

Hellen Nnajjuma

Road Traffic Accidents in Uganda in view of Taxi Drivers Masaka District.

Master's thesis in Human Development

Trondheim, Autumn 2013



Hellen Nnajjuma

**Road Traffic Accidents in Uganda in view of Taxi Drivers
Masaka District.**

Thesis for the degree of master of philosophy in Human Development (M.Phil),

Trondheim, Autumn, 2013

Norwegian University of Science and Technology

Faculty of Social Sciences and Technology Management

Department of Psychology

NTNU

Norwegian University of
Science and Technology

DECLARATION

I, Hellen Nnajjuma, declare that apart from where referenced, I solely own this work and carried out the study under the supervision of Dr. Berit Johannesen and Prof. Birthe Loa Knizek of the Institute of Psychology at the Norwegian University of Science and Technology (NTNU). I have too observed the NTNU's academic regulations.

Signature.....

Date:.....

Hellen Nnajjuma (student)

This thesis has been submitted for examination with my approval as supervisor.

Signature:

Date.....

Dr. Berit Johannesen
(Supervisor)

DEDICATION

“Females normally have higher chances than males”. I dedicate this compilation to you my brother David Mutyaba who offered so much for me to join high school, I believe this was a grand cornerstone for this achievement. To you my sister Beatrice Namakula you are an adroit role model to us your siblings. My parents Mr. J.C. Ssemwogerere and Mrs. Winfred Naluwoza Ssemwogere you accredited and nurtured in me the importance of education coupled with the virtues of resilience, self-efficacy and unconditional positive regard to life encounters. Rev. Fr. J.B. Ssebwalunyo, Rev. Fr. Kizito Kaganda and other family priests your prayers have always been present and prevail evermore.

ACKNOWLEDGEMENT

With God everything is possible. Countless acknowledgements to my special friend Judith Igeme and fatherly encouragement from Dad Igeme Nabeta. You started it, enabled me to take a decision over relieving the then “enriching” positions I held in Uganda; to accomplish the NTNU Quota scheme scholarship application process and embark on studies far away from Home. Today I undoubtedly believe my set objectives are to thrive.

My gratitudes to the Norwegian government through lånekassen that granted and loaned me a scholarship and other financial assistance throughout the period of study. Special appreciation to the international house NTNU officials (spring 2009 - spring 2011⁺) for the unreserved service. Recognition to all my lecturers with a special mention to you Prof. Timo Lajunen you empowered me with the primary insight to take up this particular study field, and the supervisors Dr. Berit Johannesen and Prof. Birthe Loa Knizek of the department of Psychology, Faculty of social sciences and technology management at the Norwegian University of Science and Technology (NTNU). Dr. Berit thank you once again for your continued guidance amid tranquillity has served a fundamental building block to this triumph.

To you dear respondents, the invaluable information you provided was remarkably a vital bolster in this completion, each interview outstandingly catered for the research question.

Even though success comes with a greater obligation, my appreciation to you Dr. Dorothy Kizza and Dr. James Mugisha plus student colleagues- Johnny and others, you each uniquely offered immense support, but mostly you were fine academic links. Gratitude to my dear friends; Siv-Krutivik, Jesca Ntongo and family, Irene Nagawa and family, Doreen Nakyzze and family, Shupekile and family, Robert Musobya and family, Frobisha Kasirye and family, Addah Kobulunga and family you have uniquely been a reliable social capital.

Supports to this accomplishment from my beloved spouse Lawrence Kainamura and sons- Anthony Mugabo and Michael Bagabo are beyond words am immensely indebted; dear parents and siblings you are my heroes for I attribute to you the resilience vested herein- with you I rocked at furtive obliterations to this accomplishment. I am beholden to you all.

Table of Contents	
DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
Abstract	ix
Chapter one	1
INTRODUCTION	1
1.1.1 Background to the study.....	1
1.1.2 The scale of road traffic accidents in Uganda	3
1.2.0 Study area	6
1.3.0. Aims and Objectives of the study	8
1.3.1. General objective	8
1.3.2. Specific objectives	8
1.4.0 Research questions	8
1.5.0 Rationale of the study.....	9
1.6.0 Definition of Terms.....	10
Chapter two	10
REVIEW OF SIGNIFICANT LITERATURE	10
2.1.1 Context	10
2.2.0 Theoretical perspectives and models.....	11
2.2.1 Introduction	11
2.2.2 The theory of planned behaviour and the theory of reasoned action.....	12
2.2.3 Social Identity theory and Identity theory	16
2.2.4 The Haddon matrix model of injury	17
2.2.5 The PRECEDE-PROCEED model.....	20
2.3.0. Related literature review	21
2.3.1 Human factors.....	21
2.3.2 Environmental factors.....	23
2.3.3 Occupation related factors	24
Chapter Three	25
METHODOLOGY	25
3.1.1 Design.....	25
3.1.2 Interpretive Phenomenological Analysis (IPA)	26
3.2. Participants and sampling considerations	28

3.3. Procedure and Data collection.....	29
3.3.1 Interview	30
3.3.2 Time and setting	31
3.3.3 Interview subjects	33
3.4 Secondary data	33
3.4.1 Observation.....	33
3.4.2 Personal communication.....	34
3.4.3 Document review.....	34
3.4.4 Memoing.....	34
3.5 Instrument/ material	35
3.5.1 Language	35
3.5.2 Researcher	36
3.5.3 Interview schedule.....	36
3.5.4 Other instruments	36
3.6 Data transcription	37
3.7 Data analysis	37
3.8. Authenticity and dependability	39
3.9 Ethical considerations	39
3.9.1 Consent form	40
3.9.2 Confidentiality and anonymity	41
3.9.3 Incentives.....	41
3.9.4 Reflexivity	41
3.9.5 Trust worthiness.	41
3.9.6 Debriefing.....	42
3. 10 practical challenges	42
Chapter Four.....	43
RESULTS AND DISCUSSION	43
4.1.1 Introduction	43
4.2.0 Typical routines of taxi drivers	44
4.2.1 Introduction	44
4.2.2 Personal background.....	49
4.3.0 Socio-cultural context	52
4.3.1 Work environment.....	52

4.3.2. Economic related aspects.....	54
4.3.3 Gender and age	56
4.4.0 The taxi community	56
4.4.1 Working life of the drivers	56
4.4.2 Driver factors	62
4.4.3 Health conditions.....	63
4.5.0 Accidents.....	65
4.5.1 Specific accident cases	65
4.5.2 In-depth of the specific accidents	67
4.5.3. General accidents talk and explanations.....	69
4.6.0. Coping.....	77
4.7.0 Intervention	78
4.7.1 Driver related aspects	78
4.7.2 Road related aspects	79
Chapter Five.....	80
GENERAL DISCUSSION AND CONCLUSION.....	80
5.1. Overview of Findings.....	80
5.2 Limitations	87
5.3 Strength of the study	88
5.4 Implications and Recommendations	89
5.4.1 Community psychological interventions and praxis	89
5.5 Conclusion.....	91
REFERENCES.....	92
APPENDICES	108
APPENDIX I: LETTER OF ETHICAL CLEARANCE FROM NSD	108
APPENDIX II: INTRODUCTORY LETTER.....	109
APPENDIX III: INFORMED CONSENT STATEMENT.....	110
APPENDIX IV: INTERVIEW GUIDE	112
LIST OF FIGURES	
FIGURE 1: MAP OF UGANDA	4
FIGURE 2: GRAPHICAL REPRESENTATION OF ROAD TRAFFIC ACCIDENTS, 2008-2010 IN UGANDA.....	5
FIGURE 3: MAP OF MASAKA DISTRICT	6
FIGURE 4: CONCEPTUALISATION OF THE THEORY OF REASONED ACTION	13

FIGURE 5: THE CONCEPTUAL MODEL OF THE THEORY OF PLANNED BEHAVIOUR	14
FIGURE 6: INTERACTING FACTORS TO INJURY OR ACCIDENT	18
FIGURE 7: PSYCHOSOCIAL ACCOUNTS OF TAXI DRIVER ROAD ACCIDENT INVOLVEMENT.....	44
FIGURE 8: ILLUSTRATIVE EXAMPLE OF THE CHAIN-OF-BOSSSES PHENOMENON	60

LIST OF TABLES

TABLE 1: THE HADDON MATRIX AND TAXI-DRIVER ACCIDENT INVOLVEMENT	18
TABLE 2: SUMMARIZED RESPONDENTS' FORMAL TRAINING AND DRIVING TRAINING	51

Abstract

The aim of this study was to explore how psychosocial lived experiences of taxi drivers explain accident involvement in Uganda. Face to face in-depth semi-structured interviews were conducted with six male taxi drivers who survived accidents while driving and still served as taxi drivers. The sample was identified with purposive and snowball sampling techniques. Ethical considerations were observed during data collection through transcription, analysis to the final compilation. Interpretive phenomenological analysis (IPA) was employed to each participant's discernment of the specific and general accounts of accident narratives in a bid to make "sense" of their lived worlds as drivers and accident involvement. Three superordinate themes illuminating accidents emerged out of the data: typical routines of taxi drivers; the socio-cultural context; and the taxi drivers' community. These were discussed based on relevant theories and previous studies as well as pertinent concepts. Considering the study results, typical routines of taxi drivers, driver community factors and social/cultural factors affect each other, these together leave driver-accident involvement inevitable. Categorically such factors include; age, formal education, driving training, driver health status, domestic concerns, significant others, competitive driving / worse-worse, other road users, Impulsive pick and drop-off of passengers, theft, driver stress, state of the road, state of the vehicle among others. Thus behavioural and cognitive remedies are herein suggested towards ameliorative and/or transformative processes of the accident endemic.

Key words: Uganda; taxi drivers; psychosocial factors; road traffic accidents, IPA.

Chapter one

INTRODUCTION

1.1.1 Background to the study

In an accident that involved three vehicles; a commuter taxi, a trailer and a Toyota Noah car; left five people killed on spot yet four of the survivors died on the way to the hospital. The head-on collision which too left numerous injuries occurred along Masaka-Kampala road. The taxi was over-taking at a ““dangerous spot”” and it crashed into the trailer. The driver of the Toyota Noah car who endured the accident with slight arm injuries; intentionally twirled off the road to dodge crashing into the trailer which was a few metres ahead of him. The driver of the commuter taxi had carried excess of 6 passengers making them 20 in total instead of the recommended 14 passengers and he was driving recklessly. In a related incident along the same highway, a commuter taxi was involved in an accident that left a boda boda motorist dead (Jaramogi, 2012, in Daily Monitor newspaper).

Even though, “road accidents are the source of so many deaths and so many other serious and not so serious injuries there are treated in a very odd way” (Mitchell, 1997). Low income countries (LIC) and middle income countries (MIC) populations are faced with more road deaths than high income countries (HIC) but all are as much affected. All road users are at risk of this endemic but taxi drivers are as more prone to perishing and /or sustain severe fractures/disabilities in road traffic accidents as the number of passenger routes they drive daily. Thus road traffic accidents stay a soaring health problem in Uganda, the world over. In this study a taxi is limited to a minibus 14 passenger seat vehicle, locally termed as *Kamunye* or *Matatu*. In Uganda, taxi business is a privately operated venture; this vests too much authority to the owners and muscle to drivers.

Although eyewitnesses, news articles and many police reports usually account for collusions to driver responsibility; including - negligence, reckless driving, inexperienced driving, over speeding and so on; various scientific studies (Brown and Bohnert 1968; Odero, Garner & Zwi, 1997; Peltzer, 2008; Selzer& Vinokur, 1974; WHO, 2004; Yaşar, 2007) have traditionally categorised accident occurrence but not limited it to; human error, environment factors and vehicle factors. For instance, driver factors are registered for between 80% and 90% of road crashes and deaths (Peltzer, 2008). Indisputably the intertwineness among micro-meso-macro factors is a fundamental underpinning which is mirrored in various road traffic accident incidents. Besides, scientific and unscientific road traffic accident rationalizations never suffice the dreadful and unresolved accident deaths. Many questions linger the drivers' grieved family members and/or those nursing the emotional and physical wounds of the injured. However, crews and/or unembroidered answers to such incidents most times rest in eternity with the driver and to some survivors consciousness to the details of accident involvement may be subconsciously repressed. Thus, banding with the current study, any efforts geared towards mitigating road safety and road traffic accidents require a balanced consideration of preconceived or perceptible non/scientific public's precipitants of accidents and an in-depth understanding of the driver's lived life experience. This study aimed at exploring how the psychosocial lived worlds of taxi drivers illuminate road traffic accidents.

Guided by Harry & Michael, (1999)'s a psychosocial factor is herein referenced to a measurement which potentially connects psychological phenomena with the social environment that may overtly be observed as both impacting the individual to "pathophysiological changes". For example driver-road safety as reflected by the micro-exo-meso-macro relationships is distinctively knotted with driver factors such as age, formal education, driving training, driver-work stress, driver health status, domestic concerns,

significant others, competitive driving / worse-worse, negative life events, Impulsive pick and drop-off of passengers, substance use/ abuse; work environment (bosses, passengers, unsafe road users, unsafe speed, witchcraft, theft, state of the road); institutional factors (traffic law, structural and taxi factors (road condition/design, the taxi's state).

WHO (2009) evidenced that about 1.3 million people lose life to road traffic accidents worldwide yet between 20 and 50 million people endure non-fatal injuries. WHO (2012) recorded the fatality rate with 90% of 1.3 million accident deaths occurring in middle and low income countries, besides, increasing motorization worldwide will shoot it to 2.4 million deaths per year. WHO (2004) observed that over one million people die and over 40 million people are injured or sustain physical disabilities due to road traffic accidents. The same report estimated an increase of the burden by 80% in developing countries between years of 2000 and 2020. Most developing countries have low GDP per capita thus are categorized as low income countries. Uganda is a low income country.

1.1.2 The scale of road traffic accidents in Uganda

Uganda is situated on the Eastern section of Africa, bordered by; Sudan, the Democratic Republic of Congo, the United Republic of Tanzania, Kenya and Rwanda. The country is land-locked covering an estimated total area of 241,550.7 km², with a projected population of 34,131,400 people for the year 2012; many of these people are at risk of the escalating road crashes endemic (UBOS, 2012). The Uganda road transport network is approximately 64,558km, collectively with about 9,4580km national roads, 22,300km district roads, 2,800km urban roads as well as 30,000km Community Access roads (UNRA). “District roads (34.5%) link communities and connect the rural to urban areas and to the national road network. Urban roads are 4.3% of the network and the rest (over 46%) is community access roads that provide access to and from schools, villages, community centres and national and district roads” (Tanzarn 2003).

Figure 1: Map of Uganda



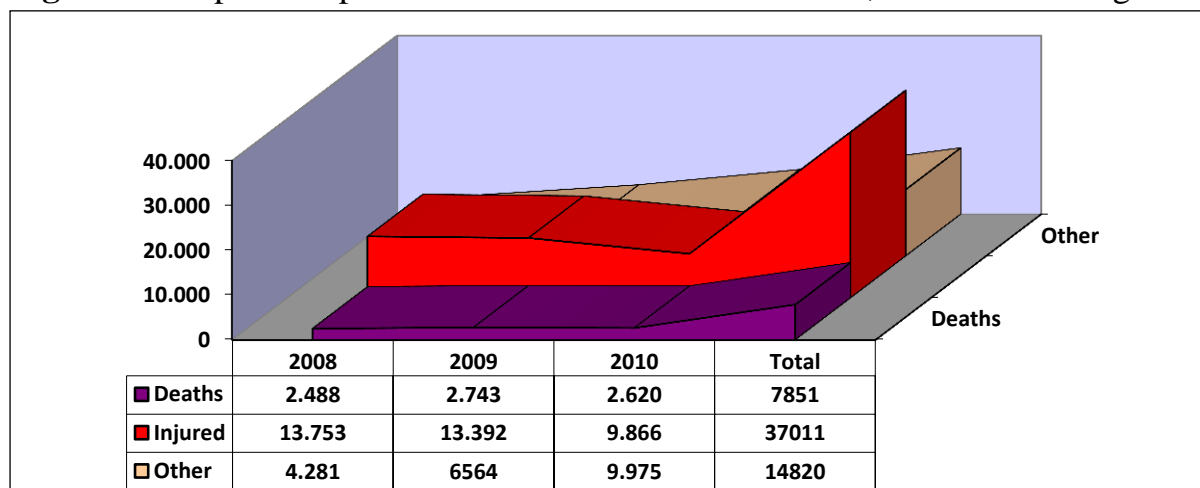
Source: **Tanzarn (2003).**

Uganda's principal type of transport as in case of many other middle and low income countries is road. This form of transport takes about 95% of the country's goods and 99% of passenger traffic respectively with a 78% fatality rate every 10,000 vehicles (World Bank 2011). The vehicles as categorised by Uganda police include; motor cars, light omnibus (taxi), medium omnibus, heavy omnibus, light goods vehicles, medium goods vehicles, heavy goods vehicles, trailers & semi-trailers, fuel trucks, tractors, Motor cycles, Pedal cycles and engineering plants. All these types of vehicles have at one time injured or killed lives on Uganda's roads. In a study carried out by Schram (1968) road traffic fatalities in Uganda involved (9%) of the drivers, (20%) cyclists (26%) passengers, and (45%) pedestrians. Various factors accounting for such accident occurrences for instance, increased number of passenger (minibus) vehicles in addition to other vehicle types on the road, have been documented. The National Transport Data Base (NTDB) (2000) registered 15523 light

omnibus/minibus in Uganda with a 17% increase in the four years prior to the same year. In (2010) Uganda police registered 4, 970 minibuses of accident involvement.

