CULTURAL DIMENSION TO PUBLIC TRANSPORT SAFETY IN IBADAN, NIGERIA

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ABSTRACT
Culture is an indispensable part of any society. The study examined the dimension of culture to the safety of public transportation in Ibadan metropolis. Both primary and secondary data were collected for the study. A pre-test questionnaire was administered on 222 professional interstate drivers who were randomly selected from the membership records kept by Nigerian Union of Road Transport Workers (NURTW) in the selected motor parks. These were complemented with Focus Group Discussion (FGD) and Key Informants Interviews (KII). Secondary information was sourced from the literature, NURTW office at Olomi (Ibadan) and from the Trans-City Transport Company (TCTC) office in Ibadan. Findings indicated that 62.2% of the interstate drivers had driven in the last 10 years, 68.9% had no formal driving training and 98.6% were aware that other commercial drivers use charms such as 'Egbe', 'Ajabo' and 'Owo' while driving. Similarly, 58.1% believed that killing of duck, if not appeased, can result in road crashes, 49.1 % was of the opinion that transporting mortar without putting coin in it can lead to road crashes and 30.2% noted that carrying corpse without inserting palm fronds or leaves on the vehicle may result in road crashes. The study suggested further enlightenment and training programme on road safety for the interstate commercial drivers as well as the integration of formalized traditional road safety devices into national road safety policy.

INTRODUCTION
The public (road) transportation system, otherwise known as commercial road transport in Nigeria, still remains the main mode for moving people especially those who have no vehicles of their own. Studies on public transportation in Nigeria has focused extensively on journey characteristics, vehicles conditions, funding as well as the operation and management of commercial transport in the country (Adeniji, 1987; Adesanya and Adeniji, 1998 and Ogunsanya, 2004). For instance, Adesanya and Adeniji (1998) observed that most of the existing commercial vehicles were often overloaded, old, dilapidated and ill-maintained; which resulted from care-free attitude of the operators. This has enormous implications on the safety of both the operators and users of commercial transport in Nigeria.

Most literature on road safety that discuss preventive actions to road crashes are based on 'rational' approaches and seldom take into consideration people's 'non-rational' explanation of causes (Dixey, 1999). Cultural influences may, to a large extent, contribute to road crashes as pointed out in a study in Ivory Coast where professional drivers expressed high degree of superstitious beliefs (Kuouabenan, 1998). However, in most developing countries, particularly in Nigeria, scarce studies exist on the role that culture plays in road traffic causation. Although Ogun **(2000)** and Arosanyin and Ipingbemi (2004) literarily examined the influence of culture particularly religion in road safety, these studies did not provide empirical analysis that should serve as a platform to really understand how cultural beliefs affect the decision of drivers on the road. The focus of this study, therefore, is to provide empirical baseline information on the implications of culture to road safety in Ibadan Metropolis.

Literature Review

No agreement exists yet among scholars on the definition and meaning of culture (Swidler, 1986; Alexander and Smith, 2001; Kupper, 1999) but it has been described as a system of belief, values, representation and shared experiences among members of a given social group (Kouabenan, 2009). Geertz (1973) argues that human beings are incomplete animals who gain overall completion through the specific cultural environment in which they live. The culture and belief of a group have an important role to play in shaping group's behaviour. The cultural mechanisms of each group to some extent also differentiate its members from other groups and influence group members' decision making and its activities (Irwin, 1997). Each culture has its own traits and mechanisms that are unique to it and include norms, behavioural expectations, life styles and an attitude framework, all of which differ from one group to another. Swidler (1986) was of the opinion that each culture has its own 'tool kit' and particular cultural characteristics that cause its members to interpret the environment and to make decisions in a particular manner. It is assumed, therefore, that people from different cultures and groups will behave in a different manner in a similar situation, because different cultures lead to different interpretations of the environment and perhaps different behaviours (Factor et al, 2007). Also, it is through culture that people build and internalize a system of belief that is inseparable from their vision of the world and that influences their interpretation of the natural environment (Dake, 1992).

