (21.1)	0 (0.0)	17 (22.7)	

11 - 15	0 (0.0)	0 (0.0)	6 (18.8)	8 (21.1)	0 (0.0)	14 (18.7)	
16 - 20	0 (0.0)	0 (0.0)	3 (9.4)	9 (23.7)	0 (0.0)	12 (16.0)	
>20	0 (0.0)	2 (66.7)	9 (28.1)	8 (21.1)	0 (0.0)	19 (25.3)	
Total							
How did you learn how to drive?							15.160 (0.513)
Family member	1 (100.0)	3 (100.0)	7 (21.9)	10 (26.3)	1 (100.0)	22 (29.3)	
Driving School	0 (0.0)	0 (0.0)	12 (37.5)	15 (39.5)	0 (0.0)	27 (36.0)	
Self-taught	0 (0.0)	0 (0.0)	8 (25.0)	6 (15.8)	0 (0.0)	14 (1.7)	
A friend	0 (0.0)	0 (0.0)	3 (9.4)	2 (5.3)	0 (0.0)	5 (6.7)	
Driver	0 (0.0)	0 (0.0)	2 (6.3)	5 (13.3)	0 (0.0)	7 (9.3)	
Total							
How often do you drive?							17.410 (0.135)
Daily	1 (100.0)	3 (100.0)	25 (78.1)	31 (81.6)	0 (0.0)	60 (80.0)	
Every other Day	0 (0.0)	0 (0.0)	5 (15.6)	4 (10.5)	0 (0.0)	9 (12.0)	
Rarely	0 (0.0)	0 (0.0)	1 (3.1)	3 (7.9)	1 (100.0)	5 (6.7)	
Weekly	0 (0.0)	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	1 (1.3)	
How would you describe Drivers?							13.365 (0.960)
Reckless	1 (100.0)	2 (66.7)	16 (50.0)	11 (32.4)	0 (0.0)	1 (100.0)	
Inpatient	0 (0.0)	0 (0.0)	7 (21.0)	15 (44.1)	0 (0.0)	0 (0.0)	

Indecent	0 (0.0)	1 (33.3)	4 (12.5)	3 (8.8)	0 (0.0)	0 (0.0)	
Fairly decent	0 (0.0)	0 (0.0)	3 (9.4)	2 (5.9)	0 (0.0)	0 (0.0)	
Average	0 (0.0)	0 (0.0)	1 (3.1)	1 (2.9)	0 (0.0)	0 (0.0)	
Aggressive	0 (0.0)	0 (0.0)	0 (0.0)	2 (5.9)	0 (0.0)	0 (0.0)	
Hilarious	0 (0.0)	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	
Do you think drivers are angry or aggressive?							2.139 (0.830)
Yes	1 (100.0)	2 (66.7)	25 (73.5)	30 (78.9)	1 (50.0)	2 (100.0)	
No	0 (0.0)	1 (33.3)	9 (26.5)	8 (21.1)	1 (50.0)	0 (0.0)	
If yes, what do you think is responsible for their anger?							14.584 (0.932)
Don't Know	0 (0.0)	0 (0.0)	1 (3.7)	2 (7.7)	0 (0.0)	0 (0.0)	
Easily irritated	0 (0.0)	0 (0.0)	4 (14.8)	4 (15.4)	0 (0.0)	0 (0.0)	
Inpatient	1 (100.0)	1 (100.0)	4 (14.8)	7 (26.9)	0 (0.0)	1 (100.0)	
Stress	0 (0.0)	0 (0.0)	5 (18.5)	6 (23.1)	0 (0.0)	0 (0.0)	
Incompetence	0 (0.0)	0 (0.0)	5 (18.5)	5 (19.2)	0 (0.0)	0 (0.0)	
Desperation	0 (0.0)	0 (0.0)	7 (25.9)	2 (7.7)	0 (0.0)	0 (0.0)	
Lack of discipline	0 (0.0)	0 (0.0)	1 (3.7)	0 (0.0)	0 (0.0)	0 (0.0)	
Do you think this anger problem can be solved?							1.370 (0.928)

Yes	1 (100.0)	3 (100.0)	33 (97.1)	38 (100.0)	2 (100.0)	2 (100.0)	
No	0 (0.0)	0 (0.0)	1 (2.9)	0 (0.0)	0 (0.0)	0 (0.0)	

