

**ASSESSMENT OF KNOWLEDGE OF AND ATTITUDE TOWARDS
SEAT BELT USE AMONG COMMERCIAL BUS DRIVERS IN
EGOR LOCAL GOVERNMENT**

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**A PROJECT WORK SUBMITTED TO THE DEPARTMENT OF
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CERTIFICATION

We, the undersigned, certify that this research work was carried out by **DAVID AGBASO** with Mat. No EDU1702512 in the Department of Health, Safety and Environmental Education, Faculty of Education, University of Benin, Benin City.

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DEDICATION

This work is dedicated to God Almighty whose mercy and grace kept me from the beginning of this project to the end.

ACKNOWLEDGEMENTS

My profound gratitude goes to my supervisor Dr. E.O. Igudia for the supervisory role he played all through the time it took to put this together. Also sincere thanks goes to Head of Department Dr. E. Olikabo, and to all the lecturers in HSE department who taught and guided me throughout my academic journey in the University of Benin especially Miss Eunice Odigie my co-supervisor.

My uncompromised and unreserved appreciation also goes to my Mum Mrs Jennifer Agbaso for financially supporting me and my ever-loving Siblings; Ruth, Joshua, Nkechi, and my Baby Amybeth for their constant support and encouragement that kept me throughout the period of obtaining this degree.

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ABSTRACT

The study focuses on the assessment of knowledge of and attitude towards seat belt use among commercial bus drivers in Egor Local Government. The objective of the study was to examine the level of knowledge of commercial bus drivers about the use of seatbelts, determine the attitudes of commercial bus drivers about the use of seatbelts and to find out the behaviors of commercial bus drivers towards the use of seatbelts in Egor LGA in Edo State.

Survey research design will be adopted for this study. The population of this study consists of all the commercial bus drivers in Egor LGA of Edo State. The sample of the study comprised two hundred and forty (240) commercial bus drivers; a simple random sampling technique was used to select the respondents for the study. The instrument for the study was a structure questionnaire was used to collect data. The data collected were analyzed, tabulated, interpreted and then discussed. Percentage and frequency were adopted as a method of data analysis.

The findings of the study therefore clearly revealed that; the commercial bus drivers know that the use of seatbelt helps to prevent accident on the road, they know that the use of seatbelt helps to reduce the severity of injuries when accident occur, majority of them do not know the right time to fasten seatbelt. Following the findings of the study, the researcher recommends below; the drivers association in Egor LGA and Benin metropolis should begin to find out solutions to causes of accidents and ways to prevent them, the Federal Road Safety Corp should work closely with drivers association, educating them on the need to use seatbelt.

CHAPTER ONE

INTRODUCTION

Background to the Study

Transportation is one of the basic daily activities of man, it is defined as the action of transporting someone or something or the process of being transported. It is also the action or practice of transporting convicts to a penal colony (Oxford Dictionary, 2020). Transportation can be said to be the movement of goods and services from one place to another. Air transportation, sea transportation, railway transportation and road transportation are basically the forms of transportation best known. Every day people move from place to place, going to work, school, mall, meetings, seminars, one occasion or another among others. The most common means of this movement enumerated above is the use of vehicles, being that not everyone has a personal vehicle the need for commercial vehicle drivers is therefore of great demand and men and women in some places have seized the opportunity to make earnings for themselves working as commercial drivers. The United States defined a commercial vehicle as any self-propelled or towed vehicle used on a public highway in interstate commerce to transport passengers or property when the vehicle:

- a. has a gross vehicle weight rating of 4,536 kg (10,001 pounds) or more
- b. Is designed or used to transport more than 8 passengers (including the driver) for compensation;
- c. Is designed or used to transport more than 15 passengers, including the driver, not used to transport passengers for compensation;
- d. Is used in transporting material found by the Secretary of Transportation to be hazardous (US Federal Motor Carrier Safety Regulations, 2022)

The Collins English Dictionary defines a commercial vehicle as a license to be used for the transportation of goods or materials rather than passengers. (Collins English Dictionary, 2022).

A commercial vehicle is a vehicle that is licensed to be used for the transportation of goods or materials rather than passengers. A commercial motor vehicle is any vehicle used to transport goods or passengers. Also a commercial motor vehicle (CMV) is any vehicle used to transport goods or passengers for the profit of

an individual or business. Examples of CMVs include pickup trucks, box trucks, semi-trucks, vans, coaches, buses, taxicabs, trailers and travel trailers. In the United States, a vehicle is labeled "commercial" if it is registered to and its title is owned by a company. In Nigeria the major means of road transportation are motorcycles (bike commonly called okada), tricycles, cabs and buses. Commercial buses in almost all the states in Nigeria are well known for their recklessness and wayward behaviors which many a time leads to road crashes.

The World Health Organization and the National Center for Injury Prevention and Control noted that globally road traffic crashes and the resulting injuries are some major causes of morbidity and mortality, with developing countries having a greater record of it (WHO & NCIPC, 2012). The World Health Organization (WHO) (2014) reported that 1.2 million peoples die and 50 million get injured from road traffic crashes every year. Murray and Lopez noted that road traffic crashes were the third leading contributor to the worldwide burden of diseases and Injury

Most of (91%) road deaths occurred in low and middle-income countries (Ncube, 2013). In the case of Africa, road traffic accidents constitute 25% of all injury-related deaths (Peden, McGee, & Krug, 2014) and over 75% of road traffic casualties are in the economically productive age of 16–65 years. Road traffic injuries are the second leading cause of death among children aged 5 to 14 years and young people aged 15 to 29 years (Peden, McGee, & Krug, 2014; Eckersley, Salmon, Gebru & Khat, 2010)

Nigeria is not left out from the morbidity and mortality following road crashes as it is also on the increase (Asogwa, 2012; Oluwasanmi, 2012). Although the majority of traffic crashes that occur in Nigeria are not well documented, available data from the Federal Road Safety Commission (FRSC) revealed that in 2004, there were 14 087 reported road crashes in Nigeria (FRSC, 2006)

Studies have shown that in the absence of concerted efforts at prevention, the resulting numbers of road traffic deaths and injuries will continually be on the increase and road traffic injuries, which ranked 10 in the list of the top 24 causes of death in 2002, would move to the eighth position by 2030 if concerted efforts at the prevention of road crashes are not instituted (Mathers, & Loncar, 2015).

The use of seatbelts is an established means of reducing the severity of injuries sustained when a crash occurs. Close observation by the researcher revealed most of the commercial bus drives do not make use of their seatbelts while some of the buses do not have seatbelts at all. Studies have documented that the use of lap and shoulder belts by drivers reduces the risk of death and serious injury to crash-involved by 45 to 60% and serious injury to the head, chest and extremities by 50 to 83% (Evans, 2016; Morgan, 2019). Passengers are also expected to use their seatbelts because they too are more likely to sustain serious injury if unrestrained. Furthermore, they pose a threat to

any unrestrained passenger sitting directly in front of them if a crash occurs, as they would hit the seat in front of them with force approximately 30 to 60 times their weight (Broughton, 2013; Vague, 2016). The use of seatbelts by all drivers is thus mandatory in a number of countries.

In 2014/2015 Ethiopian police reported 15,086 accidents which caused the losses of 2,161 lives and over \$7.3 million. The Ethiopian National Road Safety Coordination Office cites a road crash fatality rate of 114 deaths per 10,000 vehicles per year and the real figure may be higher as there may be underreporting (Abegaz,2014). Study done in Ethiopia, on the road from Addis Ababa to Adama/Hawassa showed that the fatality rate of car accident was 156 per 10, 000 vehicles (Mekonnen, & Teshager, 2014). A study in Amhara region between 2007 and 2011 shows that there were 10,162 road traffic accidents, claiming the lives of 2,761 people, injuring 3,890 people and caused property damage of \$4,755,514.

In Nigeria, a primary seatbelt law that allows law-enforcement agents to stop and issue a fine to non-compliant drivers of vehicles (including mini-buses) has been in place since January 2003, and the FRSC is the agency charged with the responsibility of enforcing this law (Road Safety Nigeria, 2003). Although the law has now being extended to front and rear seat passengers, they are also encouraged to use their seatbelts (FRSC, 2017). In spite of the presence of seatbelt laws in many countries, compliance is not optimal. Strategies such as health education campaigns and the use of incentives for users have been combined with legislation in some countries and these have reportedly improved seatbelt use (Sangowawa, Ekanem, & Alagh, 2015; Segui-Gomez, Glass, & Graham, 2018).

A study carried out in Benin City, Nigeria, revealed that the seat belt compliance rate for drivers was 52.3%, front seat passengers 18.4%, and rear seat passengers 6.1%. Drivers of all categories of vehicles were more likely to use the seat belt compared to front seat passengers and rear seat passengers. Iribhogbe and

Osime (2008), noted that drivers of private cars were more likely to use seat belts compared to bus and bus drivers.

