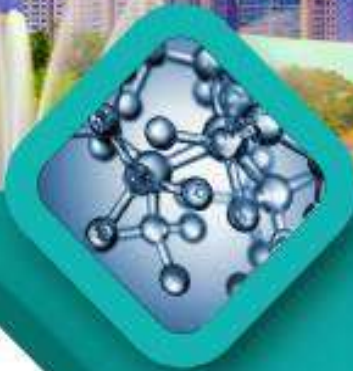


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PREFACE

The 3rd International Conference on Science, Engineering and Social Sciences, ICSESS'17 is organised jointly by Universiti Teknologi Malaysia (UTM), International Student Society-Nigeria (ISS-Nigeria), UTM International and International Student Center (ISC). The theme for this year conference is "*Promoting Innovative Multidisciplinary Research for Sustainable Development*". This promotes and encourage innovative and novelty for sustainable development in wide range of science, engineering, social science researches in terms of approaches and methods, advanced technology, professionalization, experiences, and culture.

The responses from participants for this conference is overwhelming, well attended, and successful. Our participants are from Universiti Teknologi Malaysia (UTM), School of Business, Yogyakarta, Indonesia, Universiti Tun Hussein Onn Malaysia (UTHM), University Andalas, Kampus UNAND Limau Manih, Padang, West Sumatera, Indonesia, Universiti Teknologi Mara (UITM), University of Jos Nigeria, Federal University of Technology Minna Nigeria (FUTMINNA), University of Dammam Saudi Arabia just to mention a few. Hence, this conference provides a good platform for professionals, academicians and researchers to widen their knowledge and approach on latest advances in research and innovation. Papers presented in these conference cover a wide spectrum of science, engineering and social sciences.

Finally, a note of thanks must go to ICSESS'17 central working committee for their remarkable dedication in making these conference a success. We hope the event will prove to be an inspiring experience to all committee members and participants.

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Red Light Running: Challenges and Implications in Minna, Nigeria

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ABSTRACT

This research pursued the objectives of assessing the awareness, perception, and levels of adherence of road users to traffic rules and regulations. The study was carried out in Minna and the major signalized roads were the target of the research. The research applied the survey research methodology, which involves carrying volumetric count of vehicles running the red lights on the signalized routes. The research therefore, found out that, majority of the violators of the traffic signals were the motorcycle riders, closely followed by the tricycle operators; the commercial vehicle owners also form a major percentage of violators of the red light rules in the city. The research, therefore, recommended that, strict measures aimed at ensuring immediate compliance with the traffic signals should be implemented, through fines and sanctions on violators to impoundment of offending vehicles. The research concluded that, if instant measures are not put in place to check the menace of the red light running, it will have serious adverse effect on the social and economic strata of the city.

Key words: Traffic Signals, Riders, Red Light, Violation, Signalized Roads

INTRODUCTION

Over the years, the basic measures to address road traffic accidents (RTAs) in Nigeria have been characterised by a lack of strong political will, concern and priority (Lee *et al*, 2007). Usually the responses experienced have been characterised by high vigilance following a major road accident, which gradually dies off with the passing of time (Kulanthayan, 2000). Manifestation of violation of road traffic rules in Nigeria includes; failure to use seat belts, over speeding, reckless driving, dangerous overtaking, driving without authorized plates, lack of fire extinguisher, making phone calls while driving, failure to obey traffic lights, traffic signs and over loading among others. Private and commercial motorcyclists are not left out of this malaise.

Adherence of road users to traffic rules and regulations is an on-going challenge in Minna metropolis the capital of Niger State. Traffic rules are said to be violated when drivers and pedestrians deliberately disobey formally prohibited or socially accepted codes of driving behaviour (Brittany, 2004). Niger State government introduced traffic light across the major busy or heavy traffic areas in Minna as a way of ensuring compliance with road traffic rules by drivers. However, despite these efforts, there has been continued and increasing non-compliance with road traffic rules by drivers, including those driving personal vehicles and motorcycles (Gaynard, 2009). This research work carried out a clear assessment of underlying factors that influence road users of not adhering to the traffic rules and regulations in Minna metropolis.

The aim of the study is to assess the rate at which the road users in Minna comply with the traffic rules and regulations within the town. In order to achieve this aim, the following objectives were set that is; To; assess the awareness and perception of road users to traffic rules and regulation in Minna metropolis; examine the levels of adherence of road users to traffic rules and regulations; appraise the factors that influence the non-adherence of road users to traffic rules and regulations; and evaluate the impacts of road traffic rules and regulation on the road users.

MAIN RESULTS

Level of Adherence of Road Users to Traffic Rules and Regulations

Personal observation of road users was carried out within Minna on selected strategic points where traffic lights are positioned to examine the level of adherence of road users to traffic rules and regulations. The traffic count was conducted at six points namely; Shiroro road intersection, Top Medical/Paiko road intersection, and Obasanjo Complex road for a period of three days (Monday, Thursday and Saturday), while another three points namely; Government House road, High Point International School junction along Shiroro road and Mobil axis for only a day. The survey was carried at specific peak hours when traffic is known to be much; 8:00am to 10:00am, 12:00pm to 2:00pm and 4:00pm to 6:00pm. The results from the counts are thus presented in Table 1.

Table 1: Red Light Running Along Shiroro Road, Minna.

DAYS	Vehicle Categories	Commercial Motorcycles	Private Motorcycle	Tri – cycles	Commercial Vehicles	Private Vehicles	TOTAL	
	Time						Hrs	Days
Mon 08-08- 2016	8:00am – 10:00am	218	38	26	3	39	324	2100
	12:00pm – 2:00pm	443	199	71	5	285	1003	
	4:00pm – 6:00pm	328	175	49	0	221	773	
Thurs 11-08- 2016	8:00am – 10:00am	157	44	11	0	48	260	1930
	12:00pm – 2:00pm	448	106	54	5	182	1095	
	4:00pm – 6:00pm	313	83	24	2	153	575	
Sat 13-08- 2016	8:00am – 10:00am	198	34	16	1	26	275	1850
	12:00pm – 2:00pm	419	186	37	2	201	1007	
	4:00pm – 6:00pm	276	80	23	0	189	568	
TOTAL	2800	945	311	180	1344			5880

Source: Shiroro Road Traffic Violation Survey, August, 2016.

It can be observed from Table 1, that the highest red light violations were recorded in the afternoon specifically between the hours 1:00pm and 2:00pm; this is as a result of the dismissal of Vehicle Inspection Officers (VIO) who is normally actively stationed on the road between 8:00am and 1:00pm daily. The drastic change as observed from the number of violations in the Morning and later in the Afternoon makes it very obvious that road users tend to obey the stop signal on the traffic light because of the presence of Enforcement Agencies such as the Vehicle Inspection Officers. Also, Table 1 shows that the commercial motorcyclists are by far the worst culprits of traffic light violation. This can be attributed to their swift maneuvering ability and the non-existence of motorcycling license.

CONCLUSION

In conclusion, the research study shows that there is high level of awareness of road traffic rules and regulation among road users in Minna Metropolis. However, there is high level of non-adherence to road traffic rules and regulation by the same road users. Also, it was observed that in the case where a vehicle user violates, there is usually the tendency of others following suit. This is as a result of the inability of FRSC/VIO to enforce the penalties of non-adherence to road traffic rules and regulation. The research further reveals that there is no serious enforcement of penalties to violation of road traffic rules and regulations on the part of the Law Enforcement Agencies of Government in Minna Metropolis.

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