Table 2: Exploring the Link Between Education and Driver Licensing

Questions	Profession				$\chi^2$ (sig)
	Private Sector	Public Sector	Entrepreneurs	Student	
Can you drive?					20.233 (0.000)
Yes	21 (100.0)	31 (93.9)	22 (95.7)	1 (33.3)	
No	0 (0.0)	2 (6.10)	1 (4.3)	2 (66.6)	
Driving Experience					28.662 (0.18)
<1	0 (0.0)	0 (0.0)	1 (4.5)	0 (0.0)	
1 - 5	4 (19.0)	1 (3.2)	6 (27.3)	1 (100.0)	
5 - 10	9 (42.9)	9 (29.0)	5 (22.7)	0 (0.0)	
11 - 15	0 (0.0)	3 (9.7)	2 (9.1)	0 (0.0)	
16 - 20	3 (14.3)	7 (22.6)	3 (13.6)	0 (0.0)	
>20	5 (23.8)	11 (35.5)	1 (4.5)	0 (0.0)	
Total					
How did you learn how to drive?					10.090 (0.608)
Family member	4 (19.0)	10 (32.3)	7 (31.8)	1 (100.0)	
Driving School	11 (52.4)	7 (22.6)	9 (40.9)	0 (0.0)	
Self-taught	4 (19.0)	8 (25.8)	2 (9.1)	0 (0.0)	
A friend	1 (4.8)	3 (9.7)	1 (4.5)	0 (0.0)	
Driver	1 (4.8)	3 (9.7)	3 (13.6)	0 (0.0)	
Total					22.791 (0.007)

How often do you drive?					
Daily	20 (95.2)	21 (67.7)	19 (86.4)	0 (0.0)	
Every other Day	1 (4.8)	5 (16.1)	3 (13.6)	0 (0.0)	
Rarely	0 (0.0)	4 (12.9)	0 (0.0)	1 (100.0)	
Weekly	0 (0.0)	1 (3.2)	0 (0.0)	0 (0.0)	
How would you describe Abuja Drivers?					17.098 (0.516)
Reckless	10 (47.6)	12 (44.8)	7 (35.0)	1 (100.0)	
Inpatient	6 (28.6)	11 (37.9)	5 (25.0)	0 (0.0)	
Indecent	2 (9.5)	3 (10.3)	3 (15.0)	0 (0.0)	
Fairly decent	3 (14.3)	0 (0.0)	2 (10.0)	0 (0.0)	
Average	0 (0.0)	0 (0.0)	2 (10.0)	0 (0.0)	
Aggressive	0 (0.0)	2 (6.9)	0 (0.0)	0 (0.0)	
Hilarious	0 (0.0)	0 (0.0)	1 (5.0)	0 (0.0)	
Do you think drivers are angry or aggressive?					0.339 (0.953)
Yes	16 (76.2)	26 (78.8)	17 (73.9)	2 (66.7)	
No	5 (23.8)	7 (21.2)	6 (26.1)	1 (33.3)	
If yes, what do you think is responsible for their anger?					5.453 (0.941)
Don't Know	1 (9.1)	1 (4.0)	1 (5.0)	3 (5.4)	
Easily irritated	1 (9.1)	4 (16.0)	3 (15.0)	8 (14.3)	
Inpatient	3 (27.3)	7 (28.0)	4 (20.0)	14 (25.0)	
Stress	2 (18.2)	6 (24.0)	3 (15.0)	11 (19.6)	
Incompetence	1 (9.1)	4 (16.0)	5 (25.0)	10 (17.9)	
Desperation	3 (27.3)	3 (12.0)	3 (15.0)	9 (16.1)	
Lack of discipline	0 (0.0)	0 (0.0)	1 (5.0)	1 (1.8)	

Do you think this anger problem can be solved?					1.442 (0.696)
Yes	21 (100.0)	32 (97.0)	23 (100.0)	3 (100.0)	
No	0 (0.0)	1 (3.0)	0 (0.0)	0 (0.0)	

*Table 3: Association between driving and Profession.*

Participants in the study identified a number of aggressive driving factors. Impatience emerged as the most common association (17.5%), followed by stress (13.8%), perceived driver incompetence (12.5%), desperation (11.3%), and irritation (10.0%). Notably, a tiny percentage (1.3%) attributed aggression to indiscipline. Encouragingly, a vast majority of participants (98.8%) expressed confidence that aggressive driving can be addressed. Many respondents suggested that proper driver awareness and education programs, stricter traffic enforcement, and improved traffic management on Abuja's roads could significantly reduce aggressive driving behavior.

## **DISCUSSION**

This research explored public perceptions of driver behavior in Nigeria. The participants recruited regularly participated in driving, though not necessarily daily. The study has two main objectives: To assess public perceptions of driving behavior; This objective aims to understand how the general public views the conduct of drivers on the roads. The other objective is to identify driving behaviors linked to traffic accidents according to existing research; this objective focuses on pinpointing specific actions by drivers documented in research as contributing to crashes.

The survey participants consisted of a majority of women (52.5%) compared to men (47.5%). This finding is noteworthy because it contradicts the previous study by Ekpeyong et al. (2020) and Uhegbu and Tite (2021), which reported a higher proportion of male participants. For instance, Ekpeyong et al. (2020) found that men comprised 88% of their survey respondents.