Studies have shown that both driver and passenger seat belt use were associated with the respondent's age, sex, ethnicity, level of education, current marital status, and self-reported alcohol-impaired driving or riding with an alcohol impaired driver," In the United States of America, teenage drivers have a higher crash risk and lower observed seat belt use than older age groups. Knowledge is one of the factors that influence attitude and attitude influences behaviour. There is therefore need to determine the level of knowledge and attitudes of seat belt among commercial bus drivers. These findings will help to develop effective education and enforcement strategies to increase seat belt utilization rates among drivers. This study was therefore aimed to assess the Knowledge and attitude towards seat belt use among commercial bus drivers in Egor local Government of Edo State.

Statement of the Problem

As highlighted above the casualties resulting from non – use of seatbelts is on the increase, it ranges from crashes to injuries, fractures and in worse case death. The benefits of seatbelts cannot be overemphasized as far as protection of drivers and passengers is concerned in case of accidents.

Inspite of the importance of the protective power of seatbelts in cases of accidents, the researcher yet observed that the level of compliance to the use of seatbelts among commercial bus drivers is yet very poor. Seeing that Knowledge is one of the factors that influence attitude and attitude influences behavior the researcher is moved to carry out a study to examine the level of knowledge and attitudes of commercial bus towards the use of seatbelts.

Research Questions

To guide the research in course of this study the following research questions were formulated

1. What is the level of knowledge of commercial bus drivers about the use of seatbelts in Egor LGA Edo State?
2. What are the attitudes of commercial bus drivers about the use of seatbelts in Egor LGA in Edo State?
3. What are the behaviors of commercial bus drivers in Egor LGA in Edo State towards the use of seatbelts?

Purpose of the Study

The main aim of this study is to assess the knowledge of and attitude towards seat belt use among commercial bus drivers in Egor local Government of Edo State. Specifically, the study seeks to

- i. Examine the level of knowledge of commercial bus drivers about the use of seatbelts in Egor LGA Edo State
- ii. Determine the attitudes of commercial bus drivers about the use of seatbelts in Egor LGA in Edo State
- iii. Find out the behaviors of commercial bus drivers towards the use of seatbelts in Egor LGA in Edo State

Significance of the Study

It is the researcher's expectation that upon completion of this study, the findings of the study will be beneficial to commercial bus drivers, passengers, government and the general public in more ways than one.

First, this study will help improve the use of seatbelts among commercial bus drivers as more awareness on the need will be created through this study.

Since the use of seatbelts is of great benefits to both drivers and passengers, it will therefore enable government to put in more ways or measures to enhance the level of compliance to the use of seatbelts.

More so, it is seen and believed that the use of prevents injuries or from becoming worse and saving lives if the recommendation in this study is accepted and work with there will be reduced injuries and deaths associated with road traffic crashes.

This research will also serve as a point of inquiry and reference for both students and members of the public who want to know or carryout related study on this area.

Scope/delimitation of the Study

The scope of this study is designed to cover the knowledge of and attitude towards the use of seatbelts among commercial bus drivers in Egor local Government of Edo State. It will be delimited to commercial bus drivers in Egor local Government area. One Major limitation envisaged by the researcher is the reluctance by commercial bus drivers to provide accurate information about their use of seat belt as they feel such information might be implicating. To overcome this limitation, the researcher first addressed the commercial bus drivers to tell them that the information gotten from them are confidential and will be treated with utmost confidentiality and use strictly for educational purposes.

Definition of Terms

Driver: Anyone above the age of 18, seating behind the steering and moving the bus.

Commercial bus: public vehicle (bud) used for transporting goods and services usually within a state or local government

CHAPTER TWO

REVIEW OF RELATED LITERATURE

- Theoretical Framework
- Conceptual of seatbelt use in driving
- Seatbelt use practice
- Factors affecting the use of seatbelt
- Attitudes of commercial bus drivers about the use of seatbelts
- Behaviors of commercial bus drivers about the use of seatbelts

- Summary of Reviewed Literature

Theoretical Framework

International research has consistently proven the effectiveness of seat belt use in preventing and reducing fatalities and severe injuries during road vehicle accidents (Evans, 2016; IRTAD, 2015; NHTSA, 2013; Petridou, Skalkidou, Ioannou, & Trichooulos, 1998). Evans (1986) indicated that, if all the front seat occupants in the US were to use lap/shoulder belts without changing any other behavior, then there would be a 41% reduction in fatalities. Similarly, the NHTSA (2013) reported the effectiveness of seat belt use in reducing fatalities and injuries during the previous 20 years in the US. While using seat belt saved more than 100,000 lives, over 7000 people were killed and over 100,000 people were injured due to not using a seat belt (NHTSA, 2013). Also, IRTAD (2015) has estimated that the use of seat belts has reduced the injury severity in about 50% of road vehicle accidents, especially in accidents that would have

resulted in fatal or severe injuries. Petridou et al. (2018) evaluated motor vehicle deaths in Greece that could have been avoided by the use of standard safety devices. They found that 27% of road fatalities would have been avoided if all car occupants had used a seat belt. Hence, use of seat belt as an effective safety device can be seen to play an important role in traffic safety by reducing the severity of injuries during road vehicle accidents.

Despite the enacted seat belt legislation for urban and rural roads, a large number of car occupants do not use a seat belt in Turkey (Emniyet, 2019). The results of an observational study from Turkey showed that, 71% of the drivers used a seat belt on rural roads, while 21% of them used a seat belt on urban roads (Emniyet, 2019). Low seat belt usage rates have been accepted as one of the main problems in traffic safety in Turkey, where fatality and injury rates in traffic accidents are very high (SWE ROAD, 2011; Emniyet, 2019).

Besides car occupant characteristics and situational factors, there are also some social psychological factors such as attitudes, beliefs, and intentions affecting the seat belt use of car occupants (Chliaoutakis, Gnardellis, Drakou, Darviri, & Sboukis, 2000; Phaner & Hane, 1975; Jonah & Dawson, 1982). Negative attitudes and beliefs about the effectiveness of seat belt use had a negative relationship to seat belt use (Begg & Langley, 2000; Fockler & Cooper, 1990). Not liking to use a seat belt and discomfort were among the main reasons for having negative attitudes towards using a seat belt (Begg & Langley, 2000; Fockler & Cooper, 1990). However, having positive attitudes, beliefs and intentions about using a seat belt were not strong predictors of actual seat belt use of drivers all the time (Chliaoutakis et al., 2000; Knapper, Copley, & Moore, 1976; Loo, 1984). It has been reported that, although most car occupants agreed with the effectiveness of seat belt use, their actual seat belt use was low (Chliaoutakis et al., 2000; Knapper et al., 1976; Loo, 1984). This significant divergence between

intentions to use seat belt and actual seat belt use was mainly explained by drivers' not having a habit of using a seat belt (Calisir & Lehto, 2002; Chliaoutakis et al., 2000; Knapper et al., 1976). As summarized by Calisir and Lehto (2002), the decision to use a seat belt was not a result of a comparison of risk against benefits all the time. Instead, seat belt use was a habitual behavior that was mainly affected by a person's gender, age, GPA and perceived usefulness of seat belts in a possible accident (Calisir & Lehto, 2002).

Social psychological theories provide potentially useful yet rarely used tools for explaining how attitudes, beliefs, and values influence seat belt use. The theory of planned behavior (TPB) and the health belief model (HBM) are the two powerful social psychological theories, which have been commonly used to understand the beliefs, values and attitudes underlying a wide range of health behaviors (Aberg, 2001; Conner & Sparks, 1996; Sheeran & Abraham, 1996; Stroebe, 2000). In this study, the theory in focus will be the HBM

The Health Belief Model

The theoretical framework adopted for the study is the Health Belief Model (HBM). The Health Belief Model is considered as one of the most useful models in health care prevention and promotion (Roden, 2004).

The model helps explain why an individual may accept or reject preventive health services or adopt healthy behaviours. The theory is based on the understanding that a person will take a health related action if that person ;

1. Feels a negative condition can be avoided
2. Believe He/She can successfully take a recommended health action.
3. Has a positive expectation that by taking a recommended action, he/she will avoid a negative health condition.

The Original model had four constructs; perceived susceptibility, perceived severity, perceived benefits and perceived barriers. The

following constructs application to this study are explained in the paragraphs below.

Perceived Susceptibility

Perceived susceptibility refers to the probability that an individual assigns to personal vulnerability to developing a health condition. It is the subjective belief of an individual regarding the likelihood of being negatively affected by indulging in a particular behaviour. Personal perception of risk or vulnerability has been found to be an important perception in promoting the adoption of healthier behaviors (Abraham and Sheeran, 2005). Hence if commercial bus drivers perceive that none use of seat belt puts them and their passengers at risk of severe injury, they are likely to embrace regular seat belt use in order to eliminate or minimize occurrence of severe injuries.