The cultural belonging of a driver has effect on the general perception of the driver about the traffic system and on his style of his/her driving as well as (in the end) on the driver's behaviour in a specific situation while driving. In other words, the type of risk, danger and safety a driver will exhibit will depend, to certain extent, on the cultural belief of the driver. Kouabenan (2009) noted that risk is based on explanatory schemas capable of accounting for accidents and explaining why and how it happens. Among these schemas, according to him, are customs, beliefs and religious or animistic practices passed on from one generation to another. Such deep-rooted and persistence beliefs can lead to systematic judgment errors that may cause any new contradictory information to be overshadowed (Kruglanski and Ajzen, 1983).

Reinforcing this statement, Kouabenan (1998) pointed out, on the basis of his findings from Ivory Coast, that professional drivers expressed high degree of superstitious beliefs. For instance, many drivers shared deep-rooted mystical and superstitious attitude that may lead to systematic errors in the appraisal of risks and possible causes of road traffic crashes. He noted further that such mystical attitude or beliefs may lead people to take risks or to think that certain more or less ritual practices can ward off fate or help one face dangerous situations. Also, a similar study among taxi drivers in South Africa showed a direct association between superstitious belief and accident involvement (Peltzer and Renner, 2003). For instance, 'bad luck' (superstition) was seen as an important causative factor for accident attributions for taxi drivers with superstitious beliefs. Among the components of superstitious beliefs considered by both studies included the belief that accidents are caused by witchcraft, bad luck, black cat crossing the road, and seeing an owl while driving. Though in many part of the world the cultural aspects of road safety have not been explored because culture is taken for granted, immersed in inexperience and is therefore invisible and difficult to study (Swilder, 2001). Similarly, cultural analysis is perhaps complex, as there is no agreement on the boundaries of the domain (Mattani, 1996).

It is therefore imperative to know that the way a driver behaves on the road may be influenced by the driver's cultural values and belief orientation. For instance, among the Yorubas of Southwestern Nigeria, an individual may cancel a journey because he/she

hits his left foot against a stone; to him/her it is a sign from the gods to warm traveler that something bad is about to happen, hence he/she may decide not to embark on the journey. Similarly, a commercial driver may refuse to carry a mortal except a coin is put inside it or a driver may insist on not carrying a corpse unless palm fronds (or recently cut leaves) are stuck on the vehicle. Similarly, when a vehicle kills a duck, a coin must be put in the dead dock's mouth in order to prevent the driver from being involved in any road accidents. The question now is that are these cultural practices/ beliefs still valid in our society?

Study Area and Methodology

Ibadan is located near the forest- grassland boundary of south western Nigeria. It is approximately 150 km from Lagos. The city comprises mostly of people of the Yoruba ethnic group who speak the Yoruba Language. Like all other Yorubas, they claim to have descended from Oduduwa. They have rich culture and belief in strong kingship ties as a means of holding the society together. Ibadan has a tropical wet and dry climate with a lengthy wet season and relatively constant temperatures throughout the course of the year. The climate is characterized by a rainy season from March through October, while the dry season stretches from November to February during which Ibadan experiences the typical West African harmattan.

The economic activities undertaken by people in Ibadan include trading, public service employment, and agriculture which is decreasing in importance. The volume and diversity of demand for food products stimulated the need for agricultural production within the vicinity of the city. Many people in the city engage in agriculture. Fourchard (2003) argued that agricultural activities remained important in Ibadan, like many other African towns, with 37 per cent of the population engaged in agriculture. This percentage is gradually reducing due to the fast growing commercial and industrial activities in the city. The predominant crop production in Ibadan is staple food - cassava, maize and vegetables such as Chinese spinach, okra, cucumber, tomatoes and pepper. Family land and leasehold accounts for the dominant part of land tenure systems of urban vegetable production. Farm sizes, which average below one hectare, as well as, the number of farm holdings by individual farmers are a factor of land tenure.

A large proportion of the road network in the city is narrow, winding, lack pedestrian sidewalk and are in a state of disrepair since most of the existing roads were constructed in the late 1940s and early 1950s when the city's economic base and territorial extent were very limited (Filani, 1994). Roads are poorly maintained which result in road congestion and high vehicle operating costs. Road shoulders and walkways have been taken over by street trading forcing pedestrians to share road space with moving traffic. Roads have few or no traffic signs to alert the motorist of curves, hills, and intersections. Inter-city public transport system consists mainly of taxi and buses. These buses are in various sizes and shapes. Most of these vehicles have good appearance with adequate 'navigation aid' such as mirrors and traffic lights.

