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Socio-Economic Characteristics and Driving Behaviour of Commercial Drivers in Southwestern Nigerian Cities

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ABSTRACT:

The study examined the relationship between the socio-economic characteristics of commercial drivers and their level of safety in Southwestern Nigeria. 600 structured questionnaires were administered to commercial drivers at motor parks in selected cities in the study area. Both descriptive and correlation analysis were used for data presentation. Findings indicated that about 60% of the drivers were below 45 years while over 90% of them have no more than secondary education-out of which 27.5% have no formal education. Most of them are paid daily which they considered too meager. The age of vehicle showed that more than 65% were over 10 years old and over 95% of these vehicles are fairly used imported vehicles called "Tokunbo"; which is ridden on equally fairly used imported tyres. Vehicle defects accounted for 43.6% of the causes of accidents from drivers' perspective. Similarly, there is inverse relationship between level of education and cases of road accidents. The paper calls for proactive drivers' education and training as well as effective law enforcement in order to reduce the level of carnage on Nigerian roads.

Keywords: behaviour, commercial, driving, injury, road crashes, transport

Introduction:

Ability to drive successfully from point of origin to destination is an important component of road safety. However, in most part of the world especially in developing countries, substantial number of drivers does not get to their destinations successfully. This occurs as a result of road traffic accidents along the way. Most crashes are unintended, unexpected and could have been prevented by small differences in driver behaviour (Redelmeier et al, 2003).

Most studies on public transportation has focused exclusively on both the vehicle and its associated costs (World Bank, 2005), affordability and level of service (Carruthers et al, 2005; Benmaamar, 2003) as well as on some other indices such as access, waiting and journey time. Similarly, studies on commercial transport in the country have focused on vehicles' characteristics, operation and management as well as funding (Adeniji, 1987; Adesanya and Adeniji, 1998 and Ogunsanya, 2004). Few studies have attempted to show any relationship between the socio-economic characteristics, traffic behaviour and level of safety of commercial drivers. These issues and others are examined in this paper. The paper is divided into five parts including this introduction. Part two is the study area and method of data collection. Socio-economic characteristics of commercial drivers and its implications on road safety are discussed in part three. The Way forward is in part four while summary and conclusion is in the last part.

Part II Study Area and Method of Data Collection

The study area is the Southwest geo-political zone which comprises of cities of Lagos (Lagos state), Abeokuta (Ogun state), Ibadan (Oyo state), Akure (Ondo), Oshogbo (Osun state) and Ado-Ekiti (Ekiti state). The transportation system in the Southwest geo-political zone of Nigeria is about the best developed in the country. The most dominant form of transport in the southwest is road transportation which presently is in poor condition. Oyesiku (2002) in his

analysis of the condition of roads in some cities in the region observed that about 50% of the roads in the zone are in poor condition. The region also accounted for more than 1/3 of the vehicles registered in the country in 2005 (The Punch, 2007) which were mostly fairly imported vehicles. This increase in vehicular ownership coupled with the deteriorating road transport infrastructure may partly explain the recent increase in the number of road mishaps in the region.

Six hundred (600) structure questionnaires were administered to elicit information from commercial drivers in selected Motor parks in southwestern Nigeria. The selected Motor parks were those with the highest number of registered drivers with National Union of Road Transport Workers (NURTW) in each state. The NURTW is an umbrella body of all commercial drivers in the country. The body is responsible for the placement and discipline of drivers. 40% of registered drivers were interviewed in each of the motor parks based on the records kept by the NURTW. Tables of percentages and charts were adopted for presenting both demographic and socio-economic characteristics of the respondents. Similarly, correlation analysis was used to determine the relationship between the educational attainment of the drivers and the occurrence of road accidents.

Part III: Discussion and Analysis

A: Demographic and Socioeconomic Characteristics

3.1 Age Distribution of the Drivers.

The age distribution of the drivers indicates that 21.8% of them are between the ages of 16-30 years, 35.5% between 31-45 years and 27.3% between 45-60 years old. Only 15% of the respondents are above 60 years of age. Similar pattern was observed in all the states. However, both Akure and Ado-Ekiti motor parks have more elderly drivers than any other motor parks in the study area. On the other hand, Ojota in Lagos state and Iwo Road motor parks in Ibadan have

the highest population of youthful drivers. The reason for this is not clear but may not be unconnected with the rate at which unemployed youths move to urban centres (cities) in search of work. All the sample respondents were males, which goes to confirm that commercial driving is exclusively men's job. Culture may have a significant role to play in the sex structure of commercial drivers but the status symbol of women may be a better explanation, as no woman would want to be called a driver because commercial driving is considered to be a menial job as well as being reserved for thugs.

More than 60% of commercial drivers were married. The high percentage of married drivers is expected because most of them are school drop-outs or have secondary school education who immediately upon graduation got married. However, little variations occur from one state to another. Similarly, about 53% of those married have more than one wife. The percentage of those who have more than one wife was found to be high in Oyo, Ogun and Osun states. This may not be unconnected with predominant religions (Moslem and traditional) which allow man to marry more than one wife. In the same manner, more than 60% of those married have more than 4 children. This pattern was similar in all the states.