Perceived Severity

This construct refers to the subjective assessment of the severity or seriousness of a health problem and its potential

consequences. If undesirable health outcomes or consequences will not have a negative impact on an individual life, He or She will not be motivated to avoid it even when he/she is at risk. In the context of this study, the willingness of commercial bus drivers to adopt the use of seat belt depends on their evaluation of the seriousness of the consequences associated with accidents.

Perceived Benefits

This construct focuses on an individual's assessment of the value or usefulness of engaging in health promoting behaviours in order to reduce susceptibility to a health condition.

When commercial bus drivers perceive that strictly adhering to regular seat belt use reduces the risk of ejection and multiple injuries, their willingness to adopt it practices is increased.

Perceived Barrier

This construct takes a close look at that individual's subjective evaluation of the difficulties or the hindrances associated with

engaging in a health promoting behaviour. With a perceived barrier, an individual may not perform a behaviour despite his/her belief about the benefits in taking the action in reducing the threat if the barrier outweighs the benefits. (Rosenstock, 1966).

The barrier often relates to the characteristics of the health promotion measure. It may be expensive, painful, inconvenient and unpleasant. When commercial bus drivers are able to understand that the benefits of adopting seat belt use practices (minimise the risk of ejection and multiple injuries occurrence) by far outweighs any perceived barriers (such as discomfort, time, e.t.c.) to adopting seat belt use practices, they are likely to adhere strictly.

Overview of seatbelt use among commercial bus drivers

According to the World Health Organization's 2015 report, 2% of the deaths from road accidents in Iran were caused by bus crashes (World Health Organization, 2015). The seat belt is designed to apportion force to the harder parts of the body and

to absorb the energy of accidents. This device restricts the movement of vehicle occupants during accidents and prevents serious injury. The role of seat belts in reducing injuries caused by traffic accidents has been proven. Statistics show, for example, that 44% of occupants killed in crashes while not using seat belts are partially or totally ejected from the vehicle (Evans, 2016; World Health Organization, 2015).

Seat belts reduce the risk of death by 45-50% for drivers and front-seat occupants and by 25-75% for rear occupants. In accidents, if the occupants are not wearing a seat belt, they continue at the speed the car was traveling and are likely to impact the windshield, instrument panel, steering wheel, or other occupants. It is possible that occupants will be thrown from the car. Seat belts prevent the occupants from being ejected from the vehicle (Elvik, Vaa, Høy & Sørensen, 2009). The risk of severe injuries in bus crashes is dependent on whether or not the occupants use seat belts. A study by Chang, Guo, Lin and Chang (2006) reported that the use of seat belts could prevent

or reduce the severity of injuries caused by bus crashes. Bus seat belts prevent occupant interactions, interaction with the interior of bus, and ejection in crashes. Simulations of bus crashes show that unrestrained occupants risk being ejected or partially ejected and making contact with external objects during bus crashes (IMMI, 2017; RTV6 Indy Channel, 2017; News Today, 2017). Studies based on simulations indicate that the number of injured occupants and the severity of casualties decrease if the bus is equipped with a proper seat restraint system and belts are used (Mayrhofer, Steffan & Hoschopf, 2005). This evidence confirms the need for bus seat belts.

According to European Transport Safety Council (ETSC) (2006) seat belt use rates from different countries perspectives are varied. For example, seat belt use rates in European Union countries varied from 59% to 96% for front seat occupants and from 21% to 90% for rearseat occupants, with lower seat belt use rates in Southern (e.g., Greece) and Eastern European countries (e.g., Poland), compared to Northern (e.g., Sweden) and

Western European (e.g., France) countries. Compared to the developed countries; however, developing countries where seat belt laws mostly came into effect more recently have considerably lower seat belt use rates. For instance, in Argentina after the seat belt law in 1992, seat belt use was reported to be 32% for drivers and 30% for front seat passengers in the city of Buenos Aires. Similarly, in Saudi Arabia where a seat belt law came into effect more recently in 2000, an average seat belt use rate of 60% for drivers and 22.7% for front seat passengers was reported in two suburbs of Riyadh (Bendak, 2005).

When we come to Africa, Ethiopia as a country implements seatbelt law which is less than 20%. So, from this one can understand that Ethiopia is implementing seat belt poorly (WHO, 2009). As more countries begin or continue to take steps towards addressing their national road safety problem, it has become apparent that regular global assessments of road safety are needed. These are required not only to measure global progress, but also to enable countries to compare their road

safety situation with other countries. Such a global assessment requires a standardized methodology that can provide governments, donors, practitioners, planners, and researchers with the information that they need to make evidencebased decisions (WHO, 2009).

According to WHO (2009) 97% of the world countries have incorporated seat belt law into the road safety program, but Ethiopia as a big country which has more than 83 million people has adopted seat belt law at sub national level. In order to improve the behavior of vehicle occupants to use seat belt different social change campaigns have devoted their time and effort like Medias Ethiopian Radio and Television and traffic police programs. Thus, the purpose of this study is to investigate barrier factors of seat belt use in selective city administrations.

In the Ethiopia, the National Transportation Safety Board, (2012) stated that at present, public transit is more accessible, reliable, and efficient for passenger transportation than before. Passengers

generally feel safe using public transport, especially bus travel. Traveling by bus is among the safest modes of transportation, and bus crashes do not happen very often. However, compared to other crash types, because these vehicles carry many passengers, the number of fatalities and injuries can be high, so bus crashes have become a major concern throughout most of the world (Barua & Tay, 2010; Guler, Atahan & Bayram, 2011). For example, bus accidents led to 13,417 injuries and 250 fatalities in the U.S. in 2009 and cause 30,000 injuries and 150 fatalities in Europe every year (Blower & Green, 2010; European Coach and Bus Occupant Safety Project, 2004; Bjornstig et al., 2005; The National Transportation Safety Board, 2012).

Reducing mortality rates due to bus accidents is among the road safety aims of many countries, including Denmark, India, Thailand, Nepal, Tanzania, and Zimbabwe (Pearce, Maunder, Mbara, Babu & Rwebangira, 2000; Prato & Kaplan, 2014; Nambulee, Jomnonkwao, Siridhara & Ratanavaraha, 2019). Bus safety is regulated in the U.S. by the Buses in Fatal Accidents

database (BIFA), which contains records of all the medium and heavy buses that were involved in fatal traffic crashes in the 50 states. In Europe, the European Coach and Bus Occupant Safety project (ECBOS) aims at making improvements in the current regulations and proposes new regulations and standards for the development of safer buses and coaches (ECBOS, 2004; National Highway Traffic Safety Administration, 2017). Bus accidents are also a concern in Iran, where evidence shows that bus accidents kill and injure a large number of passengers each year.

Previous studies have examined the factors associated with safety belt use. In a survey of 215 young drivers, Fernandes, Hatfield and Job (2010) found that BMI, drunk driving, and high speed driving were independent risk factors for the non-use of seatbelts in car drivers and passengers. Anderson & Mellor (2008) in another study measured risk preference through the lottery choice experiment and found that risk aversion is negatively and significantly associated with cigarette smoking and seat belt non-use when people drive cars. Several studies have shown a

significant relationship between gender, age, drug use, drunk driving, speed limits, alcohol consumption, high-speed driving, and seat belt use for rear and frontseat occupants in different types of vehicles (except buses)(Dinh-Zarr et al., 2001; Lichtenstein, Bolton & Wade, 1989; Schlundt, Briggs, Miller, Arthur & Goldzweig, 2007; Takakura, Ueji & Sakihara, 2001).

Some factors that have been highlighted in various studies as the main reasons for not using seat belts include lack of belief in seat belt effectiveness; trust in the safety of the car; not having the habit of putting on a seat belt; and believing that seat belts are uncomfortable, restrict movement, and trap occupants in the vehicle during a crash (Begg & Langley, 2000; Cunill, Gras, Planes, Oliveras & Sullman, 2004; Dinh-Zarr et al., 2001; Edgerton, Duan, Seidel & Asch, 2002; Gras, Cunill, Sullman, Planes & Font-Mayolas, 2007; Routley et al., 2010). There are also some socio-psychological factors, such as attitudes, beliefs, and intentions, which affect seat belt use (Şimşekoğlu & Lajunen, 2008).According to the World Health Organization's 2015 report,

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Some factors that have been highlighted in various studies as the main reasons for not using seat belts include lack of belief in seat belt effectiveness; trust in the safety of the car; not having the habit of putting on a seat belt; and believing that seat belts are uncomfortable, restrict movement, and trap occupants in the vehicle during a crash (Begg & Langley, 2000; Cunill, Gras,

Planes, Oliveras & Sullman, 2004; Dinh-Zarr et al., 2001; Edgerton, Duan, Seidel & Asch, 2002; Gras, Cunill, Sullman, Planes & Font-Mayolas, 2007; Routley et al., 2010). There are also some socio-psychological factors, such as attitudes, beliefs, and intentions, which affect seat belt use (Şimşekoğlu & Lajunen, 2008).