Regarding statistical road fatality in the year 2010, vehicle accidents claimed lives of 128 (4.3%) drivers, 799 (27.1 %) passengers, 1,217 (41.2%) pedestrians, 512 (17.3 %) motor cyclist and 298 (10.1%) pedal cyclists; the seriously injured victims included; 903 (6.4%) drivers, 5,568 (39.4 %) passengers, 3,908 (27.6%) pedestrians, 2,642 (18.7%) motor cyclist and 1,127(7.9%) pedal cyclist; yet other victims sustained minor injuries among whom 173 (10.1%) were drivers, 740 (43.4%) passengers, 347 (20.3%) pedestrians, 209 (12.3%) pedal cyclists and 237 (13.9) motor cyclists (Uganda crime report, 2010). In the year 2009 the Uganda police registered 22,699 total number of accidents of whom 2743 people died and 13,392 were injured. Similarly 2008 police traffic report documented a total number of 20,522 accidents with 2,488 deaths and 13,753 injured cases.

Figure 2: Graphical representation of road traffic accidents, 2008-2010 in Uganda



Source: Uganda crime report (2010).

Data presented among the published studies carried out in Uganda, accident involvement was due to speeding (19%), breach of license (18%), dangerous loading by trucks (16%) and careless driving 14% (Bishai et al., 2008). Another study rated accident causation as; careless

driving 41.5%, reckless driving 29.3%, hit and run accidents 9.5%, over speeding 3.7%, careless pedestrian 3.9%, vehicle mechanical defects 3.2% (Uganda crime report, 2010). Other documented causes of road traffic accidents in Uganda have been categorised as human error (80%), mechanical conditions (10%), road conditions (5%) and environment factors (5%), (Ministry of works and transport, 2012). However, the above and several other related reviewed data regarding the study phenomenon are more quantitative rather than qualitative- they do not go beyond statistical representations to show the in-depth contribution of such enumerated factors preceding and subsequent to the accident fatalities or injuries, which leaves a gap that the current study set out to bridge. That is the psychosocial lived world of taxi drivers and road traffic accidents in Uganda.

Regarding the existing road accident studies, driver-fatality representations are often next to or the smallest while the passengers and pedestrians percentages are both assigned huge proportions (Odero et al., 1997, WHO, 2009, Uganda crime report, 2010). Nonetheless, it is important to acknowledge drivers' pivotal role in such accident prevalence rates. Eminently an attempt to comprehend taxi drivers-accident involvement in Uganda extends further than statistical explanations, thus this study sought to reveal the underlying psychosocial spectrum within the life world of taxi drivers to road traffic accidents

1.2.0 Study area

Figure 3: Map of Masaka district



Source: *Google map* (2012).

Masaka district is situated in the southern central part of Uganda. It was initially composed of other districts including; now itself, Sembabule, Kalungu, Bukomansimbi and Lwengo that were separated and are now its borders/neighbours. The district is currently made of three constituencies; Masaka municipality, Bukoto central and Bukoto east covering a total area of 6213.3km² with a topography characteristic of “rolling hills with vertical gully heads and valley bottom swamps including streams and swamps flowing to lakes and rivers” (Planning unit, Masaka 2003). It is approximately 120km from Kampala the main capital of the country. The district’s population was 767,759 among whom 377,924 were males and 389,835 were females, in the Uganda census of 2002 (ibid). The people’s ethnicity in this area is predominantly Baganda with a mixture of Banyarwanda who migrated into the area since the early 1912, through 1950s and to date, with Barundi, Banyankore, Banyoro and others who all for various reasons joined to stay in the area. The housing structure of Masaka district is a mixture of permanent, semi-permanent, linear and temporary dwelling houses with “by-pass roads with a right of way of 40.0 metres, major roads with right of way of 30.0M, primary distributors with right of way of 20.0M-25.5M and local distributors with right of way of 12.0-15.0M” (UN-HABITAT, 2010). Various district roads are tarmacked with a few busy murrum community / feeder roads. Most people reside along main and community / feeder roads.

Masaka-Kampala high way is one of the major main roads in the study area. It is one of the two roads in the country categorised as ““killer roads”” and are ranked the highest with road fatality because of their topography which is characteristic of blind corners and sharply meandering bends with some narrow parts of the road (UNRA). In 2009 the Masaka traffic police inspector emphasised the danger that was placed on the citizens’ life due to the road crash prevalence on this highway. Some places including; Mpugwe, Kkingo, Mukoko and Bisanje along the highway were categorised as highly prevalent with road accidents. In the

following year 2010; 610 people in Masaka district alone were involved in road accidents. Some of them occurred along the same Masaka-Kampala highway, these included; 101 fatal accidents, 278 serious accidents and 231 accidents. Among the fatal accidents seven (7) were drivers, of the seriously injured 30 were drivers and of those who sustained minor injuries 12 were also drivers.

Some areas of the highway were in a sorry state; narrow, with potholes, and having dangerous blind spots. However, about mid-year of 2010 through 2011, the road was altered to a relatively better state.

1.3.0. Aims and Objectives of the study

1.3.1. General objective

- To explore the possible psychosocial elucidation of traffic accidents among taxi drivers and offer guiding suggestions regarding preventive measures.

1.3.2. Specific objectives

- To explore the possible taxi driver factors and road accident involvement.
- To explore the possible work environment factors of taxi drivers and road accidents
- To explore the possible vehicle factors and taxi drivers road accidents
- To suggest ameliorative channels at micro-meso-macro levels to road accidents.

1.4.0 Research questions

- What possible taxi driver factors contribute to traffic accidents?
- What possible work environment factors contribute to traffic accidents?
- What possible vehicle factors contribute to accidents among commercial taxi drivers?

- What possible micro-meso-macro suggestions to road accident adversity.

1.5.0 Rationale of the study

Whenever road accidents occur; drivers, passengers, pedestrians (for example my beloved 3.5 years old niece- Brian Ssemakula who on 9th May, 2013 was knocked down at about his home by a racing taxi), or any other road users or those with nearby residences or nearby business attendants (e.g kiosks, retail shops, local markets, schools etc) sustain injuries or lose life. In the case of Uganda, traffic accidents cost people's lives every day, affect the country's GDP, that cause economic and / or psychosocial wreckage as well as leave individual casualties, families and friends of the deceased in horrendous grief. Even with several lives depressing into death or disability in excruciating pain, at the face of road traffic accidents, the problem continues to claim lives the world over. Various interventions have been undertaken mostly in European countries compared to Africa and other continents but the problem subsists. Such attempts have included research and physical infrastructure developments; however, driver factors/ human error together with work environment factors, structural and vehicle factors, plus institutional factors remain at the roots of road accidents occurrences. Even so, there are hardly considerable efforts taken beyond media broadcast and police investigations to spell out such accident occurrences.

There is limited accident data (Lajunen, 2001) especially scientific work about traffic safety in Uganda. Besides, nothing has been said about qualitative understanding of the phenomenon more categorically one that seeks the in-depth of psychosocial factors and taxi drivers' involvement in road accidents. Most of the existing literature is quantitative in (e.g World Bank 2011; UN-HABITAT, 2010; Uganda crime report, 2010; WHO, 2009; Ministry of works and transport, 2012; Bishai et al., 2008; Odero et al., 1997; UNRA, 2012,) yet other available related publications are European based- most of which are not quite pragmatic to Uganda's context; a gap that the current study sought to bridge. Thus the motivation to carry

out the current study was to unveil the lived experience of taxi drivers regarding accident involvement; decisively it is my aspiration to add knowledge to existing road safety publications with a phenomenological analysis of field data.

1.6.0 Definition of Terms.

- Psychosocial factor: A component that correlates both psychological and social environment attributes
- Taxi: It is a fourteen-passengers vehicle locally called “Kamunye” that is commercially used to transport passengers in Uganda.
- Taxi Drivers: people who transport passengers to set destinations by a taxi in Uganda
- Occupational factors: work dynamics that intimately influence the driver cognitively and behaviourally.
- Driver factors: driver personal elements /attributes that may contribute to road accidents
- Environmental factors: aspects in the environment that can influence accidents

Chapter two

REVIEW OF SIGNIFICANT LITERATURE

2.1.1 Context

The current study was guided by interpretive phenomenological analysis and it is upon the philosophy of science of this orientation that this study is structured. That is the different chapters are presented based on the principles and guidelines of IPA. This chapter is predominantly to address theories and other related knowledge to the study. However, following IPA principles theories are given less priority that even in some circumstances are absolutely not used. IPA like most qualitative studies instead require that attempts should be geared towards bracketing’ existing theory and aim at understanding as well as representing

the study participants' experiences and actions as virgin as they unfold of their lived life in connection with the taxi work.

In the current study I tried to develop understanding of the accident phenomenon as expressed by the different participants' feelings and actions presented in the interviews (Robert, Constance, David, 1999). However, as it is often acknowledged by various qualitative researchers it rather impossible to set aside individual perspectives as well as not thinking of existing knowledge. For the same reason, though accorded IPA rules more consideration, I have further tried to "reconcile the opposing perils of objectivism and relativism" (Kvale, 1996; Rennie, 1998) with the following theoretical models and perspectives in a bid to further conceptualize the accident phenomenon.

2.2.0 Theoretical perspectives and models

2.2.1 Introduction

"The production of knowledge is fundamentally dependent on past knowledge" (Zina, 2010). This chapter further presents the theoretical framework of the study. Following that "a theory of crash causation must go beyond statistical associations, make assumptions about underlying processes, and gloss over issues of measurement" (Blander, West, and French, 1993), the present study seeks to find how psychosocial factors explain drivers' involvement in road traffic accidents.

Different studies have used several theories, models to explain and predict the accident phenomenon. Such studies have particularly, intensively-extensively and empirically-theoretically studied the phenomenon in a bid to better understand why they occur and how they can be averted (Ajzen& Madden, 1986; Lajunen, Parker and Summala, 2004; Lund and Rundmo, 2009). Categorically such studies have addressed; accident causality in reference to the various traffic participants- drivers, passengers and pedestrians (Carsten, Tight,

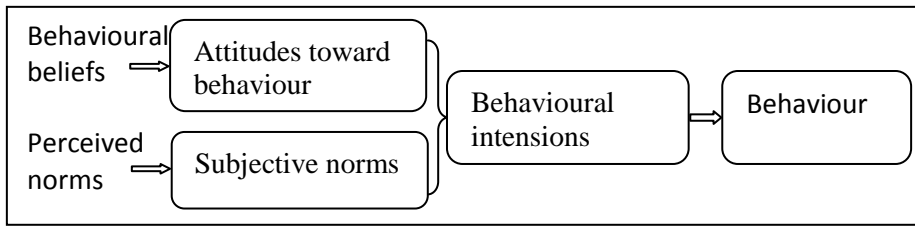
Southwell, & Plows, 1989); physical environment- roads, terrain, surroundings (Karlaftis and Golias, 2002) and the vehicle- mechanical conditions, type, seat belt (Simsekoglu and Lajunen,2008). To achieve these, such studies employed numerous interdisciplinary theories and models that enabled them to perceive, conceptualise, and contextualise in-depth the whys and hows of the accident phenomenon. On that grounding, researchers have been able to define, distinguish and categorise various accidents under respective contributory facets.

It is upon the same basis that the theories and models in context of the current study are used to structure a theoretical framework that enhances the understanding of psychosocial underpinnings and interventional procedures of road traffic accidents. Two intertwined sets of theoretical perspectives and two models relevant to the purpose, objectives and study questions have shaped the theoretical framework of the study. These include; the theory of planned behaviour and the theory of reasoned action; the social identity theory and identity theory; plus the Haddon matrix model of injury, and the PRECEDE-PROCEED model.

2.2.2 The theory of planned behaviour and the theory of reasoned action

The theory of planned behaviour (TPB) is an extension of the theory of reasoned action (TRA) (Ajzen and Fishbien, 1980; Fishbien and Ajzen, 1975), which too holds essence to the current study- the psychosocial aspects and taxi-driver road accident involvement. TRA is concerned with the interactions among; an individual's; a) beliefs (certainty that something is authentic), b) attitudes (relatively constant positive/negative evaluative component towards an individual, object or action), c) intentions (likelihood to act in some way in a particular situation) and d) behaviour (a spectrum of performances or actions undertaken by an individual in connection with the environment).

Figure 4: Conceptualisation of the theory of reasoned action



Source: Fishbein and Ajzein (1975)

According to the theory of reasoned action, intention determines behaviour. It assumes that intentions (the cognitive expositions of an individual's preparedness to execute particular behaviour, and it is believed that intention is an instantaneous precursor to behaviour (Ajzen, 2002) are a product of behavioural beliefs (personal beliefs about the outcome of given behavior); attitudes toward the behaviour (personal evaluation of a given behavior whether to perform it or not; attitudes are influenced by factors e.g. past life events, family and peers, socialization, social cultural aspects, recent/current life experiences), perceived norms regarding the behaviour (personal perception of social demands disapproving of the individual's behaviour), and subjective norms (personal perception of specific behavior that is dependent upon the social influences i.e. the micro-meso-macro systems) which together determine behaviour.

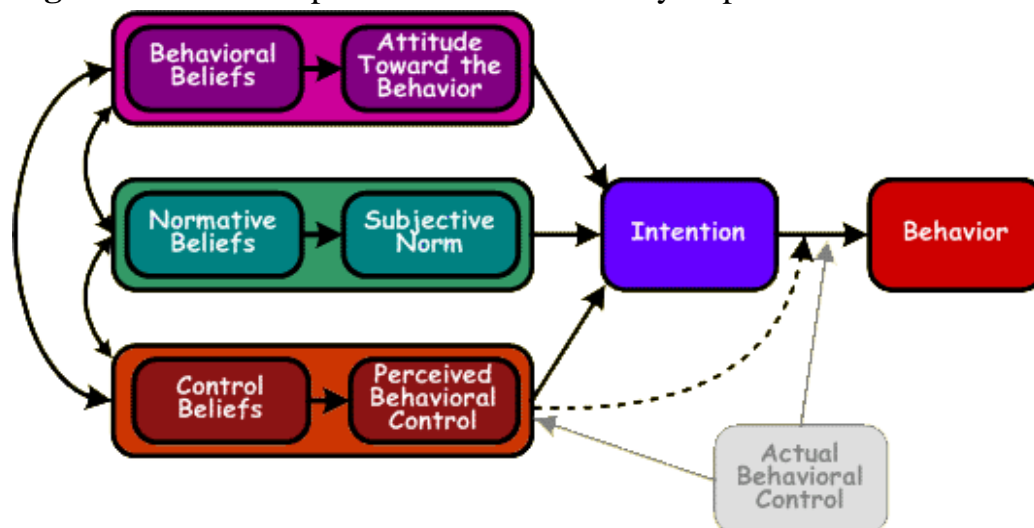
Nonetheless the theory of reasoned action does not only confound norms and attitudes but it is also challenged with emphasizing intention over other pertinent aspects that affect behavior. Therefore extensions of the TRA as often proposed and incorporated by other researchers, the current theoretical framework has too included some extensions. To begin with; to bridge the gap in the TRA, the theory of planned behavior (Ajzen and fishbien 1980) was born of it (TRA). Particularly the perceived behavioral control construct was added to the TRA's framework and it changed to the TPB (ibid).