Over the years, increase in population, city expansion, increase in urban activities and increase in number of vehicles have placed greater demand on roads in the city. About 50 percent of houses in the traditional core of the city are not accessible to vehicular traffic (Egunjobi, 1999). This situation has extended to the rapidly expanding slum areas of the city. Different problems associated with transportation in Ibadan are traceable to the lack of physical planning in many parts of the city and the inability to adequately control and manage public transport by the local and state governments (Adelekan, 2016).

Both primary and secondary data sources were explored for this study. The primary source made use of interviews and structured questionnaire. The researcher relied extensively on the use of Focus Group Discussion (FGD) and Key Informal Interview (KII) because more elaborate information could be elicited through these sources due to the nature of the study. Nine sessions of FGDs were conducted with commercial drivers in the three selected motor parks while one KII each was conducted with one traditional practitioner and an official of Nigerian Union of Road Transport Workers (NURTW). With respect to questionnaire administration, the three most patronized interstate motor parks (Iwo Road, Gate and Ojoo) in Ibadan Metropolis, as provided by NURTW and supported by Trans-City Transport Company (TCTC) in Ibadan, were purposively selected. Two hundred and twenty-two (222) copies of the questionnaire were administered on professional drivers who were randomly selected from the membership records kept by Nigerian Union of Road Transport Workers (NURTW) in the selected motor parks. Secondary information was sourced from the literature, NURTW office at Olomi (Ibadan) and from the Trans-City Transport Company (TCTC) office in Ibadan. Descriptive statistical analysis such as the use of tables and percentages were adopted for data analysis.

Data Interpretation and Discussion

This section contains information on the demographic and socio-economic features of interstate commercial drivers, their driving experience cultural dimension to road safety.

Demographic and Socio economic Characteristics

Table 1: Demographic and Socio-economic Characteristics of Commercial Drivers

Age of Respondents	**Frequency**	**Percentage**
18-40 years	33	14.9
41-60 years	172	77.5
Above 60 years	17	7.7
Total	**222**	**100.0**
Sex of Respondents	**Frequency**	**Percentage**
Male	222	100
Total	**222**	**100.0**
Educational Status	**Frequency**	**Percentage**
No Formal Education	28	12.6
Primary Education	62	27.9
Secondary Education	124	55.9
Tertiary Education	8	3.6
Total	**222**	**100.0**
Marital Status	**Frequency**	**Percentage**
Single	12	5.4
Married	210	94.6
Total	**222**	**100.0**
Family Size	**Frequency**	**Percentage**
3	18	8.1
4	40	18.0
5 and Above	164	73.9
Total	**222**	**100.0**

Source: Author's survey, 2016

The age distribution of the commercial drivers as depicted in Table 4.1 indicated that 14.9% respondents were within 18-40 years of age, 77.5% were between 41-60 years and 7.7% of were above 60 years of age. This shows that the substantial percentage of the respondents falls within the active population. All commercial drivers interviewed were male which implies that commercial driving is predominantly male occupation.

Similarly, the educational status of interstate commercial drivers indicated that majority of the drivers did not go beyond secondary education. Those with tertiary education accounted for 3.6%. As noted earlier in some of our studies, the poor level of education constitutes a great challenge to road safety as many of them will find it difficult to read and interpret or decode road signs on the highways. Most (73.9%) of the respondents were married and had large family size of more than five people (Table 1). Observed general tendency for commercial drivers to have large families may likely put pressure on these drivers to hassle for more money which may have deleterious safety implications.

Traffic Characteristics of Commercial Drivers

Table 2: Driving Experience (Years) of respondents

Years of Driving (Years)	Frequency	percentage
1-5	10	4.5
6-10	128	57.7
Above 10	84	37.8
Total	**222**	**100.0**
Valid License Possession	Frequency	Percentage
Valid	192	86.5
Not Valid	30	13.5
Total	**222**	**100.0**
Formal driving training	Frequency	Percentage
Yes	69	31.1
No	153	68.9
Total	**222**	**100.0**

Source: Author's survey, 2016

The years of experience of sampled commercial drivers indicated that 4.5% of them had been driving in the last five years, 57.7% had driven for between 6 and 10 years while 37.8% had driven for more than 10 years. In terms of possession of driver's license, about 90% of the respondents had valid driver's license. A large proportion (68.9%) of commercial drivers never went through formal training before they ventured in to driving, as only 31.1% of them received formally trained on driving (Table 2). Some of them learned the art of driving through friends, relations, and siblings, among other. Observed informal process of learning driving by close to 70% of sampled commercial drivers in the study area has serious implications for road safety as many of them may be unaware or ignorant of the rules of the road.