A review of related literature shows few studies focusing on seat belt use on bus passengers. One study by Nambulee et al. (2019) determined the factors influencing bus seat belt use in terms of behavioral intention. The theory involves factors such as perceived enforcement, past experience, and self-efficacy using structural equation modelling (SEM) and HBM. The results of the study show perceived severity, perceived benefits, and perceived barriers to be the most significant influence on bus seat belt use. Iran has a mandatory seat belt usage law and enforcement program mandating that all passengers in the front and back seats of cars wear belts. Bus occupants are also covered by this law. Iran's traffic police enforcement fine bus

drivers if a bus occupant (driver or passenger) does not wear a seat belt (Iran's traffic police enforcement, 2010). Despite this law, it should be noted that among the different types of vehicles, seat belts are most ignored by bus passengers and the rate of bus seat belt use is not specified in Iran. No study has been done to date in relation to bus seat belts in Iran. In other countries, there has been more focus on the use of bus seat belts on school buses (Mehta & Lou, 2013).

Although there have been several studies of bus and coach safety, attention to bus occupant safety is not reflected in the literature; consequently, the risk factors associated with passenger injury severity remain unknown. Despite the effectiveness of seat belt use in reducing the risk of death and serious injury from traffic accidents (Elvik et al., 2009; World Health Organization, 2015), a comprehensive study of low frequency seat belt use and the determinants of it in bus passengers has not yet been undertaken. Increased bus seat belt use depends on recognizing factors related to this behavior. It is almost impossible to take appropriate

measures to increase bus seat belt use without considering the determining factors.

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Importance of Seatbelts

It has been reviewed that seat belts are designed to retain people in their seats during a crash; the belt is designed to limit the movement of the occupant whilst managing the energy transmitted to the occupant so as to mitigate the likelihood of serious or fatal injury. Within modern vehicles they are designed to work as part the wider occupant restraint system that includes airbags, seats, head restraints and the vehicle structure. Early research found that seat belts alone could reduce the risk of injury for drivers by 57% at lower speeds and 48% at higher speeds, and reduced the risk of injury for all occupants by 63% at lower speeds and 55% at higher speeds (National Highway Traffic Administration, 2021). Research by the Road Safety Observatory (2013) found they are 50% effective at preventing fatal injuries for drivers, 45% effective at preventing serious injuries and 25% effective at preventing minor injuries was 25%. For front seat passengers, seat belts are 45% effective at preventing fatal injuries or serious injuries, and 20% effective at preventing minor injuries. Rear seat belts were less effective, being 25% effective

at preventing fatal injuries, 25% effective at preventing serious injuries, and 20% effective at preventing minor injuries. Lap belts are less effective than three point belts, but nevertheless provide significant levels of protection, reducing fatal injuries by 32%. (Road Safety Observatory, 2013)

The risk of death and serious injury in a crash or sudden stop is increased significantly if a seatbelt is not worn, even when travelling at low speed (Centre for Accident Research & Road Safety, 2014); wearing a seat-belt reduces the risk of a fatality among drivers and front-seat occupants by 45–50%, and the risk of minor and serious injuries by 20% and 45% respectively. Among rear-seat occupants seat-belts reduce fatal and serious injuries by 25% and minor injuries by up to 75%; wearing a seat belt can improve the effectiveness of airbags in reducing death and injury in a crash (Barry, Ginpil & O’Neill, 1999; Crandall, Olson, & Sklar, 2001); children should be seated in a restraint that is designed for their size and body weight. The probability of children aged 1-7 years of being injured in a

crash or sudden stop is reduced by about 70% when an appropriate child restraint is used instead of a seat belt only.

Factors Affecting the Use of Seatbelt among Commercial Bus Drivers

Seatbelt use is mandatory for all vehicle occupants due to the legislation in force, and this is applied in several countries worldwide (WHO, 2018). Different observations such as by Iribhogbe, and Osime, (2008), Kulanthayan, (2004), and Passmore, & Ozanne-Smith, (2006) and self-reported studies by Oluyemi, (2007), Chekijian and Truzyan, (2012), and Ismaila and Akanbi, (2010) on seat belt use in Ethiopia. Showed that little was known about the use of the seat belt and factors that affect using seat belt among drivers.

In a study by Woldegebriel, Gidey and Gebru (2019), common reasons for wearing seat belt were, because seat belt saves life as reported by 79.3%, the stiffer penalties for non-compliance as reported by 29.6% and the wearing habit as showed by 5.9%.

These reasons were comparable to reports from China (Idris, 2013), Russia (Foss, Beirness, & Sprattler, 1994), Qatar (Shaaban, 2012) and West India (Routley, 2008). In many studies, drivers did not like seat belts because of discomfort, lack of knowledge, not believing in seat belt safety, forgetfulness and habit to wear were reported. In concordance with the above studies, in the study by Woldegebriel, Gidey and Gebru (2019), the main reasons given for lower use were "not believing in seat safety" (18.4%), "seat belt takes time to wear" (18.4%) and "creates discomfort" (7.8%).

According to Mahdi, Rad, and Rahele. (2015) commercial bus drivers and passenger characteristics and their behavior play an important role in seatbelt use. Driver gender, age, educational level, income, marital status, BMI, religiosity, and race have been reported to be determinants of driver seatbelt use (Kim, Kim, Kim, & Lee, 2019). Driver behaviors such as speed (Arias, 2011), mobile phone use while driving (Zeng, Hao, Lee, & Chen, 2020), alcohol/drug involvement (Kwak, Shin, Song, Kim,

Jang, 2015; Shakya, Shults, Stevens, Beck, & Sleet, 2011), smoking, driving errors, regular walking, and having adequate sleep (Chen, Song, Ma, 2019) are also predictors of seatbelt use for drivers.

The prevalence of seat belt use varies worldwide, as 48% (Lipovac, 2015), 73% (Kwak, Shin, Song, Kim, & Jang, 2015), 58% (Mohammadi, Ansari, Rad, Hashemi, & Tabasi, 2015), 82% (Wong, Lim, Chow, Zaw, 2016), and 86-90% (Beck, Kresnow & Bergen, 2019; Shakya, Shults, Stevens, Beck, 2020; Beck, Downs, Stevens, Sauber-Schatz, 2014) were reported in Bosnia-Herzegovina, Korea, Iran, Singapore, and in the United States of America, respectively. On the contrary, in Latin American countries, the prevalence of 82% was reported in Ecuador (2020), 36% in Colombia (Rodriguez, 2017) and 38% in Mexico (Velazquez, 2017); lower prevalence was observed among co-drivers (Beck, et al, 2019; Velazquez, 2017).

Several factors have been found to increase seat belt use, such as being in a city far from the capital, being female, driving a taxi (Rodriguez, 2017), older age (Wong, et al, 2016), and being more educated (Mohammadi, et al, 2015, Beck, et al, 2019; Lipovac, et al, 2015). However, most of those studies were conducted using secondary databases, through observations from outside the vehicles (Lipovac, et al, 2015) or through self-reports by the drivers. Similar to previous findings (Ismaila & Akanbi, 2010), older drivers kept their seatbelt fastened more frequently. Furthermore, driver education was the most important determinant of seatbelt use in the multivariate analysis. Furthermore, driver education was the most important determinant of seatbelt use in the multivariate analysis (Idris, 2013). Mohammed reported a positive association between seatbelt use and driver education. Better-educated drivers, by wearing seatbelts, showed a lower risk preference.

Attitudes of Commercial Bus Drivers Towards the Use of Seatbelts

Evaluation of the Think ‘Three Strikes’ seatbelt campaign (BMRB, 2009) reports differences in attitudes towards wearing a seatbelt in the front compared with the rear of a car. 70% of all adults completely agreed it was dangerous not to use a seatbelt in the front of a car. Whereas only 63% completely agreed it was dangerous not to use a seatbelt in the rear. Thus suggesting a relationship between attitude toward seatbelts and seatbelt usage. The Department for Transport’s Think Annual survey carried out in November 2011, supports the ‘Three Strikes’ evaluation results with 10% fewer adults agreeing that not wearing a seat belt in the back of a car is dangerous, compared to not wearing a seatbelt in the front of a car. (BMRB 2012).