The theory of planned behaviour (Azjen, 1991) further offers an explanation of the driver-accident involvement as related to attitudes and beliefs on the basis of psychological and

situational cues. These sometimes have a social genesis which, affect drivers into road traffic accidents. The theory of planned behaviour proposes that intention and behavioural control jointly determine behaviour (ibid). Besides acknowledging attitudes towards behaviour (accidents), it is requisite to determine the drivers' subjective norms and beliefs. The basis of predicting an individual's (driver's) intentions is to comprehend his beliefs and attitudes. Perceived behavioural control manipulates intentions. Like self-efficacy perceived behavioural control represents individuals' (drivers') discernment of their respective skills to execute or being involved with the behaviour (accident). "These predictors lead to intention. A general rule, the more favourable the attitude and the subjective norm, and the greater the perceived control the stronger the person's intention to perform the behaviour in question" (Ajzen, 2002).

I used both the TRA and the TPB because of their pertinent connectedness regarding the current study's framework. These theories apply to the study findings; because they explain why human (driver) behaviour (accident) occurs, by indicating the interaction of implicit and explicit constructs. They thus predict behaviour (behaviour can either be voluntary or premeditated).

Figure 5: The conceptual model of the theory of planned behaviour



Source: Ajzen, (1991)

According to the Ajzen (1991) human action is steered by three different considerations: Beliefs about the expected outcomes of behavior (behavioral beliefs), beliefs about others normative expectations (normative beliefs), and beliefs about circumstances that may advance or obstruct the real behavioural action (control beliefs). Regarding a range of behavioural beliefs about a particular behaviour, either positive or negative attitudes towards behaviour are created. Normative beliefs become a foundation for subjective norm (or perceived social pressure), yet control beliefs breed into perceived behavioural control that connotes the perceived ease or difficulty involved in performing the behaviour (skills, environmental aspects, structural barriers). Thus attitudes, subjective norms and perceived behavioural control are believed to “emerge spontaneously and automatically as people form behavioural, normative and control beliefs respectively” (Ajzen & Fishbein, 2000, p. 17) Thus the attitudes towards the behaviour, subjective norm and perceived behaviour control determine formation of behavioural intentions that are translated into behaviour.

Considering Ajzen and Fishbien (1980) the theory of reasoned action (TRA) better predicts behaviour under participants’ volitional control but certainly there is a wide variety of behaviours that are not volitional. For instance even paucity to a vast spectrum of cognitive; affective; physiological; environmental or social cultural factors can significantly affect an individual’s (driver’s) volitional control. A social cultural argumentation was put forward by Rutter, Quine and Chesham (1992) who presented findings with a discrepancy between the belief control held by younger and older riders either with accident involvement or not. Younger riders believed that they had limited control compared to older riders.

In another seat-belt-road safety study (Budd, North and Spencer, 1984), extended the TRA to incorporate the contribution of drivers’ past conduct and intentions towards seat belt use. Results implicated the TRA to predict drivers’ intentions to put-on seat belts but with a

pending discrepancy which had to be explicated by a measure of the drivers' past conduct while on the road. Various academic studies addressing numerous health topical issues including the subject of road safety; have been guided by the theory of planned behaviour (TPB) for example driver behaviour (Newnam, Watson and Murry, 2004), drink-driving (Gordon and Hunt, 1998), pedestrian behaviour (Evans and Norman, 1998). Even though it registered much predictive efficacy (Ajzein, 1991), the TPB showed variances based on the methodology and operationalisation of the different constructs as applied in different studies (Lajunen and Räsänen, 2004; Parker et al, 1992; Quine et al, 1998; Hardeman et al, 2002). This allows the theoretical scope to include other sources of behavioural influence based on the theory of planned behaviour.

2.2.3 Social Identity theory and Identity theory

The social identity and identity theories are here briefly employed to beef up the TPB as well to essentially chip in more description to accident involvement among taxi drivers. The concept of identity as applied in both theories refers to a spontaneous self which also includes volitional control, merging with other constructs as attitudes, subjective norms, and others in support of the TPB (Ajzein, 1991). The self (person) can relate with particular environment as it presents itself to the individual. The social identification theory calls it the self-categorization (Turner, Hogg, Oakes, Reicher, and Wetherell, 1987); yet the identity theory calls it identification (McCall and Simmons, 1978). Drivers too comply to the taxi drivers' community group dynamics including worse-worse, traffic rules violation e.g, loading excess passengers, attending to phone calls while driving; alcohol and drug use (Teye-kwadjo, 2010) and others. In addition when a person conforms to a group he becomes a social identity (Hoggs and Abraham, 1988).

Social identity theory lays emphasis on the uniformity of perception and action among group members; attitudinally group members uniformly build evaluations. Thus a group-based identity determines a person's behaviour. Similarly drivers due to a shared identity they conform to the taxi community's way of driving, and other norms and behaviour which influence the predisposing factors to road accidents. Besides different group members hold on to different beliefs and perspectives which uniquely influence them to form micro social structures in the group (Riley and Burke, 1995; Stets and Burke 1996; Stets, 1997). "Notably the emphasis is not on the similarity with others in the same role, but on individuality and interrelatedness with others counter roles in the group or interaction context." (Stets and Burke, 2000). In the same regard identity theorists consider the group (e.g. the driver community) as a set of interrelated individuals, each of whom performing unique but interrelated activities- although they are part of the drivers' community; each driver uniquely observes and experiences the world of work. Besides, every driver's intentions and behaviour significantly affects other drivers, for example various implicit thoughts and competitive driving, impulsive pick and drops of passengers, phone use while driving; these together or singularly can convert into road crash.

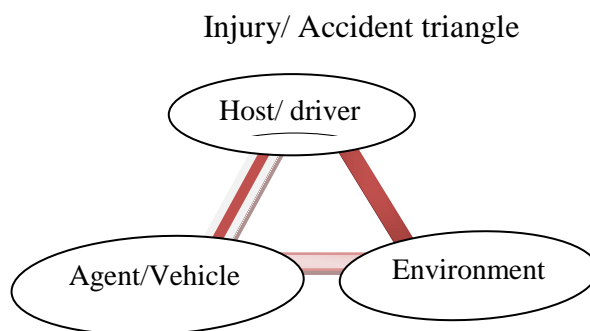
Other models though not directly extensions of the TPB but well encompassing in the theoretical explanation of the current research question, are the Haddon matrix model of injury and the precede-proceed model

2.2.4 The Haddon matrix model of injury

For decades various disciplines have geared efforts towards; examining, understanding, predicting and preventing injury with help of solution-oriented models. Many of these have among others borrowed a leaf from the Haddon matrix model. This model was developed by William Haddon (1980) and since its inception it has fundamentally directed theoretical and

empirical research with injury causality descriptions and suggestions to prevention. Haddon explicated injury causality and prevention with a two-dimensional model. That is, A. The determinants of injury or accident involvement i.e., i) host (driver); ii) agent/vector (vehicle); iii) environment. These are herein illustrated in an injury triangle.

Figure 6: Interacting factors to injury or accident



Source: Hargarten (2002).

B. The injury phases i.e., pre-event, event and post event. Generally the model presents factors to consider before addressing the accident pandemic. The model logically allows to fit in factors relating to the problem of the user’s choice; as such it has been widely employed in numerous disciplines and aspects relating to injury or otherwise to explain causality and prevention. These include: psychology, public health, sociology etc... with topic for instance, motor vehicle collisions, bicycle crashes; gender and accidents; construction injury; accidental falls; bath tub drowning; war and trauma; child abuse; and others. The current study is making use of the model to further illuminate the taxi drivers’ road accident involvement phenomenon.

Table 1: The Haddon matrix and taxi-driver accident involvement

	Host (Driver)	Agent/Vector (Vehicle)	Environment
Pre-event	Alcohol use	Brake condition	Visibility of hazards

Event	Fatigue	Tire quality	Road curvature and gradient
	Experience and Judgement	Center of gravity	Shoulder height
	Risk-taking behaviour	Jackknife tendency	Surface coefficient of friction
	Amount of Travel	Ease of control	Divided highways, one-way streets
	Stature	Load weight	Intersections, access control
	Medications	Speed capability	Weather
	Motor Skills	Ergonomic controls	Signalization
	Cognitive Function	Mirrors	Speed limits
		Visual obstructions	Drunk driving laws
	Seatbelt use	Speed at impact	Speed limits of traffic
	Age	Direction of impact	Recovery areas
	Sex	Vehicle size	Guard rails
	Bone Density	Automatic restraints	Characteristics of fixed objects
	Stature	Airbag	Median barriers
		Character of contact surfaces	Roadside embankments
	Post-event		Load containment
		Deformation zones	
		Fuel system integrity	
Age			911 access
Sex			EMS response
Medications			Triage and transfer protocols
Pre-existing medical conditions/physical condition			EMS training
Social situation			Quality of emergency care
			Location of appropriate ED
			Access to definitive care
		Access to rehabilitation	

Source: Hargaten (2002).

Given that the above theories and models mostly relate to guiding our understanding of accident interconnection to occurrence; it requires a rather more specific prevention-based model in synthesis with those above to guide the understanding of how road accidents (a social and community public health threat, a community and human burden) can be curbed. Considering that psychology and Human development in particular, serve best with communities, an educational community based PRECEDE-PROCEED model has been selected to serve as the general interventional guiding model with suggestions of how accidents can be restrained.

2.2.5 The PRECEDE-PROCEED model

PRECEDE and PROCEED are acronyms of which each letter represents a term. PRECEDE represents Predisposing, Reinforcing, and Enabling Constructs in Education/ Environmental Diagnosis and Evaluation. PROCEED represents Policy, Regulatory and Organizational Constructs in Educational and Environmental Development. The model follows four major assumptions and four phases respectively;

1. PRECEDE-PROCEED should be a participatory process, involving all stakeholders – those affected by the issue or condition in question – from the beginning.
2. Health is, by its very nature, a community issue.
3. Health is an integral part of a larger context, and it's within that context that it must be considered- the community as a whole. It therefore influences, and is influenced by, much more than seems directly connected to it.
4. Finally, health is more than physical well-being, or than the absence of disease, illness, or injury. It is a constellation of factors –economic, social, political, ecological, and physical (Lawrence and Rabinowitz- <http://ctb.ku.edu/en>).

2.3.0. Related literature review

This part of the theory section presents the reviewed literature pertinent to the research question. Under the subthemes of human factors, environmental and occupation related factors. literature based on the existing body of knowledge regarding psychosocial aspects of driver-road accident-involvement has helped to further structure understanding of the study constructs. However, regarding Uganda's context, of the existing scanty and fragmented literature; little meets the needs of the current study.

2.3.1 Human factors

Human factors in traffic are composed of the driver, pedestrian, passenger and the traffic police, Yaşar, (2007); these coupled with negative psychosocial factors of the driver-work environment exacerbate into stress and subsequent taxi crash. Other research has detailed lack of education (Asogwa, 1992; Bener and Jadaan, 1992, Nordfjærn, 2011) as an element contributing to accidents among taxi drivers. Education in this context encompasses driving training, road-traffic information, driving licence (Peltzer, 2008) and formal training in general; for instance in 2003 a number of South African and Nigerian taxi drivers, numerous Cape Peninsula University students were driving without driver's licence. In resonance with the Person Environment Fit theory (French, Rodgers and Cobb, 1974), stress results when the supplies or demands of the environment (E) do not match the needs or abilities of the person (P). The greater the misfit between the environment and the person, the greater the stress. For example, One 27 years old taxi driver starts work at 6am. His main routes are Kampala suburbs; including; Kasubi, Nansana and Namungoona. On these routes passengers pay between 800-1000 shillings (approximately nok: 3 or 5) depending on the day's work. Like many other businesses tax work isn't smooth "passengers abuse us, the fuel charges are so high, and taxes are too". These leave him with little to cater for his family. (S. Bataaliwo WBS television news).

Several driver factors associated to stressful life events account for crash involvement (Selzer & Vinokur, 1974; Matthews et al. 1999). Brown and Bohnert (1968) in their study reported 80% of a sample of drivers who had been involved in fatal accidents had serious interpersonal-marital or vocational-financial stress prior to the crash. Stress and emotions (Salzburg, 1983) contribute to MVI's. Notably taxi drivers' psychosocial history influences accident involvement. For instance, those with low education (Murray, 1998), those with previous personality and emotional problems including depressions (Blanchard, Hickling, Taylor & Loos, 1995; Ehlers, Mayou & Bryant, 1998; Norris, Matthews & Riad, 2000, Peter, Tonia, Psocka, Martin and Gina, 2003) and other mental illnesses e.g., anxiety, somatic complaints, inadequate social conscience, impulsive personalities, (Mills 1973). Driver's history of or compromised mental health, for example those with; active psychotic symptoms (Harris, 2000), hypomanic symptoms and psychomotor retardation (Cremona, 1986), suicidal symptom (Silverstone, 1988; Cantor, 2000), symptoms of dementia (Kolowski & Rossiter, 2000), neurological problems (McKenna, 1998) and borderline cognitive impairment (Marottoli et al, 1994) in addition to gender and or masculinity (Rundmo, 2004; Nordfærn, 2011) and socio-cultural factors e.g., religious beliefs (Douglas 1986) have been reported to affect driver behaviour. Drivers exposed to other stresses (Richter, 1991), and those experiencing individual turmoil, as in domestic and work (Simon & Corbett, 1996; Duxbury and Higgins, 2001) as well as mental and physical health problems (Frone et al., 1997; Frone, 2002; Greenhaus and Parasuraman, 1999) such as HIV/AIDS debilitate drivers.

Various road safety studies have discussed other driver-related factors and accident involvement. These include, route to work e.g. drivers who start as taxi charges collectors (Mebrahtu, 2002), social cultural factors e.g sex (Evans, 2004) and age (Daff et al., 1991; Yagil, 2000; Elliott & Baughan, 2003; Peltzer, 2008) alcohol use (Evans, 1990; Wieczorek, 1995; Otero et al. 1997; Peltzer, 2008); sensation seeking (Zuckerman, 1994;) and risk taking

(Waylen and McKenna's, 2008; Lund, & Rundmo, 2009), aggression (Mizell et al., 1987; Blockley & Hartley, 1995, Åberg & Rimmo, 1998; Lajunen, & Stradling, 1998; Lajunen et al., 2004; Peltzer, 2008), competitive driving-speeding (Blockley & Hartley, 1995; Åberg & Rimmo, 1998; Parker, 2002; Carcary et al., 2001; Afukaar 2003) e.g. over taking traffic in motion, manoeuvres of vehicles account for 94,92 and 95 percent of fatal, serious and slight injuries respectively (Mebrahtu, 2002), cell phone-motor radio preoccupation (Redeimer & Tibshirani, 1997; Beede & Kass, 2006, Kass et al., 2007), Fatigue (Blander, West, and French, 1993, Peltzer, 2008), passenger-driver effect (McGoldrick, 1990; Rolls & Ingham 1991, Chen et al., 2000) witchcraft (Peltzer, 2008). Besides, often taxi drivers in African countries work long hours and work when they are worn-out (ibid).

Although these factors are commonly cited as causes of accidents, they may possibly be secondary to latent and more understated or interacting psychosocial factors at the respective micro-meso-macro levels.

2.3.2 Environmental factors

Cremona, (1986) puts that most road traffic accidents are caused by human error coupled with other factors, such as road conditions, climate and the road-worthiness of the vehicle (Mebrahtu, 2002). Additional evidence (Odero et.al. 1997) reports that a high prevalence of old taxis in the transportation business that usually load many more people than they are designed to carry, lack of safety belt, poor road infrastructure and maintenance and the traffic mix on roads are other factors that contribute to the high rate of crashes among taxi drivers in developing countries. Besides Admasu (2001) demonstrated that a larger section of accidents

in Africa occur along main roads. Accordingly, driver-accident involvement is a combination stress at work and driver stress (Matthews et al. 1999; Karasek and Theorell,1990)

2.3.3 Occupation related factors

Reconditioned or old taxis contribute to accidents. For instance, of the 200 taxis only 11.5% were new by the time of use, (Mebrahtu, 2002). “Older vehicles, with mechanical defects and poor maintenance are frequently exposed to accident. The majority of traffic accidents in general are associated with defects related to brakes, tires, lights and other mechanical defects. But in Addis Ababa, these problems account for the lowest number of accidents” (Mebrahtu, 2002), pg 65-66.