The educational background of the respondents indicated that more than 90% of them had no more than secondary education- out of which 27.5% of them had no formal education. Ojota motor park (Lagos) has the highest percentage of drivers with secondary education. A substantial number of drivers with no formal education are found mostly in Osogbo and Akure motor parks. The large percentage of drivers (27.5%) who are illiterate has implications for traffic safety in the study area. It means that many of them may not be able to read road signs and markings correctly thereby increasing accident risk on the roads. Further investigations revealed that most of the drivers have other professional jobs besides driving. They were either

artisans (mechanic, vulganizer, furniture maker etc) or retired/ serving civil servants before taking to driving because income from their main occupations could no longer sustain them and members of their families. This is similar to the findings of Benmaamar (2003) in some African countries.

Most of the commercial drivers are paid daily wages which range from N1,000-N,2500 depending on the city and the type of vehicle, which they considered meager. Such drivers noted that after allowance has been made for maintaining their vehicles, what is left is so meager that it can not sustain them and their families. They complained about the incessant increase in fuel price which has also led to job losses in the industry.

Traffic Behaviour of Commercial Drivers

One of the pillars of road safety is the possession of valid and current driver's license. Although in Nigeria, this particular principle has been bastardized because many under aged and those who don't know how to drive are in possession of valid driver's license. Investigations revealed however, that over 70% of the drivers claimed to be in possession of valid driver's license that is still current, 74% of drivers that have current license are the ones plying long distance locations found mostly in Lagos, Ibadan and Abeokuta.

The age of the vehicle determines the level of tear and wear, in terms of depreciation. As vehicle increases in age there is the likelihood that different parts of the vehicle become less effective. Robust evidence suggests that the age of the vehicle has a direct impact on its productivity and maintenance costs (Hine and Chilver, 1994; Benmaanar, 2003). Analysis of the age of vehicles shows that all the respondents are driving fairly used imported vehicle popularly known as "tokunbo". Investigation further revealed that 15.6% of the respondents bought their

vehicles in the last five years, 18.4% between 5-10 years and 34.9% between 11-15 years. In addition, 16.4% of the vehicles are between the ages of 16-20 years, 9.5% between 21-25 years and 5.2% are more than 25 years old. This implies that over 65% of the vehicles are not less than 10 years of age. In fact, a physical examination of the vehicles indicated that most of them had broken traffic lights, torn seats, worn tyres and defective wipers. Similarly, the braking system, throttle and other facilities in the vehicles would have become less effective due to old age. This may have contributed to increasing rate of road crashes in the study area.

However, a state to state analysis shows that, in both Lagos and Ogun states, a relatively high percentage of the drivers bought their vehicles in the last five years. The proximity of Lagos to Sea Port and Ogun state to the border of the Republic of Benin may partly be responsible for this development. Furthermore, not only do drivers drive used imported vehicles that are old, they also use second hand or otherwise known as "tokunbo" tyres. In virtually all motor parks visited drivers have not bought new tyres in the last five years due to escalating price of the commodity. Also, many drivers do not service their vehicles regularly. For instance, only the drivers that ply long distances carry out routine servicing on their vehicles between 3-6 months. On the other hand, some drivers only know that their vehicles are due for servicing when their vehicles can no longer move.

An analysis of the data on drivers' involvement in road traffic accidents indicates that about 58% of the respondents were involved in road accidents at one point or the other in the last five years. About 70% of the accidents occurred between 7am and 6pm. The reason for the high percentage of accident cases between 7am and 6pm is due to the fact that most of the vehicles being used are on the road mostly between these hours of the day. Similarly, vehicles involved in road accident indicates that buses accounted for 44.8% of the total, taxi cabs 20%, trucks 16%

and luxury buses 11.2%. The type of injury sustained indicated that fracture accounted for the highest percentage of 32.7%. Leg injury was responsible for 29.3%, dislocation 19.6% and bruises 9.5%.

The causes of road traffic accidents from the drivers' perspective showed that vehicle defects (burst tyre and brake failure etc) were responsible for 43.6% of the cases, poor road (slippery surface, potholes) 26.0% and driver's error (Over speeding, wrong overtaking, alcohol intake etc) 10% respectively. Weather related causes accounted for 20.4%. It is not surprising that driver's error accounted for such a small percentage as no driver would like to be labeled as a bad driver. Furthermore, a number of drivers identified burst tyre as the most important cause of road accident in the region. This is expected because as noted earlier on, virtually all the drivers use old tyres imported from Europe. With regards to bad roads, the drivers pointed out that potholes dotted the carriage way of roads in most cities which often affect driver's judgment and decision making which subsequently result into road accidents especially when the roads are narrow and circuitous. Over speeding and alcohol consumption were also identified as factors in road accidents among young drivers. Unfortunately, neither the Federal Road Safety Commission (FRSC) nor the Nigerian Police has any functioning equipment (breathalyzer or laser lens) for detecting whether a driver involved in road crashes results from alcohol consumption or not. Moreover, the country has no standardized benchmark for Blood Alcohol Concentration (BAC) as found in some developed countries.