Interviews with people who had been stopped by the police for not wearing seatbelts found that non-wearing behaviour was excused at least in part because of perceived positive reasons for not wearing a seatbelt. These reasons were categorized as:

inconvenience, physical discomfort, and ‘emotional discomfort’ such as the feeling of being trapped. (Christmas et al, DfT, 2008). As well as perceived positive reasons not to wear a seatbelt, other explanations of non-use referred to a lack of “compelling” reasons to do so. For example interviewees reported that they feel safer in the back of a car or in a van and therefore do not need to wear a seatbelt in these circumstances. Also if a vehicle had airbags fitted, or if they were only going on a short journey, the respondents perceived that there was no real need to wear a seatbelt. (DfT, 2008)

A study of rear seat belt wearing in Malaysia found that higher knowledge of the benefit of wearing a rear seat belt, plus having a positive attitude toward seat belt wearing, were statistically significant “enablers” of rear seat belt wearing (likely to lead to an individual changing their behaviour). Addressing poor attitudes towards seatbelt wearing was suggested to have greater influence on seatbelt usage than knowledge of the benefits. (Mohamed et al, 2011). A survey of 79 American

university students who were licensed drivers found that in 12 different driving situations (for example, short or long trips, day or night) attitudes toward wearing a seatbelt were significantly positively correlated with intention to wear. (Stasson and Fishbein, 1990), Christmas et al (DfT, 2008) found no research studies which could recommend ways of changing negative attitudes towards seatbelt use. Seatbelt awareness training courses were cited as a potentially good mechanism to improve attitudes.

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Behaviours of Commercial Bus Drivers towards the Use of Seatbelts

A survey of 948, 21 year olds in New Zealand found that male front seat belt users were significantly less likely than non-users to drive after drinking alcohol or marijuana, to take deliberate risks when driving, or to have been disqualified from driving. Among rear seat belt users and non-users, males who did not use a seatbelt were almost twice as likely to drive after drinking as those who did use a rear seatbelt. (Begg & Langley, 2000). Supporting Begg and Langley's findings, the DfT report (2008) 'Strapping Yarns' also reported that car occupants who take deliberate risks or who display illegal behaviours are less likely to wear a seatbelt than more compliant drivers. These findings

suggest that people who are more risk averse are more likely to wear a seatbelt and that there is therefore a relationship between risk perception and seatbelt use. Stasson and Fishbein (1990) however, cite research showing little direct relation between perceived risk and seatbelt use. They claim that intention to wear a seatbelt predicts actual seatbelt use.

Under the behavioural theories of Planned Behaviour and Reasoned Action intentions are partly influenced by a person's attitude towards that behaviour, and perceived social pressure (social norms). In the theory of reasoned action, perceived risk would influence intentions, and therefore behaviour, via attitudes toward wearing seatbelts and social norms. Stasson and Fishbein hypothesised that attitudes toward wearing seatbelts are held constant across different driving situations (e.g. perceived discomfort or feelings of being trapped). Attitudes may change however based on the levels of perceived risk of accident (long journeys or icy roads for example). This change in attitude may account for variability in seatbelt use. They, therefore, asked

adults to consider driving in 12 different conditions, and asked them a series of questions using seven point scales. The measure of attitude was defined by responses to questions about how much they found seatbelt wearing ‘pleasant’, and how much they ‘liked’ and ‘enjoyed’ wearing a seatbelt in the different situations.

Results showed highly significant positive correlations between attitude and intention, and social norms and intention, but the correlation between perceived risk of accident and intention to wear a seatbelt was not significant. There was a significant correlation however between perceived risk and intention to wear a seatbelt for two “risky” driving situations (e.g. long trips on wet roads at night). They concluded that use of a seatbelt in any situation depends on one’s own attitude toward wearing a seatbelt, and social norms, but not on the level of perceived accident risk. Perceived risk has a smaller and an indirect effect on intentions to use a seatbelt via social norms. In riskier driving conditions, they suggested that people perceive greater

social pressure to wear seatbelts than in situations perceived as less risky. This might explain low seatbelt usage rates in the backseat. They concluded that seatbelt wearing can be increased by improving people's attitudes towards seatbelt wearing and by trying to change social norms of important others concerning seatbelt use. Interventions designed to increase people's perception of risk when not wearing a seatbelt they believed to have little effect.

A study that employed the Health Action Process Model stated that people do not always follow their intentions, however well formed, because they, for example, may give into temptation or come across unpredicted barriers. This study suggested that strategic planning and recovery self-efficacy (ie, a person's ability to recover from failures in implementing their intended behaviour) are better predictors of behaviour than intentions, and are, in fact, the "best" predictors. (Schwarzer et al 2007). For example, if a person intends to always wear their seatbelt but fails to do so, e.g. if they have to be a passenger for a week with

someone who doesn't believe in wearing seatbelts, then their ability to 'recover' by going back to intending to always wear their seatbelt is a key predictor of whether or not they will actually do so. Under the behavioural theories of Planned Behaviour and Reasoned Action intentions are partly influenced by a person's attitude towards that behaviour, and perceived social pressure (social norms). In the theory of reasoned action, perceived risk would influence intentions, and therefore behaviour, via attitudes toward wearing seatbelts and social norms. Stasson and Fishbein hypothesised that attitudes toward wearing seatbelts are held constant across different driving situations (e.g. perceived discomfort or feelings of being trapped). Attitudes may change however based on the levels of perceived risk of accident (long journeys or icy roads for example). This change in attitude may account for variability in seatbelt use. They, therefore, asked adults to consider driving in 12 different conditions, and asked them a series of questions using seven point scales. The measure of attitude was defined by responses to questions about how

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their seatbelt is a key predictor of whether or not they will actually do so.

This study claimed that strategic planning “bridges the gap”, between good intentions and actual behaviour. If a person has a strategy for how they are going to implement their intentions – when, where and how they are going to make sure they always wear their seatbelt for instance, then they are more likely to be successful. The authors tested their theory with a sample of 298 students in Poland. They found that 42% of the variance in seatbelt use (sometimes wear, sometimes don’t) was explained by both recovery self-efficacy and planning. These two most immediate predictors of behaviour could account for differences in performing four different kinds of health behaviour (seatbelt use, dietary behaviour, dental flossing and physical activity).

Supporting Stasson and Fishbein’s (1990) findings, Schwarzer et al (2007) reported that risk perception was not significantly related to any of the four preventive health behaviours. They suggested that increasing a person’s risk perception is not in itself

sufficient for promoting behaviour change, and instead recommended making people aware of the skills and strategies they can employ to both implement their intended behaviour change and to recover from setbacks.

The Think 'Three Strikes' media campaign in 2008 focussed on the physics of a crash. The campaign was aimed at increasing people's perceptions of the risk of not wearing a seatbelt in all driving situations. Although the campaign was well remembered there were mixed results for changes in attitude and behaviour from before to after the campaign. Although there were some positive changes, negative shifts in both attitudes and behaviour were reported. These negative shifts in behaviour and attitude were despite a reported increase in the perceived risks of not wearing a seatbelt. Nearly 2000 adults were sampled and for all adults (when prompted) there was an increase of 8% who thought serious injury was a very likely consequence of not wearing a seatbelt. Similarly, there was an increase of 6% for all adults who thought death was a very likely consequence.

This again provides support for the argument that perceived risk of injury has little effect on seatbelt wearing behaviour. Although increasing the perceived risks of not wearing a seatbelt may seem the natural choice for targeting inconsistent seatbelt users, an alternative strategy would be to provide “pauses for thought” – giving people a reason to think about their own seatbelt wearing behaviour. This could include the positives of wearing a seatbelt as well as the negatives of not wearing. (Christmas et al, 2008).

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents the method and procedure used by the researcher in study. The conducting the study and it is presented under the following Sub headings;

- Research Design
- Population of the study
- Sample and sampling Techniques

- Instrument for data collection
- Validity of the Instrument
- Reliability of the instrument
- Administration of the instrument
- Method of Data collection
- Method of Data Analysis

Research Design

Survey research design will be adopted for this study. The researcher used survey method in gathering data. This study is an investigation aimed at examining the knowledge, and attitudes of commercial bus drivers towards the use of seatbelts in Egor LGA of Edo State.

Population of the Study

The population of this study consists of all the commercial bus drivers in Egor LGA of Edo State. The population for the study

is not definite as there is no comprehensive list of registered bus drivers in LGA.

Sample and Sampling Technique

It will comprise two hundred and forty (240) commercial bus drivers. A purposive sampling technique will be used to select six areas within the local government where samples will be drawn from. Forty commercial bus drivers will be selected using the random sampling technique. Below are the areas purposively selected from which samples can be drawn from?