Gender distribution here differs from the Uhegbu, Tight (2021), who reports differently on gender distribution compared to the survey above. This 2021 report examines the attitudes and behaviors of road users in Abuja streets and determines that the population was 66% male. Although both studies were conducted within the same geographical region, the discrepancy was in the demographic focus. Although the difference between men and women is not high, the results represent a clear picture of women's increasing participation in driving in the study area. This is especially true of the increase in female taxi drivers in some states (Kadiri, 2017). The analysis also shows that there are more participants in the 31 - 40 age group (50.0%; n = 40). The current study's age distribution differed slightly from Uhegbu and Tight (2021), who reported a majority of drivers in the 41-50 age range. In this study, the most prevalent age group was 31-40. However, both studies found a concentration of participants between 31 and 50 years old. The age distribution in this research also aligns with the average age reported by Ekpeyong et al. (2020) and the broader range documented by Okafor et al. (2020).

The analysis of participants' educational backgrounds revealed a high proportion with advanced degrees: 47.5% possessed Postgraduate qualifications, and 42.5% held Bachelor's degrees. The remaining participants included those with National Diplomas (ND - 1.3%), Higher National Diplomas (HND - 3.8%), Undergraduate studies (2.5%), and Senior Secondary School Certificate (SSCE - 2.5%). Notably, 95% of respondents had some form of higher education beyond secondary school. Differences in these reports by Onowakpo et al. (2018) reported that 89.2% of those with secondary-level education were attributed to the study population, which was the intercity driver.

Participants reported acquiring driving skills through various means: family instruction (27.4%) was the most common, followed by self-teaching (17.5%). The remaining participants learned from friends (6.3%) and other drivers (8.8%). This suggests that many of the respondents in the present study may have yet to receive comprehensive guidance on driving

laws. This can be reflected in the driver's actions and factors that caused or contributed to a severe accident. Mayhew et al. (2017) suggested that learning to drive well could reduce traffic accidents.

Most of the respondents in this study (75%) said they drive every day. If this routine driving is linked to the driving experience of the participants, the number of accidents could be very low. However other studies suggest that driving behavior is only part of the cause of traffic accidents. This finding aligns with Feng et al. (2017), who reported higher anger levels among non-professional drivers than among professionals. This shows that in the present study, most are non-professionals who exhibit superior attitude problems regardless of driving frequency or driving history.

The analysis revealed a statistically significant association ( $p < 0.05$ ) between education level and driving ability. Notably, all participants with Ordinary National Diplomas (OND), Higher National Diplomas (HND), and Postgraduate degrees possessed driving licenses (100%). Similarly, a high proportion (94.1%) of those with Bachelor's degrees could drive. However, the driving ability rate dipped to 50% among undergraduate students, and none of the Secondary School Certificate Examination (SSCE) participants could drive. It is important to note that this finding is consistent with the age distribution of participants who reported driving skills. Additionally, this data reflects the educational attainment typically associated with the legal driving age in the country. In contrast, Okafor et al. (2020) reported differing results concerning both age distribution and the relationship between education level and driving expertise.

Participants described driver behavior in Abuja as ranging from reckless to amusement. According to the findings, 38.8% thought of Abuja drivers as primarily reckless, and 27.5% were thought of as merely impatient. An additional 10% thought of them as indecent, 2.5% as aggressive, 6.3% as fairly decent, and 1.3% as amusing.

Participants indicated that this behavior could be due to driver aggression (76.3%). This view is consistent with Arthur's (2015) report that alcohol consumption, distraction, fatigue, and speed are behavioral factors that equate to the likelihood of road accidents. Study participants identified impatience as a critical factor in aggressive driving. Additional factors mentioned include stress, perceived incompetence of other drivers, desperation, lack of discipline, and anger.

Encouragingly, a vast majority of participants (98.8%) expressed confidence that aggressive driving behavior can be addressed. A meta-analysis conducted by Zhang and Chen (2016) showed that driving anger could predict careless driving habits, including errors and risky and aggressive driving.

## **CONCLUSION**

It was established that road rage is an important factor influencing driver behavior. Furthermore, many negative driver attitudes, including impatience, stress, lack of self-control, incompetence, desperation, and irritability, increase the risk of accidents. These have been identified in research as essential characteristics shared by all drivers' behavioral difficulties.

## **RECOMMENDATIONS**

- Based on findings, enhanced training of drivers and targeted driver re-training should be applied when issuing or renewing a driver's license to enhance emotional control.
- Both non-professional and professional drivers, as part of driver's license renewal programs, should obtain training on emotional regulation techniques, which could equip drivers with tools to manage stress and frustration behind the wheel as part of driver-passenger safety initiatives.

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## **AUTHOR CONTRIBUTIONS**

Author Wasiu.A. Adenekan: Conceptualization, Data Collection, Writing-Original Draft Kia

Eyo Essien: Conducted the analysis and interpretation of the results. The author also reviewed the results and approved the final version of the manuscript.

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