Hypothesis Testing

The essence of this hypothesis is to know whether there is significant relationship between driver's demographic/socio-economic characteristics and level of safety. The dependent and independent variables are cases (number) of road accident and educational level of the

respondents. There seems to be negative correlation between driver level of education and cases of road accidents. This is shown in table 5.

Table 5: Correlation table between Drivers' level of education and Cases of Road Accidents

Spearman's Rho	EDUCATION LEVEL	Correlation Coefficient	1.000	-.424
		Sig.(2-tailed)		-.056
		N	220	220
	ROAD ACCIDENT CASES	Correlation Coefficient	-.424	1.000
		Sig. (2-tailed)	-.056	
		N	220	220

The result shows that the correlation coefficient between educational attainment of respondents and cases (number) of accident is -0.423. This implies that as drivers acquire higher level of education, all things being equal, cases of road accident will decrease, though marginally. This is expected because the drivers would become more enlightened and be able to read traffic signs and markings more correctly as well as complying with traffic rules and regulations, resulting in decreasing traffic accident cases.

PART IV Way Forward

One of the major ways for improving safety on Nigerian roads especially for commercial drivers is to establish driving training institutes for young commercial drivers in cities particularly in southwestern Nigeria. This will afford the commercial drivers the opportunity to be regularly updated with the Highway Code and be abreast with existing and emerging traffic laws and regulations. This should complement the 'testing ground' where prospective drivers are tested before approval is given to the issuance of driver's license.

Similarly there is need to improve the level of education of both the commercial drivers and their 'conductors' because of the negative relationship between education and level of safety. The education of 'conductors' is very important because in most cases conductors 'graduate' or metamorphose into commercial drivers. This strategy could be achieved through the establishment of evening classes where both the commercial drivers and conductors can enroll for regular academic work. And for those who are drop-outs, this will afford them the opportunity to complete their education, because an uneducated man is dangerous to the society. The government must, however, work in conjunction with the National Union of Road Transport Workers.(NURTW), the umbrella body of all commercial drivers, in order to ensure the success of the programme.

Furthermore, there is need for the proper enforcement of traffic laws in the country. All traffic agencies, the Nigerian Police, Federal Road Safety Commission (FRSC) as well as Vehicle Inspection Office (VIO) must shun bribery and corruption by ensuring that all relevant traffic laws are invoked against erring drivers. CRSP (2006) noted that corruption by road traffic officers is an impediment to road safety. In the same way, government should strengthen and overhaul these organizations by providing them with necessary equipment in order to effectively discharge their duties.

Also, penalties for violating traffic laws must be heavy so as to serve as deterrent to other commercial drivers who may wish to exhibit similar traffic behaviour. The situation where traffic laws are violated with light penalties or impunity is no longer acceptable. For instance, any commercial driver that refuses to stop when he sees **STOP** sign should not only be fined heavily but also have his vehicle impounded for a minimum of 30 days. Such heavy penalty will make any driver who wants to commit the same offence to think twice.

The Federal government should provide targeted subsidy such as tyre subsidy to commercial drivers. This could be done by reducing import duties on imported new tyre or on the raw materials for manufacturing tyre. Government can also subsidize the activities of tyre manufacturing industries. This has become necessary because the commercial drivers identified fairly used imported tyres known as “Tokunbo tyre” as major factor in road crashes southwestern Nigeria.

PART V: Summary and Conclusion.

Safety is probably the most important aspect of road transportation in developing countries especially in Nigeria. The importance is always stressed from origin to destination. However, safety on Nigerian roads particularly in the southwest geo-political zone has become a major challenge in last few decades. The paper assesses the socio-economic characteristics of commercial drivers, their driving behavior and its implications for road safety in southwestern part of the country.

Road traffic accidents have claimed over 250,000 lives in the last four decades. Similarly, more than 790,000 others were seriously injured in 926,666 road accident cases within the same period. Findings from the study indicated that about 60% of the drivers were below 45 years of age. Also more than 50% of the drivers are married while over 90% of them have no more than secondary education-out of which 27.5% have no formal education. Most of them are paid daily which they considered too meager. With respect to the age of vehicle, substantial percentage (65%) of the vehicles is not less than 10 years old. These vehicles are fairly used imported vehicles from either Europe or Japan known as “Tokunbo”. Some of them are old, rickety and

smoky. In fact, a physical examination of the vehicles indicated that most of them had broken traffic lights, torn seats, worn tyres and defective wipers.

Furthermore, the causes of road accident from drivers' perspective indicated that vehicle defects and bad roads accounted for about 70% while driver error was 10%. The small percentage of drivers' error is not surprising as no driver would like to be labeled as a bad driver. The time of the accident indicated that most the accidents took place during the day. In terms of injury sustained, fracture accounted for about 33% of the total. Finally, correlation analysis showed a negative correlation between education attainment and cases (number) of road accidents. The paper calls for proper education of commercial drivers (and conductors) through the establishment of training institutes, effective enforcement of traffic laws as well as stringent penalties for erring drivers. It is expected that this will make them to be safety conscious and result in positive driving behaviour.

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