S/N	LOCATIONS	SAMPLES I
1.	Oluku Market Bus Stop	40
2.	Uselu Market Bus Stop.	40
3.	Uwelu Junction Bus Stop.	40
4.	Textilemill Bus Stop.	40
5.	Egor Bus Stop.	40
6.	Ugbowo Bus Stop.	40

Instrument for Data Collection

The instrument for the study is a self-constructed questionnaire design to obtain data on the knowledge, and attitudes of commercial bus drivers towards the use of seatbelts in Egor

Local Government Area of Edo State. The questionnaire is divided into two sections. Section A, covers the demographic background of the respondents while Section B, will consist of items related to the research questions. A four-point scoring scale drawn along the modified likert summated rating scale for measurement will be adopted.

Validity of the Instrument

The content validity of the instrument will be established after an intensive screening by the supervisor and two experts from the Department of Health, Safety and Environmental Education, University of Benin. Their inputs and correcting in terms of clarity and appropriateness of language will be used to develop the final draft.

Reliability of the Instrument

To determine the reliability of the instrument, the test-retest method of estimating the reliability of the instrument will be

used. Consequently, the constructed instrument will be administered on a group of twenty (20) commercial bus drivers who are not part of the study within an interval of two weeks. The correlation of the response will be determined using the Pearson's Product Moment Correlation, Coefficients (PPMCC)

Administration of Instruction

The researcher and a trained research assistant will administer the instrument to the respondents. The questionnaires to be completed by the respondent will be retrieved personally by the researcher. This will be done to ensure high return rate

Method of Data Analysis

The data collected will be analyzed using the frequency, simple percentage and descriptive statistics.

CHAPTER FOUR

PRESENTATIO OF DATA AND DISCUSSION OF FINDINGS

This chapter presents data collected from the respondents illustrates and discusses the result of the research. It involves the presentation and analysis of the data generated in the course of the research. Of the 240 questionnaire distributed 23 were not valid for analysis as some were missing while others were not

completely filled to the point of acceptance, therefore leaving the number of valid questionnaire for analysis being 217. This analysis was made using frequency count and simple percentage. The presentation and analysis were also made in line with the research questions raised in chapter one. The results of this finding are also discussed.

Presentation of Result

Section A: Demographic Information

Table 1: Demographic Data

GENDER	Respondents (F)	Percentage (%)
Male	217	100
Female	----	----
Total	217	100
LEVEL OF EDUCATION		
None	23	10.5
SSCE	106	48.8
NCE/OND	36	16.5
B.Sc.	39	17.9
M.Sc.	10	4.6
PhD.	3	1.3
Total	217	100
AGE GROUPS		
18 – 28 years	52	23.9
29 – 39 years	78	35.9
40 – 49 years	44	20.2
50 years and above	43	19.8

Total	217	100
Years in Driving		
1 – 5	53	24.4
6 – 10	93	42.8
11 – 15	41	18.8
16 – 20	20	9.2
21 and above	10	4.6
Total	217	100
RELIGION		
Christian	122	56.2
Muslim	54	24.8
Traditional Religion	41	18.8
TOTAL	217	100

Source: Field Survey, 2022

From the results on demographic data presented above, the data showed that all the commerce bus drivers sampled were male. On their level of education, 23 of them being 10.5% had no formal education, 106 of them being 48.8% had only SSCE, while 36 of them being 16.5% had NCE/OND. Continuing, 39 of them being 17.9% had B.Sc., 10 students being 4.6% had M.Sc. and 3 of them being 1.3% had PhD

On the age group of the respondents, 52 of them being 23.9% were in the age group of 18 – 28m years, 78 of them being 35.9% were in the age range of 29 – 39. 44 of them being 20.2% were in the age range of 40 – 49 and lastly 43 of

them being 19.8% were 50 years and above.

Research question 1: What is the level of knowledge of commercial bus drivers about the use of seatbelts in Egor LGA Edo State?

Table 2: showing the level of knowledge of commercial bus drivers about the use of seatbelts in Egor LGA Edo State

S/N	ITEMS	YES (%)	NO (%)
1.	Commercial buses with seatbelt do not have accident	33 (15.2)	184 (85.9)
2.	The use of seatbelt helps to prevent accident on the road	89 (41.5)	128(58.8)
3.	The use of seatbelt can help to prevent injuries when accident occur	93 (42.8)	124 (57.1)
4.	The use of seatbelt helps to reduce the severity of injuries when accident occur	132 (60.8)	85 (39.1)
5.	All commercial buses have seatbelts	49 (22.5)	168 (77.4)
6.	Seat belts is just to beautify vehicles	36 (29.0)	154 (70.9)
7.	The right time to fasten seatbelt is before igniting the engine	98 (45.1)	119 (54.8)
8.	The right time to fasten seatbelt is after igniting the engine	87 (40.0)	130 (59.9)
9.	The right time to fasten seatbelt is while driving on the road	21 (9.6)	169 (77.8)
10.	There is a law on the use of seatbelt in Nigeria	131 (60.3)	86 (39.6)

Source: Field Survey 2022

The table above shows the level of knowledge of commercial bus drivers about the use of seatbelts in Egor LGA Edo State; from the table it is obvious that 33 drivers being 15.2% said that commercial buses with seatbelt do not have accident while the remaining 184 drivers being 85.9% refuted the statement. 89 drivers being 41.5% agreed that the use of seatbelt helps to prevent accident on the road while the remaining 128 being 58.8% refuted. Also, 93 drivers said that the use of seatbelt can help to prevent injuries when accident occur 124 being 57.1%. Similarly, 89 drivers 41.5% agreed that the use of seatbelt helps to reduce the severity of injuries when accident occur 89 drivers while a greater number being 128 and 58.8% disagreed with the statement. 49 drivers being 22.5% in the study said that all commercial buses have seatbelts while the remaining 168 representing 77.4% responded otherwise. 36 drivers which represent 29.0 % said that seat belts are just to beautify vehicles while

the rest 154 drivers which represent 70.9 disagreed with the statement.

98 drivers which accounts for 45.1% of the total drivers in the sample said that the right time to fasten seatbelt is before igniting the engine, while the remaining 119 representing 54.8% refuted the statement. 87 of the drivers said the right time to fasten seatbelt is after igniting the engine while the rest 130 disagreed. 21 drivers said the right time to fasten seatbelt is while driving on the road, the remaining 169 of the drivers which 77.8% disagreed with statement. 131 drivers being 60.3% said there is a law on the use of seatbelt in Nigeria while the rest 86 drivers being 39.6% said no to the statement.

Research Question 2: What is the level of Utilization of commercial bus drivers in Egor LGA in Edo State towards the use of seatbelts?

Table 3: showing the level of utilization of commercial bus drivers in Egor LGA in Edo State towards the use of seatbelts

S/N	ITEMS	YES (%)	NO (%)
1.	I always use seatbelts while driving	52 (23.9)	165 (76.0)
2.	I sometimes use seatbelts while driving	148 (68.2)	69 (31.7)
3.	I never use seatbelts while driving	103 (47.4)	114 (52.5)
4.	I always forget to use seatbelt	133 (61.2)	84(38.7)

Source: Field Survey 2022

From the table above on the level of utilization, 52 drivers which is 23.9% always use seatbelts while driving, the remaining 165 drivers being 76.0% responded No the statement. 148 drivers being 68.2% said they sometimes use seatbelts while driving while the remaining 69 drivers being 31.7% responded No to the item. 103 drivers being 47.4% said they never use seatbelts while driving, the remaining 114 being 52.5% said no to the item raised. Lastly on the level of utilization 133 drivers said they always forget to use seatbelt while the remaining 84 drivers being 38.7%.

Research Question 3: What is the attitude of commercial bus drivers about the use of seatbelts in Egor LGA in Edo State?

Table 4: showing the attitude of commercial bus drivers about the use of seatbelts in Egor LGA in Edo State

S/N	ITEMS	SA (%)	A (%)	D (%)	SD (%)
1.	Seat belt laws by the FRSC is mainly to raise revenue for the government	96 (44.2)	84 (38)	17 (78)	20 (9.2)
2.	Seat belt laws by the FRSC is mainly to prevent casualties	77 (35.4)	21 (9.6)	55 (25.3)	64 (29.4)
3.	I don't believe seat belt can safe anybody when accidents occur	49 (22.5)	53 (24.4)	88 (40.5)	27 (12.4)
4.	Seatbelt creates discomfort while driving	103 (47.4)	49 (22.5)	45 (20.7)	20 (9.2)
5.	Using seatbelt makes driving slow	31 (14.2)	49 (22.5)	69 (31.7)	68 (31.3)

On the attitude of commercial drives towards the use of seatbelts, from the table 180 commercial being 82.9% in the study agreed that seat belt laws by the FRSC is mainly to raise revenue for the government while 37 drivers being 17%. 98 drivers being

45% agreed that seat belt laws by the FRSC is mainly to prevent casualties, the remaining 119 commercial bus drivers being 54.7% disagreed. 102 commercial bus drivers being 46.9% agreed that they don't believe seat belt can save anybody when accidents occur while the remaining 65 bus drivers being 115 representing 52.9% disagreed with the statement. 152 bus drivers representing 69.4% agreed that seatbelt creates discomfort while driving, the rest being 65 bus drivers being 29.9% disagreed with the statement. Lastly, 80 bus drivers being 36.7% agreed that using seatbelt makes driving slow while the remain 137 bus drivers being 63% disagreed that using seatbelt makes driving slow

Discussion of Findings

Assessment of knowledge of and attitude towards seat belt use among commercial bus drivers in Egor Local Government

The commercial bus drivers know that the use of seatbelt helps to prevent accident on the road. In congruent with the finding

in this study Oluyemi (2007) and Taylor, and Dorn (2006) stated also that seat belt use prevents and reduces the severity of injuries during motor vehicle crashes. This indeed shows that the drivers have a good knowledge on the matter. Woldegebriel, et al. (2018) their study noted that one of the common reasons for wearing seat belt were, “seat belt saves life” (79.3%), These reasons were comparable to reports from China (Idris, et al, 2013), Russia (Foss, Beirness & Sprattler, 1994), Qatar [36] and West India (Routley, 2008).