Table 3: Other drivers' involvement and causes of road crashes

Other drivers involvement in road crashes	**Frequency**	**percentage**
None	5	2.3
1	15	6.8
2	65	29.3
3	49	22.1
4	33	14.9
More than 4	55	24.8
Total	**222**	**100.0**
Perceived causes of their road crashes	**Frequency**	**Percentage**
Break failure	13	6.0
Over speeding	69	31.7
Over loading	47	21.6
Bad roads	15	6.9
Impatient and distraction	37	17.0
Poor vehicle maintenance	37	17.0
Total	**218**	**100.0**

Source: Author's survey, 2016

Due to the fact that only few drivers do self-admit to commit error or make mistake on the road that usually leads to road crashes, the researchers asked the commercial drivers to comment on their colleagues who have been involved in road crashes and the possible causes. Investigations revealed that only 2.3% of the respondents affirmed that their colleagues had not been involved in road traffic crashes. 6.8% had colleagues that had been involved in road crashes once, 29.3% had colleagues that had been involved twice, 22.1% had colleagues that had been involved on three occasions and 14.9% of the respondents had colleagues that had been involved in road crashes on four occasions. About one quarter (24.8%) of the respondents had colleagues that had been involved road crashes on more than four occasions. In other words, over 90% of the respondents had colleagues that had been involved in multiple road crashes (Table 3). Investigations on respondents' perceived causes of the road crashes revealed that the proportion of them that attributed road crashes to the following factors: Break failure, 6.0%; Over speeding, 31.7%; Over loading, 21.6%; Bad roads 6.9%; Impatient and distraction, 17.0%; Poor vehicle maintenance, 17.0%; and Human error, 70% (Table 3).

Use of Charms in driving

The advent of Western civilization and religion, coupled with scientific revolution in the 20th century has tended to obscure the relevance of 'traditional science' to society. Even in agriculture and medicine where knowledge and practice of traditional science played a significant role prior to the period of Western scientific explosion, its importance nosedived. In Nigeria and other parts of the developing world, recent efforts are geared to evolving and establishing a synergy between Western and traditional sciences in solving societal problems. Despite these recent efforts, majority of the citizens are psychologically being cowed to openly admit their using or adopting traditional methods (science) in solving some of their challenges. It is as a result of the observation that many citizens do apply traditional sciences in ensuring safety form road crashes that prompted the researchers not to directly ask commercial drivers whether they utilize

traditional science, such as charms, to ward off road crashes. Instead, they were asked whether they were aware of their colleagues who use traditional science while driving. Some culture–related road safety issues were also further explored.

Table 4: Awareness and Major Charms used in Driving

Awareness of the use of Charm	**Frequency**	**percentage**
Aware	219	98.6
Not Aware	3	1.4
Total	**222**	**100.0**
Major of charms known and used in driving	**Frequency**	**Percentage**
Egbe	128	**58.4**
Ajabo	65	**29.7**
Owo	26	**11.9**
Total	**219**	**100.0**

Source: Author's survey, 2016

The study revealed that 98.6% of commercial drivers were aware that some of their colleagues using charms when driving. Further investigations on specific traditional science the drivers were aware that their colleagues in interstate road transportation were using revealed that 58.4% were aware that some of their colleagues were using 'Egbe'; 29.7% were aware of their colleagues using 'Ajabo' and 11.9% were aware of the use of employed 'Owo' for safety when driving. Focus Group Discussion (FGD) sessions with commercial drivers revealed that these charms ('Egbe'- risk evader; 'Ajabo'- risk transferer; and 'Owo'- risk neutralizer) are used (or 'applied') in diverse forms. Some are worn as armlets, small towels, bracelets rings, charm-belts and chains. Some are attached to vehicle keys, while some are used for decoration and kept as horse tails in the vehicles. These traditional science devices can be hung in any part of the vehicle, (in the roof, under foot mats, in the save etc.). On rare occasions, some are eaten or swallowed, incised into blood circulation, attached to or sewn to work cloths and some are kept in pockets.