Witchcraft as expressed by one South Africa Passenger, further illuminates taxi driver-accident involvement. For example; there are times when a driver can get involved in an accident claiming he sees a cow before the taxi in transit but when the passengers do not see anything (Peltzer, 2008). Thus it is deduced that due to witchcraft the driver will optically get hallucinated and perceive non existing elements in the road environment. However it leaves room for other deductions such as the driver may be experiencing acute symptoms of mental illness which can delude him to such optical hallucinations and consequent incidents.

Nonetheless, as previously noted at the beginning of this chapter, the guiding principles of IPA emphasise that the researcher brackets existing knowledge, ideas and theories in order to perceive the data anew. Thus the above theories and related literature are used for purposes of broadening our perception and synthesis of the study phenomenon.

Chapter Three

METHODOLOGY

The data used in this dissertation was collected in the year 2010 from Masaka district - one of Uganda's upcountry districts.

3.1.1 Design

The qualitative paradigm was used in the present study with an aim to explore and develop an in-depth understanding of the lived world experience of the taxi drivers on the subject of road traffic accidents; and to promote insight towards generating meanings and interpretations of the respondents' experience. In addition it's (qualitative design) holistic; inductive-deductive; in-depth rigorous nature, appropriately convened the study objectives.

The choice for this paradigm depended on the versatility qualitative research brings into play while dealing with the question of “what”. “Perceptive of what a phenomenon entails, a conceptualization of the phenomenon under exploration as a whole and in its different parts, how these parts are interrelated and structured as a whole, and in what way the whole is related or diverse from other things” (Wertz, et al. 2011) are a cornerstone of qualitative approach. In the same way this is in resonance with what the current study is set out to achieve.

On the other hand, qualitative studies extensively and intensively detail the methodological issues of the phenomenon under study to allow the reader to clearly follow through the study process to the conclusion and thus decipher the research’s contribution towards closing the existing gap, addressing the problem of focus or otherwise. Albeit qualitative research is exhausting in itself that claiming to divulge the phenomenon in question without a guiding qualitative orientation acknowledgeable to the research world; is next to impossible. Therefore, given the subjectiveness-sensitiveness nature of the current study, it is guided by interpretive phenomenological analysis orientation.

3.1.2 Interpretive Phenomenological Analysis (IPA)

This approach is concerned with exploring in detail how respondents are making sense of their “personal and social world” (Smith, et al. 2009). It incorporates a detailed assessment of the respondents’ lived experience; it endeavours to explore personal experience and is concerned with the participant’s individual perceptions or account of the object or happening phenomenon. IPA originated from health psychology during the mid 1990s. It is built upon concepts and ideas from philosophical approaches of phenomenology (majorly informed by Husserl, Heidegger, Merleau-Ponty, Sartre) that seek to understand experience; hermeneutics and idiography (ibid). IPA is eminently concerned about humans’ experience of the phenomenon with the respective psychological elucidations of such experiences. The

approach banks on the assumption that an individual who experiences the phenomenon is the expert of such an experience. Therefore respondent's meaning and insights as used in his experiences participate at the heart portion in this approach (ibid).

The present research set out to investigate psychosocial underpinnings of taxi drivers' involvement in road accidents thus IPA approach was picked on over other qualitative orientations as suitable to study the complex realities of the current accident phenomenon. This is too supported by (Smith & Virginia, in Lyons & Coyle, 2007) who assert that IPA usually investigates complex phenomenon with study questions that impact the respondents. Such questions more often than not aim at addressing the personal together with social worlds of the interviewees (ibid) with a dedication to examine how such individuals make sense of their major life experiences (Howitt, 2010).

Besides traditionally qualitative research is mainly stirred by the author's ambition to make change plausible (Kidder and Fine, 1997 in Smith, 2008), although this study was set for postgraduate academic accomplishments, it in part inherently aimed at captivating attention to the present day escalated accident phenomenon in Uganda. Yet, deriving at the choice of this study topic it preceded intensive and extensive literature review by the researcher which enabled the identification of an existing gap- the psychosocial underpinnings. Given the reviewed literature about the study phenomenon and the nature of the problem out there it deemed fit to address it from a personal point of view thus a choice of IPA that supports the epistemological outlook of the research question (smith, et al., 2009).

A pertinent observation too is that the approach warns against overuse of theories for they can delude the respondent's lived world. Nevertheless, IPA approach presses the challenge of overwriting the respondents' subjectivities or phenomenologies (Lyon and Coyle, 2007) but, the current study tried to address this dilemma in the analysis section by comparing the different themes and leaving out those that typically carried the same meaning.

Notwithstanding, the inventor (Smith, 2008) of IPA recognised that, as is principally with qualitative research, there is ultimately no particular way most recognised to perform this kind of analysis.

3.2. Participants and sampling considerations

Taxi drivers who have ever been involved in road traffic accidents (while driving/ in a taxi) in which there occurred one or more injuries or deaths and currently in taxi driving service were selected for the present study. To attain the study principal participants I was guided by the UTODA and taxi drivers' leader's initial referrals. Here I employed a dexterous non-probability purposive sampling method Smith, et al. (2009). The choice for purposive homogeneous sampling method (ibid, Howitt, 2010) intended to address the research problem and objectives as well to draw "information-rich cases for study in-depth" Smith, et al., (2009) from the study population. As dictated by IPA, I needed to unfold the similarities and discrepancies of the respondents in-depth regarding the study phenomenon; thus I selected a homogeneous sample.

I drew the study sample from the main taxi park Masaka municipality because of convenience to accessibility the respondents. Masaka is an upcountry district located about 115km from Kampala the capital city of Uganda, it is about 37km away from the Equator towards the south of the country (Uganda travelguide.com). Six male taxi drivers between 25 and 50 years were purposively selected as respondents. However, due to scarcity of the targeted sample, the original respondent referrals did not all turn up for the intended sample number was a respondent less. To cater for this limitation, I adopted snowball sampling method (Howitt, 2010). Part of the originally targeted sample identified and made a referral to the sixth case then the head driver recommended an interview.

The sample size was limited to few participants (6) given the IPA approach which was set to frame the study. The sample size is usually small in IPA ranging between one to 42 participants Smith, et al., (2009). However, preference is accorded to a smaller number; for example, three to six informants are recommended for IPA student projects. In addition, the intricacy of studying human phenomenon as in the case of the current research, IPA concentrates on small sample size Smith, et al.(2009). Besides, “the detailed case-by-case analysis of individual transcripts takes a long time and the aim of the study is to write in detail about the perceptions and understanding of the participant”(ibid). The choice for the respondents’ age range (25-50) was to achieve varied triangulated lived experiences of the respondents regarding the study phenomenon. Besides, the respondents were only males because in Uganda the taxi occupation is predominantly performed by males- who are also an active group of the general population, many also carry other responsibilities as family heads.

3.3. Procedure and Data collection

During data production (Glesne, 2011) I explicitly focused on road traffic accidents and more specifically on taxi drivers who have ever been involved in traffic accidents. Following the prime research question; what is the possible contribution that psychosocial factors can make in the taxi-driver road accident involvement? Guided by the IPA framework, I allowed data to emerge (Lyons and Coyle, 2007; Glesne, 2011; Howitt, 2010; Smith, et al., 2009; Wertz, et al. 2011) as the respondents expressed the experiences.

Considerably, as earmarked by Willig (2008) to maintain clarity between the interview schedule and the research questions, the concrete research questions on which the interview schedule was built included: how do driver factors contribute to road accidents?; how do drivers’ work environment contribute to road accidents?; how do structural factors contribute to accidents? Following the researcher-respondent introductions, I explained and availed the necessary written approvals e.g. an Identity card issued to me by UNCST which confirmed

my identity as a student to the respondents. The interviews lasted between 30 minutes and 1 hour and 45 minutes. Field notes; describing observations and reflections, impressions, insights (Kinder & Fine, 1997; Patton, 2002) will in a postscript be taken during and after the interview respectively. The participants' responses were stored on a digital recorder and in a note book- the same book was used for detailed memos.

3.3.1 Interview

In agreement with the study's paradigm Kvale (1996) delineates that a qualitative research interview is that whose purpose is set to collect descriptions of the life world of the respondents in preparation for a qualitative data interpretation. Categorically, I carried out semi-structured life world interviews. However, prior to the actual interview; as proposed by (Lyons and Coyle, 2007); I developed an interview schedule. Considering the common language of the study population and so the sample, I initially composed and documented the guiding questions in English, translated them into Luganda and back-translated them to English. To check for consistency I asked a professional with both languages proficiency to check both versions before I carried out any interviews. In the same way I prepared to pilot the interview guide but due to delayed approval of my study I did not accomplish it. These prior arrangements allowed me to prepare myself ponder over what exactly I wanted the interview to elicit out of the respondents; to imagine what challenges I was likely to face while carrying out the interview and outline the solutions. For example: this allowed me think of the likely conceivable probes I needed to divulge the phenomenon in-depth; besides the sensitive nature of the study phenomenon required me to ready myself to handle any respondents who could psychologically re-experience the accident ordeal during the interview. To cater for this I mapped available therapeutic units and police station in the nearby places where I had to make referrals or seek help respectively.

Categorically, prior to each interview, I explained the purpose of the study, specified the institution of affiliation, and sought permission to audio-record the interview at the commencement of the interviews. I carried out introductions in way geared towards establishing rapport, so as to make the interviewee more flexible and cooperative (Donald, 2008). In a conversational interaction approach rather than an information extraction operation (Kvale, 1996), with the guidance of the interview schedule I defined and decided upon the focus at the prioritized areas. The interview guide composed of; demographic information questions; environment factors; work factors; and driver personal factors. During the various interviews I opened with broad questions that gave insight and autonomy to share their experiences regarding the phenomenon. Various prompts were used respectively at points when the broad question seemed lacking or as the situated-evaluation dictated.

3.3.2 Time and setting

Glesne, (2011) recommends that before gaining access to a research setting, the researcher has to discuss access issues and consent with the respective “gatekeepers” who then grant access to the interviewer to contact the respondents. Given that the study phenomenon relates to personal data, in addition to the general research regulations, before reaching to the respondents I sought approval and consent from various bodies; starting with NTNU, NSD, UNCST,UTODA and then the respondents. After accessing the respondents with the help of the gatekeepers (e.g. UTODA, taxi drivers’ leader), each interviewee decided over when and where the interview should take place. One interview- the snowballed one was carried out from the interviewee’s home and the remaining five interviews; took place from within the taxi park where the interviewer and interviewee either sat on a bench under a shade or in a taxi.

Even though I had initially planned to carry out the interviews from a quiet room free from disruptions and convenient for an in-depth one-on-one guided conversation; respondents did not submit to the arrangement. They instead chose places nearby the respective tax vehicles. These were open areas that other subjects in the study population among others expressed curiosity over the interviews in progress amidst a noisy background of other park activities. These intruding subjects in one way or the other affected the rate and/or quality of responses of the participants. The respondents preferred to be interviewed from closer to the respective taxis unlike from within a room because they wanted to also guard against missing to call passengers into their taxis and to transport them when their numbers had reached. Again this affected the respondents' concentration and response.

The interview opened with a brief common talk initiated by the researcher that aimed at; establishing a comfortable and trusting atmosphere. This allowed an interviewer-interviewee flexible-collaborative relationship to prevail enabling the respondent to think and speak of the phenomenon and be heard (Katie et.al, 2005). The topic was briefly discussed between the interviewer and the respective interviewees with an intension of further preparing a natural environment; for the interviewees they had to feel openly relaxed to respond open-mindedly and in-depth. In a conventional friendly, courteous and unbiased manner; I was able to adapt to the taxi park's conditions and developed rapport between myself and each respondent. I reintroduced myself in addition to the head-drivers' general introductions (of myself to participants). I sought consent, explained the purpose of our meeting, catering for the interviewee's fears and expectations and allowed the respondents to ask before the interview commenced as well as to feel free to quit the interview at any time they wished.

Using in-depth explorative and open-ended questions (Morgan & Krueger, 1997; patton, 2002) plus probes; I carried out interviews with the purposively selected respondents. Guided by the double hermeneutic of empathy and critical questioning (Smith, 1995); I interviewed

the different respondents aiming at gathering rich descriptions of their life world. These were subsequently used as the basis for the interpretation of the described phenomena (taxi-driver-road accident involvement) which enabled me to some degree, follow the life world of the respondents (Kvale, 2009).

3.3.3 Interview subjects

The study sought to unveil the lived experiences of six samples but one respondent stood out of the rest. For instance Kvale, (2009) commends a good interview subject likewise respondent one in the present study articulated his views more than other interviewees; thus, in the data presentation he is quoted more times than the others. For example; respondent one gave lengthy but lively descriptions of his lived experiences; he also detailed coherent accounts, unlike some respondents who wander off, respondent one kept in the confines of the interview, he was also eloquent and expressed knowledge of what he was narrating, (ibid, pg165). Otherwise every respondent uniquely expressed his lived experiences.

3.4 Secondary data

The present data was produced primarily from the chosen sample of taxi drivers while the secondary data was collected from the observations, personal communications, and documents.

3.4.1 Observation

Observation entails watching “people’s gestures; social interactions; actions; scenes and the physical environment” Yin, (2011). During data collection I was able to observe how taxi drivers’ behaviour occurred naturally in relation with the work environment. Maintaining a passive observer’s position, it enabled me to listen and see how taxi drivers practically work together with other road users. The focus of observation was anything relating to work factors, environmental factors, personal factors and possible ameliorative or transformative

measures. I took significant notes in the field data book, or memorised data of interest and made memos each day after the field study. It to some degree triangulated the participants' shared experiences, and nourished my perception of the various data structures. On the other hand though, it undermined the ethical issues-people being studied without their consent.

3.4.2 Personal communication

During the interviews respondents expressed what they feel and think of the role of traffic police and police in general while on the road- in line of the study phenomenon. Besides during field observations I triangulated and confirmed some of the respondents' expressions. This inspired me to hold a 20 minutes informal conversation with one the traffic police officers in the study area. I introduced myself and probed about what I had collected and observed. The communication from the officer was quite useful that it enriched my deductive descriptions of the phenomenon.

3.4.3 Document review

Given the nature of the research group (taxi drivers) I explored (O'leary, 2010), it necessitated me to understand in-depth the accident phenomenon by triangulating interview data with review of various information media channels- including locally produced television and radio pertinent programs, local news papers, local music and drama. These, particularly newspapers were a rich data source.

3.4.4 Memoing

Recognising bracketing of self I used diagrammatic and jotted memos for each participant. These were the added descriptions of my understanding of what had been discussed by the participant. The memos documented the type of participants, non-verbal

communications; the pertinent features of the interview environment, emerging themes, and interview duration. These descriptions enriched the analysis section.

3.5 Instrument/ material

3.5.1 Language

“Language is the medium of research; a tool of interview process”(kvale, 2009 pg,55) that aims at exploring interview objects and knowledge which, are characterically; produced, relational, conversational, contextual, linguistic, narrative and pragmatic (ibid) . To discuss the current phenomenon in-depth, linguistic knowledge and ease among other characteristics to both interacting parties were a vital requirement. Considerably, Uganda is a multilingual country thus it was imperative to choose Luganda language in which the respondents and interviewer could effortlessly express and perceive themselves respectively. Henceforth I prepared a semi-structured, interview guide (Bogdan & Biklen, 2003) in Luganda. The choice for Luganda language was motivated by it being my first language and the commonest local language of the area and the country at large as opposed to English – the official language. The English language was the choice for interaction when the second party was not conversant or comfortable with Luganda e.g, in the personal communication, and with some gatekeepers during negotiations over the respondents’ accessibility.

Even though “IPA is built on theories of phenomenology and hermeneutics”(Howitt, 2010, pg 293), having bracketed myself, to perceive some participants experiences; it demanded me to also consider language theories. Notably, interviews were worthy to be performed by myself other than research assistants because some expressed Luganda language discourses required deeper understanding of the language and culture to perceive surface and beneath some interview responses. For example in Luganda “we” in some contexts is referring to “I” and vice-versa. Besides, without interviewer-interviewee probes

and explanations respectively; a person foreign to the study or language would miss or be confused with much of the respondents' shared experiences. In addition some responses were interwoven in often applied idiomatic expressions that even probes or otherwise explanations would limit or change the participant's intended communication. Thus Fluency in the study language and knowing the cultural norms were added advantage.

3.5.2 Researcher

A 'researcher is the instrument' (Nelson and Prilleltensky, 2005). To comprehend the interviewees' lived world; it necessitated me to be open-minded and newly attentive to each participant's interview conversation. I gathered data using materials including myself e.g. personal observations which vitally triangulated the participants' views.