The drivers hold a wrong attitudinal position about the use of seat, majority of the drivers believes that seat belt laws by the FRSC is mainly to raise revenue for the government. The bus drivers believe that seatbelt creates discomfort while driving. In many studies, drivers did not like seat belts because of discomfort, lack of knowledge, not believing in seat belt safety, forgetfulness and habit to wear were reported (Idris SH, et al. 2013; Sahai, 1997; Routley, 2008; and Shaaban, 2012). In concordance with the above studies, in the current study the

main reasons given for lower use were “not believing in seat safety” (18.4%), “seat belt takes time to wear” (18.4%) and “creates discomfort” (7.8%). These findings suggest that we still need promotion on using seat belt during licensing and on job training to enhance safety.

Beck, Kresnow and Bergeb (2020) in their study found a strong association between attitudes about the importance of seat belt use and seat belt wearing behavior and further demonstrated that this relationship existed for both front and rear seat passengers. Previous research has also found that positive beliefs about seat belts (such as believing that seat belts are important for one’s health) increased the likelihood of seat belt use (Boyle & Lampkin, 2008; Steptoe et al., 2002). In a 2016 survey of adults who did not always buckle up in the rear seat, common reasons for not doing so included beliefs that the rear seat was safer than the front, a crash was unlikely, or they were not needed because of the type of trip (e.g., short distance; Jermakian & Weast, 2018).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary

The study focuses on the assessment of knowledge and attitude towards seat belt use among commercial bus drivers in Egor Local Government. The objective of the study was to examine the level of knowledge of commercial bus drivers about the use of seatbelts, determine the attitudes of commercial bus drivers about the use of seatbelts and to find out the behaviors of commercial bus drivers towards the use of seatbelts in Egor LGA in Edo State.

Survey research design will be adopted for this study. The population of this study consists of all the commercial bus drivers in Egor LGA of Edo State. The sample of the study comprised two hundred and forty (240) commercial bus drivers, a simple random sampling technique was used to select the respondents for the study. The instrument for the study was a

structure questionnaire was used to collect data. The data collected were analyzed, tabulated, interpreted and then discussed. Percentage and frequency were adopted as a method of data analysis.

Findings

The findings of the study therefore clearly revealed that

1. The commercial bus drivers know that the use of seatbelt helps to prevent accident on the road
2. They know that the use of seatbelt helps to reduce the severity of injuries when accident occur
3. Majority of them do not know the right time to fasten seatbelt
4. The commercial bus drivers in Egor LGA know that there is a law on the use of seatbelt in Nigeria.
5. Only a few of the commercial bus drivers always use seatbelts while driving, others say they always forget to

use their seatbelts

6. The drivers hold a wrong attitudinal position about the use of seat, majority of the drivers believes that seat belt laws by the FRSC is mainly to raise revenue for the government
7. The bus drivers believe that seatbelt creates discomfort while driving,

Conclusion

Injuries and deaths from bus accidents across cities in Nigeria and the world at large are very serious and solutions should be sought. Using safety equipment, such as a seat belt, on a bus is one way to reduce mortality from bus accidents. In this study, the commercial bus drivers on an average have a good level of knowledge about the use of seatbelts, but yet a negative attitude and very low level of utilization of seatbelts was found from the study.

Recommendations

Following the findings of the study, the researcher recommends below;

1. The drivers association in Egor LGA and Benin metropolis should begin to find out solutions to causes of accidents and ways to prevent them.
2. The Federal Road Safety Corp should work closely with drivers association, educating them on the need to use seatbelt.
3. Periodic sensitization should be carry out by FRSC on seatbelt use and other road safety measures so as to adjust positively the poor attitude on the use of seatbelts among drivers
4. The laws on seatbelts use should be strictly followed so as to ensure all commercial bus drivers use their seatbelts
5. The general public who are the passengers should be enlightened on the need for their drivers and themselves

to use seatbelts as they can to an extent influence the drivers use of seatbelts.

REFERENCES

- Adih, W. K., & Alexander, C. S. (1999). Determinants of condom use to prevent HIV infection among youth in Ghana. *Journal of Adolescent Health, 24*, 63–72.
- Ajzen, I. (2011). The theory of planned behavior. *Organ Behav Hum Decis Process, 50*(2), 179–211.
- Ajzen, I. (2015). *From intentions to actions: A theory of planned behavior*. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior*. Berlin, Heidelberg, New York: Springer-Verlag.
- Ajzen, I., & Fishbein, M. (2008). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice Hall, 2008.
- Armitage, C.J., & Conner, M. (2001). Efficacy of the theory of planned behavior: a meta-analytic review. *Br J Soc Psychol, 40*, 471–499
- Beck, L.F., Downs, J., Stevens, M.R., & Sauber-Schatz, E.K. (2014). Rural and Urban Differences in Passenger-Vehicle-Occupant Deaths and Seat Belt Use Among Adults—United States. *Morb Mortal Wkly Rep Surveill Summ Wash DC 2002 66*, 1–13.
- Beck, L.F., Kresnow, M., Bergen, G. (2018). Belief about seat belt use and seat belt wearing behavior among front and

- rear seat passengers in the United States. *J Safety Res*, 68, 81–8. <https://doi.org/10.1016/j.jsr.2018.12.007> PMID: 30876523
- Budd, R. J., North, D., & Spencer, C. (1984). Understanding seat-belt use: A test of Bentler and Speckart's extension of the 'theory of reasoned action'. *European Journal of Social Psychology*, 14, 69–78
- Chekijian, S.A., & Truzyan, N. (2012). Practices, attitudes and perceptions toward road safety in Yerevan, Republic of Armenia. In: Annals of Advances in Automotive Medicine/Annual Scientific Conference. *Association for the Advancement of Automotive Medicine*.
- Chen, F., Song, M., & Ma, X. (2019). Investigation on the Injury Severity of Drivers in Rear-End Collisions Between Cars Using a Random Parameters Bivariate Ordered Probit Model. *Int J Environ Res Public Health* 16, 2632.
- Conner, M., & Armitage, C.J. (1998). Extending the theory of planned behavior: a review and avenues for further research. *J Appl Psychol*, 28, 1429–1464.
- Conner, M., & Armitage, C.J. (2008). Extending the theory of planned behavior: a review and avenues for further research. *J Appl Psychol*, 28, 1429–1464.
- Conner, M., & Sparks, P. (1996). *Theory of planned behavior and health behaviors*. In: Conner M, Norman P, eds. Predicting Health Behavior. Buckingham, UK: Open University Press; 121–162.
- Elvik, R., & Christensen, P. (2007). The deterrent effect of increasing fixed penalties for traffic offences: the Norwegian experience. *J. Safety Res*. 38, 689–695.
- Eugenia, M.G., Monica, C., Mark, J.M., Sullman, M.P., & Silvia, F. (2007). Predictors of seat belt use amongst Spanish

- drivers. *Transp Res Part F Traffic Psychol Behav.* 10, 263–269.
- Fishbein, M., & Ajzen, I. (2015). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research.* Reading, Mass: Addison-Wesley;1975.
- Fishbein, M., & Ajzen, I. (2015). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research.* Reading, Mass: Addison-Wesley; 2015
- Foss, R.D., Beirness, D.J., & Sprattler, K. (2011). Seat belt use among drinking drivers in Minnesota. *Am J Public Health.* 84(11), 1732–7
- Helmut, P., Stephan, V.D., Rosenstock, I.M., Strecher, V.J., & Becher, M.H. (2018). Social learning theory and the health belief model. *Health Educ Behav,* 15, 175–183.
- Idris, S.H. (2013). Factors affecting self-reported use of seat belt among commercial vehicle drivers in Gusau metropolis Zamfara State North-western Nigeria. *Int J Injury Control Saf Promot.* 20(4), 380–4
- Ismaila, S., & Akanbi, O. (2010). Study on the use of seat belt by Nigerian drivers. *Aust J Basic Appl Sci.* 4(3), 494–7.
- Joann, K.W., Allan, F.W., & Charles, M.F. (2002). Seat belt use among African Americans, Hispanics, and Whites. *Accid Anal Prev.* 34, 523–529.
- Kim, J.M., Kim, S.C., Lee, K.H., (2019). Preventive effects of seat belts on traumatic brain injury in motor vehicle collisions classified by crash severities and collision directions. *Eur J Trauma Emerg Surg* 20, 19 – 23