The workability of each charm was further investigated through interviews. In the event of road crash, 'Egbe' mysteriously takes the user to a safe place and in some instances the person would suddenly be seen walking towards the vehicle that had just crashed, instead of being one of the victims of the crash. Another scenario is that if a user of "Egbe" sits with a friend or relation in the vehicle and if the body of his friend or relation touches the body of the user of "Egbe", in the event of a crash, both of them will mysteriously be ferried away uninjured from the crash to a safe location.

'Ajabo', unlike 'Egbe' does not mysteriously ferry the person that puts it on away from the crash. It works by transferring whatever harm, injury or death the wearer might have suffered to another person in the vehicle. "Owo' works differently. 'Owo' guarantees full protection for both the vehicle and the person who puts it on. A user of "Owo" will have his/her vehicle go freely and nothing evil will happen to it even if all other vehicles are involved in any evil on the road. It also works in such a way that if the vehicle is supposed to be involved in a crash in a particular day, the vehicle will mysteriously not start when the vehicle key is inserted into the ignition to start the vehicle. Even if motor mechanics are brought to work on the vehicle, it still would not start. This particular charm provides an umbrella for all forms of safety and security like road crashes, armed robbery attack, traffic agencies at checkpoints etc.

It must be noted, however, that the continued efficacy of these traditional sciences depends on the user adhering to some rules and regulations guiding its usage. For instance, the user must believe in it, be truthful, avoid stealing and regularly makes necessary sacrifices. In other words, if the user (driver) of the charm swears falsely, fatal road crash may occur and claim his life. Also, if the user snatches the wife of a colleague or if the driver is engaging in extramarital affair with the wife/wives of fellow drivers, he may die from road crashes.

The implications of the foregoing is that the driver may become over-confident while driving, knowing fully that he may likely not be harmed in the event of a road crash. For instance, any driver using Egbe (risk evader), Ajabo (risk transfer) and Owo (risk neutralizer) can afford to drive recklessly (such as wrong overtaking or over–speeding) because he beliefs that he cannot be a victim if road crash occurs. This has serious implications for road safety because of the way the driver will behave behind the wheel.

Other Cultural Issues

The other cultural issues considered in this sub-section are duck myth, transporting of mortar and carrying corpse.

The Duck Myth

Some animals are considered sacred and must not be killed violently without being appeased. One of such animals is duck. Most respondents agreed that killing a duck with a vehicle is forbidden. However, if it is accidentally run over by a vehicle, the driver must put a coin in the mouth of the duck to ward off evil occurrence. Consequences of failing to put a coin in the mouth of the 'slain' duck, as perceived by the respondents are: involvement in road crash (58.1%); death of the driver (22.5%); invitation of evil curse on the driver (15.3%); and the driver continuously having ill-luck (4.1%) (Table 5).

Table 5: Killing of Duck and its Consequences

Reasons for not killing duck	Frequency	Percentage
It will lead to accident of the vehicle that killed the duck	129	58.1
It will lead to death of the driver	50	22.5
Curse will be laid on the driver	34	15.3
The driver will be having ill luck	9	4.1
Total	**222**	**100.0**

Source: Author's survey, 2016

Transportation of Mortar

The issue of transporting mortar was further discussed with the interstate commercial drivers and they all agreed that coin must be put inside a mortar while transporting it. This is very expedient because failure to do so may result in road crashes and other dire consequences as shown in Table 6.