3.5.3 Interview schedule

An interview guide was also a fundamental instrument; this had the study guiding themes with anticipated probes. Even though all questions were not asked (Patton, 2002) the schedule fundamentally smoothed the interview process. Open-ended questions purposefully granted participants an opportunity to express their personal experiences regarding the researched phenomenon. The questions and probes were used to urge respondents to detail rather than to verify whether they agree or disagree with particular contentions or accounts (Donald, 2008).

3.5.4 Other instruments

Other materials including a voice recorder- which audio-recorded the interview data, notebook, pen, digital camera, and an umbrella were used during data collection.

3.6 Data transcription

In order to get a comprehensive representation of the verbally collected respondents' experiences, and to unearth the data underpinnings premised by IPA approach, I used word-for-word transcription rewritten in normal national text in an attempt to arrive at a rather adequate representation of the orally collected data. With this account it allowed a construction for the basis of an intensive though 'tedious' in-depth interpretation of the text. Attending to "paralinguistic" (Howitt, 2010, pg141) kinds of communication, I transcribed the audio-recorded data verbatim. However, since transcriptions are translations from oral language to written language Kvale, (2009) notes with barely no transcription that can ever carry exact spoken message (Howitt, 2010); it is plausible that the Luganda-English interviews translation during data transcription impacted the meaning of the respondents' shared experiences. In addition, attempts at verbatim interview transcriptions produce hybrids, artificial constructs that may be adequate to neither the lived oral conversation nor the formal style of written texts" (ibid, pg178 parag2). Besides, data transcription served as preliminary analysis to interview data; along with data familiarisation it enabled me to gain an overview of the outstanding lines, data patterns and themes of the phenomenon under investigation.

3.7 Data analysis

"The whole point of qualitative analysis is to develop descriptive categories which fit the data well" (Howitt, 2010, pg373). Analysis followed through IPA's three unique phases of contemplation; epoche, phenomenological reduction and imaginative variation (Moustakas 1994) to study the respondents' perceptions of their world. The choice for IPA as documented by Moustakas, (1994); Smith (2008); Eatough & Smith, (2006); Smith, et al... (2009); Wertz, et al. (2011); was because of its focal point- the personal meaning and sense-making in an explicit context, for individuals who share a particular experience. Besides, IPA

is constant with the epistemological position of the current research question. IPA also considers participants' cognitive, linguistic, affective and physical aspects as interconnected components, Smith, (2008). Guided by this, and recognising that human beings either effortfully articulate what they are thinking and feeling, or they are uncomfortable to self-disclose; at the researcher's due to interpret whichever communications (ibid); I paid particular attention to the participants' thoughts and feelings as expressed of the different participants' transcripts. Considering the doctrine of symbolic interactionism: individuals' meanings attributed to events is usually a process of social contact; phenomenology: experience involves conscious intentionality; and hermeneutics: meaning is a social and cultural product (Howitt, 2010). I detailed the content and structure of the subjects' data expressions that enabled me take hold of the qualitative miscellany of the respondents' experiences as well as to illuminate their respective meanings. Following observations such as "IPA analysis can also involve standing a little back from the participant and asking curious questions of their accounts e.g. what is the person trying to achieve here? Is something leaking out here that was not intended? "Do I have a sense of something going on here that may be a person him/herself is less aware of?" (Smith and Eatough in Lyone and Coyle, 2007, pg 35)

Analysis involved; a. numerous intensive and extensive perusal of raw data to get a holistic perception so that later interpretations maintained the participants originality of meaning of shared experiences. b. I identified Initial themes and structured them into clusters and cross-checked them against the data; c. I developed themes, checked for similarities and differences and reduced them; d. I produced a narrative account of the interpretive activity. Categorically this is how I carried out data analysis. After transcription, I noted initial thoughts, comments and points of potential significance read every transcript numerous times and I noted in the left hand margin anything that was imperatively useful. The more I

familiarized myself with the transcripts the closer I got to essence in data. At this level I took notes in a form of comments regarding the words used. At the following level with the use of psychological abstractions I made notes in the right hand margin to convert original notes thoughts and ideas into more explicit themes. The following level comprised of extra data reductions and the creation of connections between the first themes and clustering them suitably. At this point some themes put together and some were dropped. In the final stage a table was produced with common clusters- the super ordinate themes; I created rundown/across tables of the structured themes with subthemes simultaneously with the respective quotations that show themes, after which, I drew relevant interpretation and later made a final write up of the study findings.

3.8. Authenticity and dependability

Validity in qualitative studies is also referred to as authenticity; it is “concerned with truth value.... and concerned with describing the deep structure of phenomenon in the manner that is true to the experience” (O’leary, 2010 pg43). Validity is verified by tracing out the sources of invalidity Kvale, (2009). Invalidity is trucked from the start throughout the research process to the end. That is I have attempted to minimize invalidity by observing validation at seven levels (ibid);“thematizing, designing, interviewing, transcribing, analysing, validating, and reporting” pg,248-249. Dependability (reliability) is hardly achieved given the subjective nature of most qualitative studies. However it is possible if the methods are systematically to show the study’s subjectivities (o’leary, 2010).

3.9 Ethical considerations

Incorporating an aspect of judgement I observed ethical doctrines at each level of this study. Through the supervisors, Norwegian Social Science Data Services (NSD)- a research authenticating body approved the study topic, I got an introductory letter from the Psychology department confirming to the Uganda National council of Science and

Technology (UNCST) and Uganda Transport and Drivers Association (UTODA)-Ugandan research authenticating bodies that I am a student at NTNU interested in carrying out a study from Masaka district-Uganda.

The research approval in Uganda started with UNCST; here I was asked to submit the study proposal for review with a cash payment for international research projects which is relatively huge. However being a student I was required to ask for student's payment reconsideration for which I applied and the application was sent for the Board's review. The review board again asked for a confirmation from NTNU whether I was a student, obliged me to contact the supervisor; sent me a confirmation letter and forwarded it to the board. The process of proposal review, payment subsidization application and approval plus cashing it in the specified bank; spent the biggest portion of the entire research time. After UNCST's approval it referred me to UTODA Masaka branch (MATODA) which by the research time it had been partially replaced by another taxi association- Equator but because Equator had not yet started off independently of MATODA I have in the write-up referred to both as UTODA. Fortunately UTODA swiftly approved my study and allowed me access to the participants whom I mostly found in the taxi park Masaka.

3.9.1 Consent form

This was first approved by NSD. I drafted the study description and the ethical contract form (Howitt, 2010) where every participant was to confirm his acceptance to take part in the study, sent them to the supervisor and then these were forwarded to NSD. After approval it was sent back to me. At the beginning of each interview I sought consent from the respective interviewee; though some respondents were uncomfortable with writing due to illiteracy –like one who verbally consented; the rest confirmed their acceptance by signing a consent form. This was preceded by explanations of the purpose, procedures and estimated interview

duration. Participation right, each interviewee was also informed of the huge freedom he had to withdraw from the interview any time he wished

3.9.2 Confidentiality and anonymity

Given the “idiosyncratic” (ibid) nature of the current study I was careful about the data details that could reveal participants’ identity. To further ensure confidentiality, I masked the participants’ identity by assigning pseudonyms to each of them. Regarding anonymity; I obscured any information pertaining to respondents during data collection transcription and presentation in the final write-up which, could serve as a cue to the reader of knowing the participant. I created security codes for raw data – of which only I and the supervisors had access. I carefully kept the memo book; besides, extra sensitive issues were not transcribed or discussed, audio recorded data was deleted after a specified period following transcriptions.

3.9.3 Incentives

“Although the general view is that payments or other rewards for participation should be avoided” (Howitt, 2010); with the divers time is very expensive to them thus completing a between 30 minutes and 1.5hours talk would be seeking only “withdrawals” when the interview is in progress. Therefore to prevent this I clearly informed the participant of the cash incentive at the start of the interview.

3.9.4 Reflexivity

Guided by IPA bracketing and perceiving the participant anew, I was very careful not at any level to influence the data. (Patton, 2002; Kvale 2009; Howitt, 2010; Glesne, 2011; Wertz, et al. 2011).

3.9.5 Trust worthiness.

This was ensured in support of confidentiality as conferred by (Oliver, 2003; Gregory, 2003) as well as anonymity, Bulmer (2001). Given the qualitative nature of the study, trustworthiness was ascertained by establishing its four criteria; credibility Transferability, dependability and conformability (Licoln and Guba, 1985). In addition through triangulation of the conceptual, theoretical, empirical and analytic stages of the study, I confirmed trustworthiness of the findings of the study. In addition to observing the 'epoche'- by controlling my preconceived supposition to infiltrate the participants' meaning of the shared experiences; this allowed subjectivity, originality and truth to prevail. During data analysis I cross-checked the memos and audio recorded data with the transcripts to further ascertain credibility.

I also catered for credibility by sensitively attending to the needs and concerns of the participants (Donald, 2008) as dictated by the interview situation. This was guided by the acknowledgment of the possibility of the unmitigated ethical issues during the interview (ibid), as presented in three major philosophical ethical positions explained by Kvale (1996, p 121). Following Creswell, (1998) list in Glesne, (2011), I was able to check issues of Trustworthiness/ credibility. That is, prolonged engagement and persistent observation, triangulation/crystallization; debriefing, clarification of researcher bias; member checking; rich, thick descriptions; external audit

3.9.6 Debriefing

At the end of every interview I allowed respondents to comment about the experience, add or ask anything they wished.

3. 10 practical challenges

The following are challenges during data collection and compilation.

- Accessing approval from the UNCST took so long, it cost me much time and money.

- Tracing the targeted informants with rich and desired data was strenuous.
- In one scenario the interview ended rather prematurely because the interviewee's turn to call-in and drive off passengers reached before it ended.
- Transcription of lengthy audio interviews and translation of the lengthy transcripts from Luganda to English, plus condensing detailed interview descriptions were exhausting and time consuming.
- Qualitative analysis in context of IPA was a backbreaking task. Combining these with responsibilities of a young mother almost made the thesis compilation a dead end.

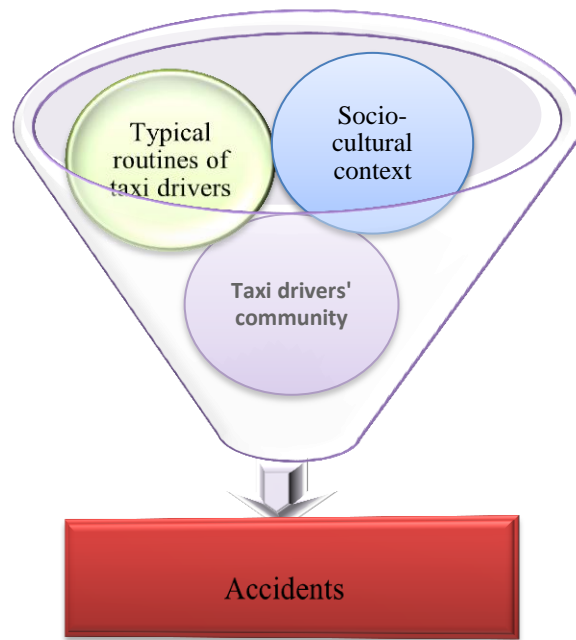
Chapter Four

RESULTS AND DISCUSSION

4.1.1 Introduction

The study results herein present; a multifaceted psychosocial elucidation of taxi drivers-accident involvement as expressed by the respondents. Three super ordinate themes with the respective subthemes and lines of quotations from the data unfold the accident phenomenon. The themes include typical routines of taxi drivers; the socio-cultural context; and the taxi drivers' community. The results also detail the challenges embedded in the driving work; with coping options and plausible interventional suggestions to combat road accidents.

Figure 7: Psychosocial accounts of taxi driver road accident involvement



Source: *researcher*

There are a number of diverse forces into play at individual, taxi drivers' community and socio-cultural levels that shape a multifarious reality of taxi-driver road accident involvement.

4.2.0 Typical routines of taxi drivers

4.2.1 Introduction

Guided by “what” rather than “how” it is said, IPA observes that nothing is clearer (Howitt, 2010); this subsection contextualizes the work environment of taxi drivers by recounting the pertinent aspects of the drivers' daily work life. It presents the taxi drivers' work and the different systems (stakeholders) that directly impact their lived world- i.e. the taxi owners, drivers, taxi fares collectors, blockers, passengers, pedestrians, park tender owners and traffic police. To some drivers when they are overwhelmed with particular or a sum of the various systems; road accidents are inevitable.

Taxi as used in the current compilation refers to a Toyota Mini-Bus (Matatu), a 14 passenger seat vehicle. It is one of the major public forms of transporting passengers in Uganda. Even though it is called a taxi, it should not be confused with a special hire taxi, another way of transporting people in Uganda which too is recognized as a taxi (commonly performed by smaller vehicles).

Stake holders here refer to groups of people who directly or indirectly influence the goings and comings of the taxi work. The taxi owners are usually middle or high class wealthy individuals for example affluent self-employed individuals, moneyed business partners, politicians or any government workers who are financially capable of buying a taxi – “*Kamunye*”. The taxi owner is responsible for maintaining the mechanical conditions of the vehicle catering for the tear and wear, general vehicle servicing, and other required universal payments for example insurance or licence.

The driver who sometimes can be the vehicle owner or an employee to the owner or renting the taxi from the owner or from other drivers employed by the owner; is a key player this business. The driver is the one responsible for transporting passengers to and from agreed destinations and for taking care of passengers in transit. The driver executes this through attentive driving and settling damages that are directly due to his fault if caused to the vehicle or to other road users. For instance, minor accidents (e.g. denting another driver’s vehicle while in slow traffic, denting his own vehicle while reversing or even getting involved in any sort of accident while on personal transactions outside the contracted terms and conditions of work) due to “negligence” or otherwise. Most driver-employer (boss) relationships are typically demanding; drivers are answerable to their boss which to all drivers is always pressing to fulfil, such as the day’s contracted percentage amidst other driver personal and work demands.

The taxi fares collector is typically one individual male on each taxi in transit but they can be more than one fares-collectors serving on the same vehicle during different work intervals. Fares-collectors are sometimes relatives to, or recommended by, taxi owners or they are friends to the taxi drivers. This allows an assorted monitoring, reporting and coordination of the work environment to the driver plus the vehicle owner. Taxi-fares collectors as suggested by the name, besides complementing the taxi blockers work of calling passengers into the respective taxis; they are majorly responsible for collecting transport-fares from the passengers.

Passengers are another taxi business stakeholders' category. They include any individuals who from various points (stages/ taxi stops) along the road, from within the taxi-park or elsewhere board the taxis of preference, to be transported to destinations of their wish at a set fee. In the current study; passengers are those who board the taxis either from within the park, along the road or sometimes from hiring points. The park is often the ideal boarding area.

The taxi-park here refers to an open area which is gazetted a few metres away from Masaka central city for taxi vehicles. It is here where taxis collect to wait for passengers. Within the park are various apportioned taxi-parking sections i.e the stages. These are demarcated with sign-posts raised through the parked taxis, on the sign posts are written names of the respective taxi destinations which in addition to the taxi blockers' destinations-names call-outs, direct passengers into the appropriate taxis.–Here they have a “first come-first serve” system to call in passengers by the help of taxi blockers. Every taxi that fills up (of 14 passengers) drives passengers out of the park and other taxis in the queue follow in the same order. Taxi blockers here refer to males who repeatedly call-out aloud the various taxi destinations' names from both within-the-park and along the road stages, in order to alert passengers of the stages / taxis locations respectively.

Within the park are also small scale businesses such as foods and beverages stalls, mobile phone airtime kiosks, hawkers, shoe shiners and others. The park is designed with ‘In’ and ‘Out’ gates from where taxis enter and move out of the park respectively. The park arrangement is predetermined by the tender owners. For example they are responsible for acknowledging and/or allocating positions to any businesses due to take place from within the park. For instance, apportioning stages to various taxis.

To briefly expound on the tender concept, the government makes open advertisements for the park management to the public. Interested bidders then compete with enormous disbursements to the government. The highest bidder takes up the park tender. Now, this tender needs to recuperate the paid amounts by levying much on every venture that takes place from within the park including social and political amenities, foods and beverages retailers and most of all the taxi businesses. Taxi drivers in turn transfer such charges to the final consumer –the passengers.