- Kristen, A., Conner, H.X, & Gary, A.S. (2012). The impact of a standard enforcement seat belt law on fatalities and hospital charges in Ohio. *J Safety Res.* 41, 17–23
- Kwak, B.H., Ro, Y.S., Shin, S.D., Song, K.J., & Kim, Y.J., (2015). Preventive Effects of Seat Belt on Clinical Outcomes for Road Traffic Injuries. *J Korean Med Sci* 2015; 30:1881–8. <https://doi.org/10.3346/jkms.2015>.
- Kwak, B.H., Shin, S.D., Song, K.J., Kim, Y.J., Jang, D.B. (2015). Preventive effects of seat belt on clinical out-comes for road traffic injuries. *J Korean Med Sci*, 30,1881–8
- Lajunen, T., & Rasanen, M. (2004). Can social psychological models be used to promote bicycle helmet use among teenagers? A comparison of the health belief model, theory of planned behavior and the locus of control. *Journal of Safety Research*, 35, 115–121
- Laraque, D., Mclean, D. E., Brown-Peterside, P., Ashton, D., & Diamond, B. (1997). Predictors of reported condom use in central Harlem youth as conceptualized by the health belief model. *Journal of Adolescent Health*, 21, 318–327.
- Lipovac, K., Tesic, M., & Marić, B. (2015). Self-reported and observed seat belt use—A case study: Bosnia and Herzegovina. *Accid Anal Prev*, 84, 74–82. Retrieved from: <https://doi.org/10.1016/j.aap.2015.08.010> PMID: 26320737
- Ma, S. (2012). Seat belt and child seat use in Lipetskaya Oblast, Russia: frequencies, attitudes, and perceptions. *Traffic Injury Prevent.* 13(1), 76–81
- Manstead, A. S. R., & Parker, D. (1995). *Evaluating and extending the theory of planned behavior*. In W. Stroebe & M. Hewstone (Eds.). *European review of social psychology* (vol. 6, pp. 69–96). Chichester: Wiley.

- Mohammadi, M., Ansari, M.A, Rad, M., Hashemi, H.R., & Tabasi, M.A. (2015). Seatbelt Use and Related Factors Among Drivers Involved in Road Crashes in Southeast Iran. *Health Scope*, 24, Retrieved from: <https://doi.org/10.17795/jhealthscope-30782>.
- Mullen, P. D., Hersey, J. C., & Iverson, D. C. (1987). Health behavior models compared. *Social Science and Medicine*,24, 973–981.
- NHTSA, National Highway Traffic Safety Administration (2003). Initiatives to address safety belt use. Retrieve from: <http://www.nhtsa.dot.gov/people/injury/safetybelt/OPIPT-FinalRpt> (Retrieved 21.10.04).
- Parker, D., Lajunen, T., & Stradling, S. (2012). *Attitudinal predictor of interpersonally aggressive violations on the road*. Transportation Research Part F,1, 11–24
- Quine, L., Rutter, D.R., & Arnold, L. (2019). Predicting and understanding seat helmet use among schoolboy cyclist: a comparison of the theory of planned behavior and the health belief model. *Psychol Health*. 19, 251–269.
- Routley, V. (2008). China belting up or down? Seat belt wearing trends in Nanjing and Zhoushan. *Accid Anal Prev*. 40(6), 1850–8.
- Shaaban, K. (2012). Comparative study of road traffic rules in Qatar compared to western countries. *Procedia-social Behav Sci.*;48, 992–9
- Shakya I, Shults RA, Stevens MR, Beck LF, Sleet DA. State-level seat belt use in the United States, 2011–2016: Comparison of self-reported with observed use and use by fatally injured occupants. *J Safety Res* 2020; 73:103–9.

- Shakya, I., Shults, R.A., Stevens, M.R., Beck, L.F., & Sleet, D.A. (2011). State-level seat belt use in the United States, 2011–2016: Comparison of self-reported with observed use and use by fatally injured occupants. *J Safety Res*, *73*, 103–9.
- Simsekoglu, O., & Lajunen, T. (2008). Social psychology of seat belt use: a comparison of theory of planned behavior and health belief model. *Transp Res Part F Traffic Psychol Behav*. *11*, 181–191.
- Simsekoglu, O., & Lajunen, T. (2009). Relationship of seat belt use to health and driver behaviors. *Transp Res Part F Traffic Psychol Behav*. *12*, 235–241
- Stasson, M., & Fishbein, M. (1990). The relationship between perceived risk and preventive action: A within-subject analysis of perceived driving risk and intentions to wear seatbelts. *Journal of Applied Social Psychology*,*20*, 1541–1557.
- Wong, T.H., Lim, G.H., Chow, K.Y., Zaw, N.N., Nguyen, H.V., Chin, H.C. (2016). Buckling up in Singapore: residency and other risk factors for seatbelt non-compliance—a cross-sectional study based on trauma registry data. *BMC Public Health*, *16*, 402. <https://doi.org/10.1186/s12889-016-3080-3>
- World Health Organization. (2018). Global status report on road safety 2018. WHO 2018. Retrieved from: <https://www.who.int/publications-detail-redirect/9789241565684>
- Zeng, Q., Hao, W., Lee, J., & Chen, F. (2020). Investigating the Impacts of Real-Time Weather Conditions on Freeway Crash Severity: A Bayesian Spatial Analysis. *Int J Environ Res Public Health* *17*, 2768.

APPENDIX

**UNIVERSITY OF BENIN,
BENIN CITY, EDO STATE
FACULTY OF EDUCATION,
DEPARTMENT OF HEALTH, SAFETY AND
ENVIRONMENTAL EDUCATION
STUDENTS' QUESTIONNAIRE**

Dear Respondents,

I am an undergraduate in the above department currently carrying out a research on the Topic: *Assessment of Knowledge and Attitude towards Seat Belt Use among Commercial Bus Drivers in Egor Local Government*

Please tick (✓) the questionnaire sincerely as all information gathered shall be used purely for research purposes and shall be treated with utmost confidentiality.

SECTION A (Demographic Data)

Gender: Male () Female ()

Age: 18 – 28 years () 29 – 39 years () 40 - 49 years ()
_50 years and above ()

Level of Education: No Formal Education () SSCE ()

NCE/OND () B.Sc. () M.Sc. () PhD ()

Years of driving: 1 – 5 () 6 – 10 () 11 – 15 () 16
– 20 () 21 and above ()

Religion: Christian () Muslim () Traditional
Religion ()

SECTION B

Instruction: Please answer all questions: indicate the answer(s) most appropriate to you by ticking (√) in the box provided.

Thank you

S/N	ITEMS	TRUE	NO
A	Level of knowledge of commercial bus drivers about the use of seatbelts in Egor LGA Edo State		
1.	Commercial buses with seatbelt do not have accident		
2.	The use of seatbelt helps to prevent accident on the road		
3.	The use of seatbelt can help to prevent injuries when accident occur		
4.	The use of seatbelt helps to reduce the severity of injuries when accident occur		
5.	All commercial buses have seatbelts		
6.	Seat belts is just to beautify vehicles		
7.	The right time to fasten seatbelt is before igniting the engine		
8.	The right time to fasten seatbelt is after igniting the engine		
9.	The right time to fasten seatbelt is while driving on the road		
10.	The right time to fasten seatbelt is before igniting the engine		
11.	There is a law on the use of seatbelt		
C	Utilization of commercial bus drivers in Egor LGA in Edo State towards the use of seatbelts	ES	NO
12.	I always use seatbelts while driving		
13.	I sometimes use seatbelts while driving		
14.	I never use seatbelts while driving		
15.	I always forget to use seatbelt		

B	Attitudes of commercial bus drivers about the use of seatbelts in Egor LGA in Edo State	SA	A	D	SD
16.	Seat belt laws by the FRSC is mainly to raise revenue for the government				
17.	Seat belt laws by the FRSC is mainly to prevent casualties				
18.	I don't believe seat belt can safe anybody when accidents occur				
19.	Seatbelt creates discomfort while driving				
20.	Using seatbelt makes driving slow				