Table 6: Transporting Mortar

Transporting Mortar without a coin	Frequency	Percentage
Vehicle Malfunctioning	49	22.1
Lead to Road Crashes	109	49.1
Unexplainable death	19	8.6

Breakdown of Vehicle	45	20.3
Total	**222**	**100.0**

Source: Author's survey, 2016

For instance, 22.1% of the respondents believed that not dropping coin in mortar could lead to the malfunctioning of the vehicle conveying it; 49.9% believed that the vehicle could crash; 20.3% believed that vehicle could breakdown; while 8.6% believed that it could cause unexplainable death of the driver and/or owners of the mortar. In-depth interviews and Focus Group Discussion sessions with the commercial drivers and traditional religions devotees affirmed that failure to drop a coin inside the mortar while transporting it can lead to tyre burst or engine malfunctioning. The necessity to drop a coin in the mortar also has some mystical connotations. For instance, Yorubas of Southwestern Nigeria, belief that evil spirits reside inside trees in the forest. Falling trees to make mortars means depriving these spirits of what they belief to be their rightful abode, and term this action 'wickedness' on the part of human beings, that are bent on destroying their homes by felling trees. The belief is that evil spirits see human beings carrying mortars inside vehicles as an opportunity to avenge human beings' wickedness by causing fatal accidents. These evil spirits could, however, be appeased by dropping a coin inside the mortar. It is also generally believed that putting a coin in the mortar mysteriously makes the mortar lighter in weight.

Carrying of Corpse

In many developing countries, particularly in Nigeria, palm fronds or leaves are inserted on any vehicle conveying a corpse. This is a departure from what we have in most developed countries where in many cases ambulances are designated to carry corpse or hearse with flowers inserted on them. The study investigated the perceived consequences of not inserting leaves or palm fronds on any vehicle transporting a corpse (see table 7). Close to a half (48.2%) of the respondents believed that the vehicle would not move freely; 30.2% believed that it could lead to road crashes; 16.2% believed that occupants of the vehicle wound experience mysterious things; and 5.4% believed that the vehicle would be faulty. A better understanding of the respondents' believes consequences of failing to comply with this practice were provided during focus group discussion sessions. For instance, it was emphasized that any driver that fail to tie leaves or palm fronds on the vehicle being used to convey a corpse would have the nightmare of seeing the dead person running after the vehicle whenever he dared look into the rear mirror of the vehicle. This would frighten him and could lead to the vehicle crashing. Some drivers also provided an antidote to this consequence of not tying leaves or palm fronds to the vehicle carrying a corpse: all mirrors in the vehicle should be covered to prevent the driver from looking into the mirror with the possible dire consequences. It was generally emphasized that the main reason for tying leaves or palm fronds to vehicles conveying corpses is to appease the spirit of the corpse.

Table 7: Transporting Corpse

Transporting Corpse	**Frequency**	**Percentage**
Reasons for attaching leaves while transporting Corpse	**Frequency**	**Percentage**
The vehicle will be faulty	12	5.4
The vehicle will not move freely	107	48.2
Lead to road crashes	67	30.2
Occupants of the vehicle experiencing mysterious things	36	16.2
Total	**222**	**100.0**

Source: Author's survey, 2016

RECOMMENDATIONS AND CONCLUSION

In view of the influence of cultural beliefs on the safe use of road by commercial drivers, it is important that some pertinent recommendations are made.

Road safety agencies, particularly the Federal Road Safety Commission (FRSC), should focus more on best practices enlightenment programme. This could be through sponsoring jingles on road safety, distribution of leaflets and pasting of posters on board or use of digital boards with messages on safe use of roads. It is suggested further that most of these enlightenment programme are conducted in local languages to give better understanding to drivers who are illiterate or semi-illiterate.

The existing drivers' training institutes should be strengthened and well equipped to provide driving knowledge to all intending drivers. All new commercial drivers must satisfactorily pass through driver training institute before a license can be issued to such driver. This has become necessary due to a large number of commercial drivers who learned how to drive through friends, relations and siblings.

Commercial drivers, particularly the interstate commercial drivers' require continuous training and re-training in order to be able to cope with their responsibilities on the road, thereby enhancing their performance. The road environment is very complex and commercial drivers must have good knowledge of the road environment in terms of the ability to read the road signs and obey traffic rules. Training and educational programmes on road safety should be provided regularly for public transport drivers by stakeholders in road safety.

Furthermore, in drafting road safety policy, conscious efforts should be made to take into consideration the cultural dimension to road safety. If some commercial drivers still rely on traditional safety methods to drive, it is important for road safety stakeholders to see how these traditional methods of road safety can be integrated into road safety policy, if they cannot be discarded. This will help to make traditional method to road safety to become more formalized and regulated.

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