The transportation of passengers to and from specific places is accomplished at a set fee normally determined by the tender owners. However, the fee is liable to fluctuations as may deem fit to the driver and the conductor during various times e.g. - festive seasons, fuel crisis times, drivers’ strike and various times of a usual working day. In addition to the main activity of transporting passengers, taxis are sometimes hired out of the routine to transport particular groups of passengers. For instance those going for political, motor car or motorcycle rallies; school children/ students who may be travelling for academic, sports, entertainment or adventurous objectives; some may be going for cultural functions such as last funeral/burial with the dead body up over the taxi; they can be religious groups of passengers, and sometimes drivers can be hired by beverage (e.g. alcohol, soft drinks) or other merchandise companies for promotion or other purposes as **Alex** notes “... *drivers are hired to take people on say alcohol promotions...*”

Other road users include; fellow vehicle-drivers, motor cyclists, bicycle riders, and pedestrians. Cyclists categories include; motorcyclists, bicycle cyclists and boda-boda (commercial min motor cycle or bicycles) riders. The boda-boda category is the largest of all categories as well as most destructive in traffic. Although a few bicycle boda-boda taxis are still in operation, they have been immensely replaced by boda-boda motorcycles.

The riders / cyclists tend to violate traffic rules- for example they hardly observe road symbols and markings; they compete for passengers with motor vehicle taxi drivers; they join flowing traffic at any point or time they choose, even in slow or motionless traffic jam they manoeuvre the small gaps that exist in between vehicles meandering from side to side of the different traffic lanes. Juniorsaid *“the boda-boda motor cyclists always compete for the same passengers we want and they are never careful while on the road,..”*

Pedestrians are usually found at busy points for example trading centres or residential areas along the road. Traffic police is too part of the taxi work system, it is usually on the road for purposes of maintaining traffic rules among various road users of which taxi drivers are part. Other stakeholders are taxi organisations such as Uganda Taxi Operators and Drivers Association (UTODA), Kampala City Council Authority (KCCA), companies that are directly involved in the business and individual groups who take up the park tenders.

Given the driver’s mental, physiological and environmental work conditions, the various stakeholders distinctively impact the driver’s lived world as mirrored in the driver’s conduct while on the road.

My data further shows that the commercial taxi drivers’ daily routine is characteristic of various activities that are intimately driven by different psychosocial facets that trace from their personal backgrounds together with their work environments. I want to start presenting the results by introducing the individual drivers’ personal backgrounds followed by the main

themes and corresponding subthemes. That is taxi drivers' typical routines; socio-cultural context; drivers' community and accidents.

4.2.2 Personal background

The selected respondents' personal backgrounds are categorically expressed below;

Junior is a 27 years old male cohabiting with a woman and one child. With senior four formal training (grade 11), he joined the commercial taxi business as a taxi charges collector. Later he was trained by a friend driver how to drive. By the interview time he had had a five (05) years' experience as a driver and three (03) years as a taxi charges collector. He had been involved in three (03) accidents; two (02) of which he was the driver. He accounted for those when he was the driver the serious accidents ever experienced. His daily work is characterised by shifts of driving work among different taxis. That is he does not drive any single taxi permanently, he rents the available taxis for hours from the willing fellow drivers. For instance he has one vehicle he rents for four hours every day, after driving that one he asks any other drivers who can rent to him their taxis to boost the day's income. As he stated here *"sometimes I get different drivers who may give me their routes for about a total of five or more hours in town service"*. However, it is usually not a smooth go - *"they help me but out of hardship, those who allow to give me their taxis, ask for high rental charges!"* Junior.

Desire for basic human satisfaction, for example Junior further expressed that *"I wish to save as much as I can to be able to fulfil my human needs e.g. to pay rent and be able to buy clothes for my girlfriend and take good care of my child when I can still fulfil all"*.

Joseph is a 39 years old Muslim man, cohabiting with two women and children born of one of them. However, he was not comfortable to say the number of children he has because in cultural restraints. With primary four education, he joined the commercial taxi business through a friend also a taxi driver; who trained him how to drive. This respondent initially

worked at a petrol station, from where he also gained a self-styled experience through trial-driving on customers' vehicles brought for tyre repair. He also learned driving by observing steering and gears manipulations as done by customers, whenever they brought or picked the vehicles from servicing. He is employed by a business woman— owner of the taxi, his working day usually runs between 1am and 6pm though sometimes may stretch beyond 6pm when passengers are available.

By the interview time he had had 10 years' experience as a taxi driver and he had been involved in one (01) serious accident as he accounts below;

In addition to this serious accident he has been involved in four (04) minor accidents. Like other workers he expressed his motivation for work as *“I want to be self-reliant, able to fulfil mine and others human needs for whom am responsible”*.

Bob he is a 33years old man cohabiting with a woman and five children. With senior two (grade 12) education level, he joined the commercial taxi business through a friend who trained him how to drive. In addition to this training he by himself acquired additional practice by parking the car whenever his brother got back home from work. He is now employed by a taxi owner; unlike some taxi drivers he drives one taxi every day. His day's work normally runs from 5am to midnight (24:00 o'clock), for some days however, retiring time vacillates depending on the passengers' availability. By the interview period he had a 12 years' experience as a taxi driver. He had been involved in two (02) serious accidents one of which he was the driver. He had been involved in other minor accidents-which he said *“these normally occur to almost all drivers”*.

Alex is 42 years old married man with children- due to cultural disquiet this respondent was too uncomfortable with mentioning the number of his children. After a short period of formal training- *“I went to school for a very short time”*- he joined the commercial taxi

business through friends who trained him how to drive. Later they helped him to go for a driving test after passing it he got a driving permit. This driver employed by a vehicle owner, he drives for 12 hours each new day. At the interview time, he had been involved in one serious accident.

Henry is a 48years old married man with children. He trained for driving and got a permit from a driving school in Masaka city. He was employed by a vehicle owner; his working day ran between 8:00am to 5:00pm. By the interview time, with a 20 years’ experience in the taxi business, he had been involved in one serious accident.

David is a 38 years old married man with three children. Formally he studied up to senior one (grade eight). Regarding driving, he was first trained by experienced drivers while he served as a turn-boy on the respective truck vehicles. Later when he was about to join the taxi business he trained again in order to get a driving permit. He is employed by a taxi owner, his day’s work runs between 6am and or 6pm. During his eleven years’ experience as a taxi driver, he got involved in one fatal accident

Table 2: Summarized respondents' formal training and driving training

		Formal training											
		Junior		Joseph		Bob		Alex		Henry		David	
School training		grade	senior			grade	senior			grade	primary	grade	senior
			11	4	“	I	9	2	“I	4	4	8	1

Driving training	didn't		went					
	study		to					
much"		school						
		for a						
		very						
		short						
		time"						
	A Friend	A	A Friend	A	A	driving	A	driving
		Friend		Friend	school		school	

Source: researcher

The above table indicates that four of the six drivers were trained for driving by friends and two were trained from driving schools. Accordingly, of the six (06) study participants they are two who have drivers' licence.

4.3.0 Socio-cultural context

This section presents the respondents' reflections on the social and cultural aspects regarding accidents. These include the work environment, economic facets, gender and age

4.3.1 Work environment

Taxi; although the respondents gave differing opinions about the standards of the taxis, the general impression is that there are old and reconditioned. For instance Joseph put that *"the taxi business is dominated by old vehicles, well the one I drive is in a relatively ok state."* Junior added *"in Uganda almost all taxis including those I drive are old"*. David confirms the same *"the taxi which I drive is not in good conditions; police normally asks about the broken indicators or side mirrors, the tyres and others. When they find a driver with a dusty vehicle they handle you as they wish"*

Witchcraft; some taxi owners were described to have a hand into what occurs on the road regarding for example; Joseph expressed that *“some taxi owners when they buy their taxes they ‘protect’ them by putting witches in the tax”*.

Junior added that *““nvuga kibalwa”- (I drive when an opportunity shows up) but there could be another “kibalwa” driver who compete for the same taxis; so to put one out of the ‘game’ one can bewitch the other.”*

Roads; the taxi drivers’ working environment involves roads. Although some roads are under reconstruction, others are in poor conditions, as Henry put *“during dry season the road have potholes yet during the rainy season it becomes slippery.”* Joseph indicated that *“some parts of the road are narrow and elsewhere pedestrians misuse it- people rare animals freely alongside the road and carelessly walk in the road”*. Yet Alex expressed that

the road is under face-lighting, there is a lot of dust which obstruct the drivers at work. Besides there are points on the road with sharp corners; some of such points have over centuries been named after consecutive motor vehicle accidents that occur from there. For example “Kitemu”-(assassin); “Ndikuttamadda” - (I will kill you while coming back); and “Kikoma” (end point)” - all these have connotations to death.

In another expression put by Junior the details of the nature of the road leave drivers vulnerable to accidents, that is

the road has no tarmac and it is very dusty especially during dry seasons and when it rains some parts of the road get too slippery and muddy. If a driver is ahead of another, he speeds up not to allow the other driver to overtake him due to dust and mostly to get passengers before they are taken. So in some places the driver behind drives without seeing where he is going due to thick raising dust from the taxi ahead of him.

Theft; sometimes taxi drivers are forced to drive hurriedly due to uncertainties they hold about particular areas along travel routes, for example, driving along some places where they anticipate thieves; for instance Junior put that *“...taxi drivers who pass such points where they anticipate thieves are normally forced to drive off those areas while on a high speed to avoid*

being stopped by the thieves or even to avoid finding them...” Some thieves masquerade into pedestrians; when the driver is picking genuine passengers along the road they ambush such a vehicle and robe those in transit. Others have specific points along the road where they hang around, they put fake road signs for example those that notify accident or faulty vehicle ahead by putting small leafy tree branches at relatively short distance before the ‘accident/ faulty vehicle’. Sometimes the thieves block the road at the respective points. *“Sometimes thieves put blocking logs or stones in the road, such places make drivers apprehensive”* Junior.

In addition circumstances around the work environment and beyond (macro) impact the drivers’ conduct. For example Alex lamented that *“the government, has left taxi drivers to suffer with inflating tender rates, which forces drivers to work on worse-worse in a bid to fulfil such rates a thing that place them close to and/ or into accidents”*.

Junior like other study respondents also pointed out to a recurrent disturbance during work hours that crop from property loss; desire to fulfil basic human needs; and worry about health status as expressed; *“I had a poultry business I had just opened for my spouse but it was all cleared by thieves, I got quite disappointed and all this keep lingering on my mind with brief out of control moments while am driving”*

4.3.2. Economic related aspects

Route to work; young males who later become taxi drivers start by enrolling for a living from any available low income generating options; for example rudimentary vehicle mechanical work, attending to fuel pumps, parking and escorting heavy produce or merchandise vehicles as turn-boys. Others start in the taxi business as fares collectors and later “graduate” into drivers after they have had a relative period of apprenticeship, finally some go for professional driving training before taking on taxi work as a driver.

Social economic status; generally put, taxi drivers belong to a low income group with low socio economic status. They live under difficult conditions with regard to housing as well as general social welfare. Most of them do not own personal houses but rather rent from house landlords. They hardly fulfil livelihood demands; instead strive to pay housing bills on time. Even If some drivers own personal homes this may also involve some uncertainties given existing appalling land issues. Land questions are rather complicated in Uganda thus people, taxi drivers inclusive give up homes due to corruption and land confiscation. Other drivers get overwhelmed following such scenarios, due to land loss and related issues *“I have a friend with a court case they have been evicted out their land on no clear grounds-Junior.*

Self-help groups; as a way of boosting their income drivers often enrol in self-help groups which allow them for example; access loans and boost their inadequate income sourced from the taxi driving work . However, later loans to some drivers turn to grave stressors when they fail to service them and grow into huge debts.

Debts/loan payment; leaving other factors constant, drivers are usually highly stressed out due to various debts they serve. For instance David said *“one man had just bitterly demanded me his money which I used to pay as some loan, so I was trying to squeeze in more time for my own that would help me in paying that debt.* Such stress levels are a basis to intrusive thoughts that jeopardise drivers’ capabilities into road accidents. Otherwise, added pressure and malfunctioned road use is visible among drivers given nearing dates for payment of loan bills, especially when there is not enough or absolutely nothing to pay- *“due to thoughts about debts I drive on a very high speed”* Henry.

The “frailed” legal system. At the country’s level, economic issues precipitate and maintain competition among drivers. The political/ social conditions of the country dribble down to everyone in the society as well as drivers. The country’s existing poverty levels

leave drivers discontented like David stated *“Uganda is very unreliable on matters concerning the economy; we get very little and spend too much”*..

4.3.3 Gender and age

Gender/ masculinity. Blending with gender roles in a submission to understand the drivers’ world of work and road traffic accidents is the masculinity component. The presence of feminine figures close to especially youthful male drivers ignites such drivers’ masculinities which are expressed behaviourally to signal their driving expertise before the targeted females. For example Junior stated that *“the way I drive in normal circumstances may not be the same way I drive if say I had a beautiful girl seated next to me. Sometimes I feel like I should prove the best driver may be ...”*

In addition, as part of masculinity expressions of youthful drivers they drive swiftly for recognition, for example; showing off the newness of the vehicles, ‘driving skills’, etc...,”. This was backed by Bob *“it is a problem that affects most male drivers especially youths because they want to show off newer vehicles,-“kanamba” a driver overtake another speeding vehicle and if by coincidence passengers in the overtaking taxi are in favour of speeding ...”*

4.4.0 The taxi community

4.4.1 Working life of the drivers

Disrespecting work environment. In Uganda taxi driving work is largely perceived as a low income status job. For instance David wrathfully recounted that *“after an unsuccessful day’s work I can return the vehicle home then the boss’ wife yells for not raising enough money, and worse than that are the boss’ children who sometimes also make belittling comments”*.

Competitive driving; Many taxi drivers grasp the art of this occupation's dynamics through friends and self training. Therefore they most times take on their masters' erroneous driving behaviour; or practice other drivers' "conduct" which they observe during self training. For instance most of them work for prolonged hours; as well engage in competitive driving (worse-worse). Worse-worse in the drivers' community is characteristic of impulsive pick and drop-offs of passengers. Characteristically drivers compete at work as they rush for passengers on the road for example prior to the accident, Junior put that "*I was rushing to meet passengers before other drivers could take all of them*".

Worse-worse also denotes hasty driving while rushing for passengers in a first-come first-serve mode. Taxi drivers practice the worse-worse phenomenon by picking passengers from any areas along the road, whether there is a stage or not. It also entails drivers' impatience to drop off passengers before reaching legitimate stages especially when they meet new passengers to pick; Bob confirms the same "*we are trapped in a competitive battle – e.g. when a driver comes across new passengers to pick at the same time he is about to drop off others - it is human to treasure something new to an old one*".

Worse-worse is practiced during seasonal periods or particular times of the day for example pick hours; that is, very early in the morning when passengers and employers are going for the day's work and during evening hours when many are now retiring off the day's work. Other times include seasonal or festive periods such as "*...and I was targeting holiday makers who were many on the road that day.*" Junior.

Competition / worse-worse among drivers is also apparent because of the little pay assigned to the drivers. Junior noted "*....., one may be trying hard to save a portion of money on the day's income to boost the contracted percentage pay.*" At times such competitions are based on covetous intentions among the drivers, for example over aspects such as how long

another driver serves a contract and retained by the employer. That is, while some drivers are employed for quite long by the same employers others keep on shifting from one employer to another even when they would wish to have worked with the same employer for a longer period. For instance Alex told that

things to do with work are not very straight, like you (interviewer), not all wish you well even here some fellow drivers may get annoyed because one's boss gives him a taxi to drive until it wears out and gives him another one- they do not like it.

In other instances worse-worse is practiced as a form of retribution; for example Junior explained “*I worked and my boss refused to pay as contracted. Besides, I drove speedy to find several passengers before my fellow drivers picked them from the different stops along the road*”.

Pressure from the bosses fuels worse-worse and maintains it among drivers. For example Junior expressed

sometimes the vehicle can get a fault and I spend too much time in the garage that means I will not work for a full day so I cannot collect all the money as the boss set it, but when I explain to him what happened he never listens instead he presses hard for such set amount even when it is never available.

