

# **RESEARCH ARTICLE**

# TRAFFIC MORTALITY, MORTALITY AWARENESS, AND ATTITUDE TO ROAD SAFETY

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#### ..... Manuscript Info

## Abstract

Manuscript History Received: 10 February 2021 Final Accepted: 16 March 2021 Published: April 2021

Key words: -Traffic, Mortality, Road Users, Road Safety, Attitude

..... Road traffic accidents in Nigeria are increasing at an alarming rate and have raised one of the country's primary concerns. The current study aimed to investigate the effect of mortality awareness on attitude towards road safety. This study's main objective is to ascertain if subtle reminder of traffic mortality will influence road users 'attitudes towards road safety. One hundred and three (n=103) road users from public bus terminals, and private car parking garages in the Enugu State of Nigeria participated in this study. A cross-sectional survey design was adopted. Data were collected using a modified version of the Attitude towards Safe Driving Scale (ASDS) and a scale developed to trigger mortality thoughts. The regression analysis conducted on the data established a positive association between a subtle reminder of mortality and attitude towards road safety at F (1,101), 367.67, P<.000. More so, an adjusted  $R^2$  of .547 indicates that mortality reminders accounted for 54.7% of the variation in attitude towards road safety. The study concluded that mortality reminders are essential in controlling traffic-related accidents and violations. The practical implication and recommendations are discussed.

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#### ..... **Introduction: -**

Road traffic accidents in Nigeria are increasing at an alarming rate and have raised one of the country's primary concerns (Adebola et al., 2015; Sanusi et al., 2016). There are generally growing incidence, morbidity, and mortality rates of road traffic accidents (Bun, 2012). Nigeria has recorded severe road accident and more road safety measures need to be introduced for its effective management (Atubi & Gbadamosi, 2015). Extensive studies have been conducted on road traffic accidents in Nigeria (Abdulkabir, 2015; Anyabolu et al., 2020; Ediomo-Ubong et al., 2018; Emmanuel Igho et al., 2015; Gbadamosi, 2015; Onyemaechi & Ofoma, 2016; Osayomi, 2013; Williams et al., 2015). Many lives have been lost and injuries sustained due to traffic accidents worldwide, and the situation is on the increase, especially in low-income countries.

Road transportation is among the essential means of transportation worldwide and has accounted for many losses of lives and properties. Road traffic accidents are among the leading cause of injuries and deaths and the most common cause of disability(Solagberu et al., 2009). Most of the traffic crashes recorded have been attributed to human error, comprising over speeding, non-use of seat belt, use of mobile phone while driving, road rage, drunk driving, traffic violation (Akanbi et al., 2009; Petridou & Moustaki, 2000; Sharma, 2016; Solagberu et al., 2009). These perceived causes of road traffic accidents can be attributed to an individual's attitude toward traffic safety.

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Mortality awareness is operationalized in terms of the understanding that one's death is inevitable, according to Terror Management Theory (Greenberg et al., 1997). The realization that death can occur at any point in time produces psychological conflict that motivates an individual to embrace cultural values and avoid certain behavior that can sustain death's inevitability. Studies have shown that slight reminders of mortality can increase a person's anxiety and proclivity to respond defensively (Burke et al., 2010; Greenberg et al., 2003; Levasseur et al., 2015; Routledge & Juhl, 2010). Researches in recent years have started to reveal the influence of mortality awareness manipulations on behavioral change (Burke et al., 2010; Grant & Wade-Benzoni, 2009; Santos et al., 2007; Taubman-Ben-Ari & Findler, 2005; Vess et al., 2009). Thus, the present study is concerned with the role of mortality salience on attitude towards road safety.

## The Present Study

Most of the literature on curbing road traffic accidents suggested public awareness, strict enforcement of rules and regulations, maintenance of vehicles, and offenders' punishment (Aderamo, 2012; Ngallaba et al., 2013; Oduro, 2012; Sharma, 2016). Okpiliya et al. (2016) examined the trend of road traffic accidents and the extent of casualties in Taraba state, Nigeria. They recommended that for accidents to be reduced, roads should be built to specifications, routine checks on drivers' behavior, constant road maintenance, and government agencies' enlightenment campaigns' (2014) recommended that the use of a safety helmet and belt must be enforced and strict rules regarding license issuing and ban on using a mobile phone while driving. Organizations and the government have made attempts to identify relevant causal variables so that meaningful measures could be taken to control traffic accidents (Philip et al., 2013). Thus, the present study aimed to examine mortality awareness as a factor that could influence driver's attitudes towards road safety. The study's primary objective is to ascertain whether subtle reminders of traffic mortality would influence road user's attitudes towards road safety.

## Hypothesis

For the study's purpose, it is hypothesized that subtle reminder of traffic mortality would influence road users 'attitudes towards road safety.