During other instances worse-worse precedes taxi drivers' breach and digression of traffic rules. As David put

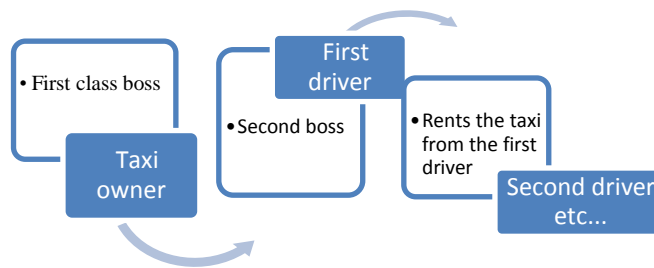
sometimes I forget the driving permit at home which also make me work amidst worry and hurry because if traffic police found me it can be an offence. But I don't use the seat belt because of the dusty road it can make me dirty so I by any means try to avoid police

Junior further expounded the continued practice of the worse-worse phenomenon stating that “...*taking excess passengers forces us as drivers to find shortcuts or drive on high speed to avoid the traffic police which are both deadly!*”

In that regard, taxi drivers acknowledge that worse-worse is a risky practice and accident precarious, but they hang on to the “custom” due to various lived psychosocial facets (maintaining factors). In addition the drivers whose various support structures are due to psychosocial reasons perforated, they lose vital walls to lean against especially during emotionally stiff moments, a thing that even with or without worse-worse can let them fall victims of destructed on-the-road behaviour. For example David said that “*One driver’s wife abruptly passed on; he in most cases seemed to be depressed, so we advised him to first have a rest-off the driving work*”.

The Chain-of-bosses phenomenon; some taxi drivers are neither employed directly from the taxi owners nor do they own any taxis; for example Junior put that “*any chance I get to convince a driver to let me drive he then becomes my boss*”. However such drivers actively participate in the driving service through fellow drivers who are initially employed by the taxi owners. For clarity am calling them second class ‘bosses’ as opposed to the vehicle owners (first class bosses). Junior is also quoted “*if they are paying me to rent out the vehicle*” referring to fellow drivers, fares collectors or blockers who pay to him to access the vehicle for at least a route - yet he also rent it.

Figure 8: Illustrative example of the chain-of-bosses phenomenon



Source: researcher

The chain though becomes demanding and costly when all the various bosses demand for the respective ‘shares’. Junior illustrated that *“at work bosses pressurise us, secondly the wife and other home demands. Yet sometimes in a day one may fail to rise for just any of them”*.

However, drivers have various ways of responding to such pressures. In addition the different ‘hierarchical levels among the ‘bosses’ exist with other conditions and influences. Such as Junior told that *“any chance I get to convince a driver to let me drive he is then my boss...”*

The chain-of-bosses to drivers also include; police, UTODA/ MATODA and sometimes family members to the taxi owner who sometimes step in on behalf of the taxi owner. This can be backed up by Joseph’s opinion about those he perceived as his bosses in this work *“it is first of all the owner of this taxi, the traffic police, and may be UTODA officials”*. Here Joseph is also trying to point at the different groups of people the drivers are supposed to legitimately and/ or otherwise meet their requirements. Such requirements include the day’s payments, traffic rules and bribes.

Park-numbers; these too are a fundamental custom to taxi drivers. In order for a vehicle to get passengers from the park it must register with the taxi park officials which is normally done at the beginning of the day and recycled whenever the available taxis have all taken passengers out of the park. These numbers enable taxi drivers to access passengers from the park sequentially. Therefore it is upon the driver to enter before another driver in order to

book the first number/ position and so he will get passengers as well move out of the park before those drivers who arrive after him.

Alex put that *“other drivers are usually speedy because they want to book numbers in the park.”* Yet David put that *“because of competition and racing after another driver that I get ahead for passengers and also get to the park earlier for a better number”*.

Some drivers practice hasty driving because they want to avoid the park’s long queues and receipt payments to access passengers, for example; David *“It also saves me paying for another park receipt, and sometimes police questions”*.

Gap; this is a shared norm among the drivers that too maintains competitive driving. It is commonly used by taxi drivers. Gap can be understood as being part of a function: worse-worse, the gap itself, impulsive pick and drops of passengers and consequent traffic action.

When a taxi driver transports passengers out of the park, with the respective park number other drivers follow sequentially. Depending on how long the following taxi spends to fill up of the passengers from within the park, dictates the distance between the first and the following taxis while on the road driving to another park or the desired destination, following the same route. It is that distance between the taxis that is referred to as a gap. Notably the taxi behind competes highly to either close the gap or as well overtake one in front. Similarly the one in front too speeds up to avoid being overtaken for the passengers ahead and booking of new park numbers. Besides there are other taxis that do not fulfil the conditions of accessing passengers from the park, they also compete for such gaps together with the boda-bodas and taxi drivers who get passengers from the park. David put that *“all commercial drivers, whether of small taxi motorcars, boda-bodas or taxi matatu compete for the gap in a bid to pick any passengers”*.

Often the rush and competition for passengers in addition to how drivers handle them, precipitate actions and reactions among traffic in motion. Besides each driver have different driving factors to such conducts. For example Junior acknowledged that “*nothing interests like driving a ‘flying’ taxi though the consequences may not be all positive, nonetheless work is work and it depends on what demands lay ahead of the driver most of which are implicit to the driver.*” Actions or reactions were also reported to affect the driver while on the road. For example a respondent put that “*I was frustrated and forced to displace it all to the passengers who boarded later.*” Alex also expressed that “*a driver can hit another when they are both racing for passengers or even to hit a pot-hole or a crossing pedestrian because you want to overtake a fellow driver. That is why most of the drivers drive on worse-worse and in away it exposes us more to accidents*”. The driver-taxi ratio is relatively high, a thing that create room for worse-worse while driving. For example “*this taxi business is just for “mmere ya leero” (survival) every driver wants a bit of a share by at least getting a chance for a route for the day’s amount;....*”.

Informal socialisation; drivers usually work in shifts, that is, they transport passengers out of the park during various intervals. It is during this time when many of the other drivers who are still waiting for their taxi numbers to reach; that they informally converse about affairs that commonly matter to them, including health, economic and current affairs.

4.4.2 Driver factors

Drugs; the study revealed that both illicit and prescribed drugs are ingested through various routs of administration; including- oral, intravenous or are inhaled. For instance, marijuana; alcohol, nicotine, aviation fuel, Antiretroviral drugs are abused or used for reasons including; psychological distress; hedonistic intensions, and medical prescription. Such as in an explanation made by Alex “*Sometimes a driver can take a mix of drugs i.e. marijuana,*

alcohol, aviation fuel which is deadly to use all at once. Besides drivers have various reasons for taking drugs and substances....”.

Reduced concentration due to disturbed perception; drivers who use drugs are liable to pushing fellow drivers and passengers, further to the road carnage for example *“when a driver uses illicit drugs or alcohol also his way of seeing things changes. He may be driving off the road but perceives the vehicle still steady on the road. Others drive on a high speed without recognising it”*

Drivers’ work environment also attracts them into drug abuse and so accidents. Alex added *“drivers are hired to transport people on say alcohol promotions, they always drive vehicles with radios that advertise the new and tasty brands which also push them to look out for....”*

Some taxi drivers make U-turns from the middle of the road before speeding traffic; when such vehicles meet it is unlikely that they survive a crash. Like Bob exclaimed over such driving, *“if one made a u-turn before a speeding taxi!...”*

4.4.3 Health conditions.

Mental and physical exhaustion; the mounting work stress levels relegate drivers to mental and physical exhaustion. Those who fail to adapt to such work environments either relapse/ fall sick or to extremes commit suicide. Junior detailed that *“a taxi driver committed suicide; the deceased noted that he did so because of the fellow drivers who never allowed him to participate in the taxi business.”*

HIV/AIDS; Other drivers are trapped in the worry over their infected health for example, Junior expressed that *“it compels me to work so hard to get enough money for my medication and my partner plus the child. So many times I don’t feel well due to many thoughts about how my future and the family is to be”*

Yet David expressed that *“People still point fingers to those infected with HIV and some passengers intentionally do not board such drivers’ taxis whose health has deteriorated due to ...”*

In addition drivers whose immune systems have been compromised by physiological or psychological illness, such as depression, HIV/AIDS, these conditions exacerbate the accident proneness. However, those infected are often compelled to boost health with ARVs, besides; such drivers are usually frustrated and depressed of their status that to maintain working moods, they incorporate drugs or substances. For instance results revealed one driver’s drinking pattern and the various ways of how he/ other drivers opt for alcohol to deal with ill health daily stresses; as Alex added about an infected colleague, *“...he always starts lunch meal with a sachet of vodka; unfortunately he is infected with HIV”*.

Often times what affects the body also affects the mind so the symptoms of HIV usually incapacitate the drivers’ psychological functioning and so the social and work environment and to the victim and the circle continues. Below is a brief overview of both (HIV/AIDS and mental illness) as perceived in the Ugandan society.

In Uganda both HIV/AIDS and mental illness are culturally perceived as terminal illness, and they are associated with immorality and witchcraft respectively. That is to say, as was initially perceived in other parts of the world (Parker, Aggleton, Attawell, Pulerwitz, Brown, 2002) those who are infected with HIV/AIDS are perceived as either promiscuous, homosexual, or involved in other deviant forms of sexual practices.

In addition the early days of the spread of the disease, categorized AIDS as an antisocial-conduct, awful, terror, death, and other names as were perceived by different cultural groups. Such beliefs created room for deep rooted stigma and discrimination especially for HIV victims who showed physical symptoms. Even with increased sensitization the infected are

still stigmatized mostly by relegating them to disadvantaged levels for example self-isolation. In reaction to such treatment many of those infected never reveal their status except to the respective significant others. To outsiders, the victims instead mischievously revenge to those free of the virus- by spreading it through sexual promiscuities. They lose interest in life.

Like AIDS mental illness victims are stigmatized and discriminated against and most often are tormented more than those infected with HIV. Reasons are the various misconceptions (e.g. it is witch craft, family history, non-common, strange, etc) attached to mental illnesses in Uganda. In some circumstances those infected with HIV present with symptoms of mental illness alternatively HIV predispose the victims to mental illness just as mental illness do predispose its victims to HIV. But in both conditions those on medication still participate in the day today activities such as taxi driving. Besides the stress of having physical or mental illness tends more when it collides with the taxi drivers' occupational stress. The uncertainty about when and what a driver's health can turn to with the presence of HIV infection, places him in a hopeless position that manifest in inappropriate road use.

4.5.0 Accidents

This section presents brief descriptions of the current study's accident cases; how the respondents specifically presented their lived experiences of accidents and the general accident talk.

4.5.1 Specific accident cases

This section presents the serious accidents in which the respondents were involved. Such accidents involved severe bruises, bone fractures, and/ or death and some drivers sustained pain which up-to-date affect the driving work. To begin with are the brief descriptions of the actual accidents. One of the serious accidents for each respondent is summarised below.

Prior to the accident Junior intrusively thought about various personal and work related demands e.g. housing bills, wrangle with the landlord, rushing to squeeze in time for extra routes, entertainment fee for a night club. He was also stressed more when he conflicted with a taxi fares defaulter- a woman passenger who also by coincidence made an HIV/AIDS stigmatizing statement that angered him. With this added to worse-worse for Christmas seasons numerous passengers, he rumbled into a truck which had parked on the road side.

For Joseph another speeding driver knocked the back of his taxi while he was negotiating a way to that vehicle and saving a pedestrian crossing from about the same point. The passengers with the driver were severely injured and the vehicle was demolished. Bob was trapped in the accident while struggling to fulfil the job's schedule and significant others' demands. He was rushing for passengers during peak hours-when most workers were retiring off the day's work. In the same evening he had another responsibility of applying for a vacancy in a nearby school a sister, while there he received a phone call asking him to pay bail charges for a brother who had conflicted with the law but this driver sponsored that brother's education too and he dropped out of school. In such a mood he drove off, with the gear in neutral when he got to remove it, he mistakenly pushed the gear into reverse he lost control over the vehicle.

Due to impulsive pick and drop off of passengers, Alex ended into an accident victim- he was knocked down by a truck vehicle when he was trying to get where to park to drop off a passenger, the back seat people were severely injured, and were rushed to the hospital. Henry abruptly got into stationed thieves, they stopped him and he declined they gun shot him an arm; in the process he tried to engage a faster gear and it failed so he lost control over the vehicle.

In this accident David was competing for passengers, racing after another driver to overtake him and get ahead before he could take the passengers as well get to the park to book a number before him. Given poor conditions of the road- untarmaced with potholes, in the process of speeding to overtake a fellow driver he was shocked by another taxi that he abruptly noticed driving from ahead yet behind him was a charcoal man carrying a full sack of charcoal (normally it lies across the bicycle carrier). When he tried to save the charcoal man, he lost control over the vehicle.

4.5.2 In-depth of the specific accidents

Driver factors

Domestic concern; Junior added that Domestic issues such as food are a major concern among drivers *“I was very speedy thinking so much of the demands that lied ahead of me, including food to take home.”* The responsibility that is culturally placed upon men as providers forces drivers to devise all possible means even at less or no day’s income to fend for their respective families.

Health status; in the study results respondents all together acknowledged the strain of working with terminal illnesses, most of them describing living with HIV/AIDS and some combined it with mental illnesses such as depression. At both levels a driver is positioned in a life submerged with worry and the stigma that follows... Junior said

/I remember the day I got an accident there was one passenger who refused to pay so I talked to her harshly and she retaliated with a statement that almost “boiled” me.

In view of Junior’s quotation traffic accidents among taxi drivers are usually a tip of an iceberg abased of various intra-personal and interpersonal stressors which can be ignited any moment while at work.

Significant others; accidents among taxi drivers are usually a total of various factors that directly affect the respective drivers especially issues connecting from the drivers' significant others. These affect their concentration and attention skills. For example Bob detailed as follows;

preceding the accident I was hurrying to reach a nearby school to ask for a vacancy for my sister, at the same time minimize how long I was spend there, in order to catch up with the peak hours passengers on the road. Besides, while at school I received irritating information about my brother. I mistakenly pushed the gear into reverse

Work environment

Driver behaviour; given numerous demands to the driver, with a competitive work environment accidents are inevitable. Such as Junior expressed that; *"I was speedy because I wanted to drive another small route before handing over the vehicle"*,

Other road users; Sometimes even with careful driving other road users such as truck drivers/ others cyclists or pedestrians contribute to taxi drivers' accident involvement; backing the same Joseph recounted how he got involved in an accident; *"Another driver almost drove into our vehicle so with me trying to give him space at the same time cornering, I met a pedestrian crossing just about the corner, when I tried to save him I got off the road"*

Impulsive pick and drop-off of passengers; At times taxi drivers' accident involvement is a combination of impulsivity while dropping off and picking passengers with less attentive road use by other road users. This is exemplified by Alex *"I was knocked down by a speeding truck when I was trying to get where to park to drop off a passenger,"*

Competition for passengers during festive seasons; they are many passengers available during such days as Christmas, Easter and other public holidays. These in addition to narrowed roads due to trucks which park alongside the road, leave accidents inevitable. In

support of the same Joseph illuminated that *“during festive seasons so many people were boarding from town areas to their ancestral homes, we competed for passengers. In the process I rumbled into a parked truck at the road side”*

Theft; Antisocial behaviour including but not limited to road staged armed robbery. Drivers who abruptly get into the thieves’ road block traps, at most fall victims of road crash. Some lose life and others survive death but sustain severe hurt and prolonged or life time pain. As Henry detailed *“I abruptly got into thieves who were stationed along the road, they stopped me, I disallowed, they then gunshot my arm.....which sometimes pain me.”*

Structural versus state of the taxi factors

State of the road; the poor conditions of the roads in addition to competition for passengers and the sitting arrangement in the taxi for example placing a mother with a little child next to the driver. David recounted;

I drive from a murrum road with potholes, while rushing for passengers, I saw another taxi coming from ahead of us, apprehensively, I tried to dodge it, and the vehicle speeded up

The sitting arrangement; such as a mother and young child sitting next to the driver in the taxi compromised safety. Besides women generally rate higher than men on anxiety levels, thus by protecting the child she succumbed to fear henceforth grabbed the driver’s arms; also the driver could have relaxed directly or indirectly attending to a co-driver relating with a child and probably himself in say conversation that impacted his attention and concentration skills.

4.5.3. General accidents talk and explanations

This section presents the general view of accident incidents that emerged out of study respondents’ narratives. These were accident scenarios which were expressed by the study interviewees in addition to the specific individual’s lived experiences of the phenomenon.

Driver factors.