# Method: -

One hundred and three (n=103) road users from public bus terminals, and private car parking garages in the Enugu State of Nigeria participated in this study. Our choice of these locations is due to the study purpose. Participants included males and females who have driven a vehicle for more than one year. A cross-sectional survey design was adopted.

## Measures: -

## Attitude to Road Safety

Attitude towards road safety was measured with a modified version of the Attitude towards Safe Driving Scale (ASDS) initially developed by Masuri et al.(2018). The 46-item scale was reduced to 22 items for the study. Items were rated on a 5-point Likert-type scale (1 =Never, 5 =Always). A higher score on this scale indicates a positive attitude. The instrument was validated following a pilot study, and .87 Cronbach's alpha was obtained.

#### **Mortality Awareness**

The scale consisting of computer-generated images of varying morbidities and mortalities occasioned by road accidents was used as a subtle reminder of death on the road.

#### Procedure

Road users comprising commercial buses, tricycles, private car drivers from different locations in the Enugu Metropolis participated in the study. The participants were primarily selected from car parks and loading terminals. A total of 123 road users were approached and asked to participate in a survey to better understand the role of death reminders on safe driving. In all, 116 road users out of the 123 approached consented to take part in the study. Thus, the study instrument was given to them.

## **Result: -**

One hundred and sixteen (116) copies of the scale administered were completed and collected immediately. However, only the adequately filled questionnaires (i.e., 103) were subjected to statistical analysis. The remaining 11 were rejected due to improper completion. A simple linear regression analysis was conducted on the data to

ascertain the effect of mortality awareness on road safety attitude. The study revealed that subtle mortality reminders statistically significantly predicted the participant's attitude towards road safety at F (1,101), 367.67, P<.000.

	95% CI for B							
	В	LL	UL	SEB	β	$R^2$	t	Sig
Model								
Constant	2.839	2.785	1.923	.034			56.689	.000
ATRS	749	836	662	.045	730	.547	-16.736	.000

Table showing the result of the simple regression analysis conducted to determine the effect of mortality awareness on attitude towards road safety.

Note. ATRS= Attitude towards Road Safety; B = Unstandardized regression coefficient; CI = Confident Interval; LL = Lower Limit; UL = Upper Limit; SEB = Standardized error of the coefficient;  $\beta$  = Standardized coefficient;  $R^2$  = Coefficient of determination. \*P<.000.

# **Discussion: -**

The current study was concerned with investigating the effect of mortality awareness on attitude towards road safety. The regression analysis conducted on the data established a positive association between a subtle reminder of mortality and attitude towards road safety at F (1,101), 367.67, P<.000. More so, an adjusted  $R^2$  of .547 indicates that mortality reminders accounted for 54.7% of the variation in attitude towards road safety. The result suggests that most road users will comply with driving safety regulations when death is made salient. Consistent with a previous study (Măirean & Havârneanu, 2021), subtle reminder of death proves to be effective in curtailing road abuses and reducing traffic morbidity and mortalities.

Road users are aware of the traffic tips such as avoiding over speeding, making use of seat belts, avoiding drinking or using mobile phones while driving, putting on your helmet, making use of the pedestrian bridge, avoiding playing on the road, etc. Most often, we see people behaving contrary to the stipulated road safety rules, leading to traffic accidents. For instance, some motorists will intentionally accelerate beyond the speed limit with the conviction that nothing will happen. Motorcyclist will ignore the helmet's use because he does not believe they can fall. a pedestrian will put on earphone while walking on a busy road because they do not think that anything will happen. The current finding indicates that if drivers are reminded of the possibility of death on the road, they will be conscious of their driving for the moment.

## Limitations, strengths, and future directions

Although, the current research provided insight into the effect of mortality awareness on attitude towards road safety. The study encountered some limitations that could affect the generalization of the finding. For instance, the small sample size and self-report method pose a severe limitation to the study. Thus, the study failed to establish cause-effect relation. However, the study contributes to road safety literature by identifying mortality reminders as an integral approach that could be used to reduce traffic violations and accidents. Perhaps, to the best of our knowledge, no study has attempted to investigate the role of a subtle reminder of death on attitude towards road safety in the Nigerian context; hence, the justification for this current study. However, it is not clear what factors moderated the variance in response to mortality salience. Therefore, future researchers should endeavor to utilize data from more comprehensive sources and establish a cause-effect relationship.

## **Practical implication**

To our understanding, the current study provided crucial data capable of enhancing the Federal Road Safety Commission (FRSC) role and other transport regulators in alleviating the menace of traffic violation and accident in Nigeria.

# **Conclusion:-**

This study is intended to investigate the effect of mortality awareness on attitude towards traffic safety. The finding revealed that mortality awareness significantly predicted attitude towards road safety. Therefore, it is concluded that

mortality reminders are essential in controlling traffic-related accidents and violations. It is recommended that the government incorporate mortality awareness strategies in combating traffic violations and reducing accidents.

## Funding

The study was funded by the Tertiary Education Trust Fund (TetFund)

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