Loss of property; Henry noted that other life's losses devastate the driver and impede his full potential (attention) while at work *"like death of one's child, sister or brother, wife, parent or relative. Or it can be terminal ailments, or other types of losses, e.g. land confiscation, divorce, or if one's home or shop is robbed."*

The present study results conveyed that land confiscation or grabbing fatally impacts drivers. It is a disrupting factor to the driver's concentration especially when a taxi driver considers all he sweat for while collecting little by little for quite long, and now have surreptitiously turned to someone else's ownership.

Belief systems; drivers believe some accidents happen due to extra/natural forces. Junior expressed that *"Preceding such an accident a driver can see an atrocious thing say: a huge snake, a very beautiful woman, a cow crossing the road but when actually nothing exists"*.

Witchcraft; taxi drivers also believe that accident involvement is not a groundless happening; it is rather influenced by witchcraft. Alex explicated as follows

"But they are those who get into an accident because of witchcraft like one driver got into an accident because he saw a fallen girlfriend".

Some drivers perform the practice of witchcraft beyond job protection to life threat especially *"when they backfire they can be deadly...."*Junior.

Individually, taxi drivers' personal life is inclined on the respective nurtured and acquired beliefs. Thus these differently predetermine their perception and appraisal of the world of work regarding their involvement in road accidents. For example respondents differently elucidated the role of spirituality, mysticism and or fatality in this business; such as Junior put that *"...but it can be other powers out of the driver's control" or even competition at work can make one bewitch another,.... there can be some relatives who do not wish the driver well"*.

They too believe in getting blessings or bad omen as culture dictates. Junior put that “...but that morning he made me start the day with a horrible omen,..”

Fatality; the study results included that some accidents occur because it is just the ‘right’ time for the occurrence. For example David expressed that “*And to some it is God’s wish,.....yet others it is family spirits that may be following them which then claim lives through accidents*”.

Social support systems; drivers’ networks with the different social support systems either contribute to their stable or destructed service. Significant others including family members, relatives and friends these do respectively offer social support or disruption to taxi drivers in the course of work. The disruption of the drivers work is always plausible when there is unhealthy perception of the support, connections or attachment they receive through such social support networks.

Significant others; to the driver, the needs presented by the people important to them are sometimes compelling to fulfil. However, the process’ demands hardly tally with the driving work that a forced combination translates into accidents. Drivers’ responsibilities also stretch to their respective extended families. They are at times overwhelmed with such demands that if they try to combine them with the other jobs’ accomplishments amidst competitive driving with other drivers; the consequences are detrimental.

In addition many stretch further to include also fulfilling demands of their extended families. Bob for example maintained that “...in the taxi business, many drivers work with social and interpersonal problems that connect from different life encounters such as problems with the spouse or children”. Others drive with the stress of extramarital affairs, which predispose them to distracted attention while driving.

Loss/ grief and bereavement; when most humans do not resolve the pain due to loss of loved ones due to death, it may later be destructive as can be depicted in various life encounters. To drivers for example loss of a spouse with inadequate grieving process, such memories may be disorganising to extents of affecting their driving behaviour.

In another scenario, memories of a significant others disrupted a taxi driver to levels of involving in consecutive minor accidents, owing the incidents to pressing anxiety symptoms, e.g. sweating and re-experiencing the accident memories that would for example appear if he drove along points that reminded him of the accident. Some drivers wake up and start work on empty stomach; this occasionally places a detrimental effect to the service of driving for example Alex detailed that *“one may wake up very early in the morning and start driving without eating anything and if the stomach is empty so the mind”*.

Drugs and substance abuse; for instance, Alex put that *“it feels good when one takes alcohol and he changes a bit, it boosts zeal for work for longer hours especially at night when it is cold, as well produces warmth and alertness to the driver while driving”*. Yet the use of psychoactive drugs or alcohol ingestion prior to driving compromises the driver’s capabilities to manage the vehicle; which sometimes result into an accident. This is constant with Alex as he details below *“some drivers work out of the influence of drugs they drive on very high speed but when they cannot recognise it, until the passengers complain”*. Some taxi drivers use illicit drugs and or substances during or after work hours. For instance *David noted that “...sometimes they drive like that when they have taken alcohol and also drive which may not be good for them...”* For Henry he said *“Other drivers start work when they are drunk or with other drugs on their heads; like marijuana, and may be others”*. Habitually drivers are persuaded to attempt use of the respective alcoholic beverages that are commonly advertised. In view of the driver’s prior intra and interpersonal conditions, the driver’s mental strength, this can destruct a driving situation into an accident.

Health status; “we most times drive so speedy because we want to collect enough money for drugs.” Junior stated. Some drivers are terminally sick suffering from diseases including but not limited to AIDS and mental diseases; yet Uganda like many African countries, does not have a health insurance policy for all. These always linger and worry them even during and off work. For example Junior put that “Like us who are infected with HIV we are most times thinking about what may happen the next hour”. Even with worries of being HIV positive, the drivers’ responsibilities never change, however with taxi driving hassles infected drivers get so stressed especially at the failure to realise the day’s individual expectations. Fragile at such frustrations a driver end as a road crash victim. Like David detailed “some work with HIV and sometimes it worsens and driver break-off work for some time, so if such a person resumes work, he can get sick due to work pressures/ many thoughts.

Mental illness; some drivers experience road traffic accidents because of relapse to mental illness. This was brought to knowledge by almost all respondents. Specifically put, Junior detailed that “still some drivers work but when they are surviving on drugs. If say such a driver is behind a steering and he happens to relapse it is likely that an accident will result”

Work environment

The role of other road users; other road users also contribute to whatever transpires in the taxi drivers’ world of work including accidents. These were differently acknowledged by the study respondents. Sometimes taxi drivers’ abilities to avoid accidents are compromised by other reckless road users. Such as Joseph expressed that “with many users on the road, even when one driver is very careful other reckless drivers can corrupt his temper, for example truck drivers”. However, some drivers may get involved in accidents not because of direct use of drugs but because of other road users who ingest such drugs and then the effect spreads even to others. Bodaboda riders never respect traffic rules often fall victim of road

accidents. Sometimes they include taxi drivers but when it happens they are normally aggressive to vehicle drivers.

Pedestrians; these are another road user's category that in one way or another contribute to road traffic accidents that claim drivers' and other road users' lives. Some pedestrians cross the road carelessly; for example in corners, or any other risky places along the road. Backed Junior is one pedestrian, who was knocked down while crossing the road; *"the driver somehow lost control...apart from the woman's slow speed while crossing the road; a driver from another side of the road drove almost into our vehicle, then I gave him space in a moment I met a pedestrian crossing..."*

Passengers; during transit some taxi drivers are pressurised to speed up the vehicle by on-the-board passengers. If the driver is not strong enough to resist such, he will dance to the tunes of the passengers' pressure as Joseph put *"pressure to drivers from passengers to speed up"*. When this combines with poor parking along the road; accident may be inevitable. For instance Joseph adds, *"to some drivers it is not their fault alone involving into accident, it could be due to parked /stationary trucks and lorries that narrow the road."*

Theft; taxi drivers sometimes create room for accidents when they collaborate with other drivers who are thieves to transport passengers whom they later victimise with intentions of stealing their money and property and the scuffle create an accident. What did not come out in the data though is whether the taxi drivers are aware of the theft practices of those they rent vehicles to or they are absolutely ignorant of the whole affair not until it happens to the respective drivers. Other accidents are a total of numerous negative factors- social and psychological and then climaxed by the confrontational passengers.

Phone call; during work drivers are entangled with such circumstances in their family circles. Some issues are usually pressing that with a phone call communication can be devastating.*a fellow taxi driver was plagued by a call yet he was driving, while still on the*

subject he got involved in an accident". In addition taxi drivers make and receive personal or other business calls while driving and some exchange messages with mobile phones.

Vehicle radio; most drivers work while listening to taxi-radios, with some drivers having particular programs they directly participate in. In so doing they make phone calls for contributions or by sending greetings via specific radio studios. The various programmes include informative, entrepreneurship programmes, political programmes, drama and entertainment, life style or programmes, programmes addressing psychosocial issues including announcements-e.g death or otherwise, advertisements, skits or interludes. These are usually listener-centred programmes with specific set time for opinions, drivers being one of the active listeners' communities; they too call in to participate in such discussions. Drivers who may not make direct calls to various radios they are impacted by others' calls.

Work and domestic related economic issues; these too dictate what happens on the road as David puts *"in addition to my boss' fee "worse-worse driving" was rather inevitable. I was speedy so that I would raise enough even to put some on the piece of land I was paying"*.

Loss of personal properties and insecurities that come with such losses to taxi drivers; such losses are many times infectious to extents of distorting the driver's life. To some drivers they escalate into mental and physiological inadequacies, combined with other on-the-road hassles, road accidents follow. If the house owner/ land lord is impatient, to allow more time to the tenant, he or she will burst into verbal and emotional abuse towards the tenant. For instance Junior expressed supporting the same as *"I remember that day I had had a serious wrangle with my landlord because true,"*.

Marital or spousal disruptions; these perforate the taxi drivers' social support walls and stimulate the aggression centres during moments of mounting stress. For instance Junior said

“Divorce propels any driver to work with a lot of ill thoughts; it forces him to drive on a terrible -speed so that he may forget all about the woman”

Structural and taxi conditions

Road conditions; junior reported about a hip of soil that was piled along the road at a point where an accident occurred *“...the driver hit the collected soil on the side of the road and the vehicle over-turned...”*

Failure to observe road signs and/or conceptualise them; the problem of road traffic accidents was also explained as accruing from the driver’s failure to observe traffic signs and road markings as well as to understand what they portray. For example; the road signs may be available but old and faded or are obstructed by other sign posts in the same place with the road signs.

Taxi condition; the faulty mechanical conditions of the taxi partly explains accidents occurrence *“So at the time of the accident, I tried for the first time, and the gears failed, when the woman saw me fidgeting for the second time, she got hold of me and the accident followed”*. David

Institutional factors

Police; culprits are caught and fined, however, to avoid the trap of the law and maintain the excess passengers, taxi drivers drive on high speed. In an expression made by David *“other drivers work amidst worry because when traffic police finds you it can be an offence and for sure any driver devises means to save himself say by speeding and not yielding to traffic police stops, or manoeuvre.”*

Inflating tender rates; the government set high tender bids which also make those who win them to ask too much from the drivers, for example UTODA after paying too much to the government, asks for quite a lot from the drivers and so drivers ask heightened fees from

passengers. This too compels them to drive on high speed that they can close up for such gaps as Bob put *“the receipt charges placed by UTODA are too much, especially on unproductive days. In the end we drive on terrible speed.”* The ever-increasing inflation in the country pushes drivers to work with heightened pressure and competition to be able to collect more money from more passengers. For instance Alex expressed that *“Today Uganda is quite unreliable on matters concerning the economy; we get very little and spend too much. This forces drivers to have a lot of pressure for customers but with pressure one can easily fall victim of an accident”*.

4.6.0. Coping

Although drivers are overwhelmed with individual, family work and societal stressors they opt for ways that can save them such moments that would rather have escalated into accidents For instance Alex at ironically expressed that *“I don’t think about my boss so much during work hours because that can worry me throughout the day, like now I have just eaten a chicken meal”* (meals with chicken sauce are sold expensively compared to other meals).

As a way of managing what could rather be out brown of their control, drivers make use of self-help groups. Even though self-help groups are a protector to drivers; they can as well be quite demanding to the driver when it comes to say refunding the borrowed money. For example Junior put that *“we make monthly contributions and get bank loans for our own good, but when paying time is about to reach when I have no money to pay, am always forced to drive on a high speed”*.

Some drivers do protect themselves against the job as well as accidents through ‘*Work-protectionism*’. The practice involves guarding the driver’s position of work from other potential drivers who may compete for the same position. Though secretly performed, it is believed that most drivers also protect themselves against accident involvement. Besides, to some drivers the scars after experiencing life stressors from the various interacting circles are

never coped with rather these turn into a lived experience. For example David put: *“one time robbers cleared the family shop and we failed to re-open it, we almost failed to pay school fees for our children. I kept in fear and it disturbed me for quite long”*.

4.7.0 Intervention

4.7.1 Driver related aspects

The respondents acknowledged that psychosocial problems snap taxi drivers into road accidents. Thus they suggested interventional measures which can help to minimise road accidents. These include; counselling services as Junior noted *“we need to get a counsellor whom we can consult about how we can deal with disturbing psychosocial problems”*.

Social capital systems; the respondents expressed need for the various social capital resources such as caring and encouraging friendship. They as well suggested that the same constructs if well applied to the drivers by the respective significant others; they are vital contributions to combating the road accident phenomenon. Junior noted that *“the friends and family members should always be supportive, they should not point at our failures or weaknesses for example backbiting us”*.

Respondents suggested that witchcraft should be used sparingly for it is too deadly; witchcraft can dictate accidents. For example Joseph put that *“those who believe in witchcraft should try not use deadly witches that can claim drivers’ lives.”*

Resting off or taking breaks after prolonged hours of work; work relaxation intervals can harness the driver’s exhausted mind and body that would otherwise escalate into worse stages to Burnout and accidents. Henry noted *“drivers who combine taxi work with other jobs should balance time between the jobs or choose off one job”*.

Observing traffic rules; respondents proposed that drivers should avoid things that distract the drivers' attention while driving and focus more on traffic rules. Joseph put that *“drivers should decrease speed, be careful about use of phones while driving, avoid use of drugs and substance”*.

Traffic police; respondents also noted that the traffic police is fundamental in the process of alleviating road traffic accidents. For example Bob said that *“traffic police is required to execute its duties without them being bribed whatsoever”*. .

Driver training and assessment; these should be carried out before they start working as drivers. Respondents observed that this will minimize accidents. For instance Bob noted *“there should be laws that hinder those with risky terminal illnesses to join the taxi driving business because sometimes it is quite demanding for such people to sustain control”*.

Education and information to all road users. This should include but not limited to what to expect in the general environment of the road. For example Alex noted *“there is need to sensitize other road users on being alert while on the road”*.

4.7.2 Road related aspects

As a remedy to the existing burden of road accidents, suggestions to improve the road were also put across by the respondents; such as Junior put *“we ask the government to reconstruct the roads, and/or’ widen the narrow and other poor states of the road”*. Joseph emphasised the need to improve the roads by catering for aspects such as *“remove street kids from the roads, put traffic lights, put zebra crossings and other road marks, evict street vendors off the road sides, and regulate Bodaboda cyclists”* In support of the same Bob proposed that *“those who rear animals on free range system e.g. cows, sheep, goats and hens should strictly supervise or stop the practice from near the road; the police should be strict at issuing and monitoring driving permits/licences.”*

Chapter Five

GENERAL DISCUSSION AND CONCLUSION

5.1. Overview of Findings

Various publications have addressed causality of road traffic accidents including drivers' beliefs, attitudes and behaviour, physical and structural environment (Iversen & Rundmo, 2002; Bingham et al., 2006, Teye-Kwadjo, 2010) among others. However, the current study set out to explore taxi drivers' psychosocial lived experiences and their involvement in road traffic accidents. In resonance with the results of the current study, driver-accident-involvement is a spectrum of driver-environment factors that swivel around; the typical routines of individual taxi drivers; the taxi drivers' community; and their socio-cultural context which such factors transactionally or interactively culminate into road accidents.

The study intended to in part suggest interventional measures to accident phenomenon.

Studies dealing with experiences of driver-crash survivors are not very common. The results of this study disclose the drivers' psychosocial lived world as illuminated by the various factors that stretch from drivers (factors intimate to the driver), and the environment of operation (social environment: e.g, other road users; *physical environment*: weather, terrain; & *technological environment*: taxi mechanical conditions) that contribute to road accidents. An accident as referenced by (Hallnagel, 2004) is "a short, sudden, and unexpected event or occurrence that results in an unwanted or undesirable outcome".

Results of the current study agree with previous studies that driver factors play an immense role in driver-accident involvement phenomenon. The various psychological factors influence social cultural factors and the reverse is true. For example the role of social demographics (age, gender/ masculinity and education) of taxi drivers were differently

elucidated in the study results. Younger drivers are often overpowered by Masculinity and when this is flamboyantly expressed some end into accidents. Education (formal and driving training) solidly affects driver behaviour. Those with less education get involved in accidents more than highly educated ones (Mebrahtu, 2002). Plausibly low education and training together limit the development of reasoning, judgement problem solving skills even in circumstances that require swift decision making regarding road use such drivers are hesitantly redundant or even the choice of options before or about accident scenarios are usually lacking. Education is a pivotal aspect of the driver that affects all circles of his interaction i.e. at personal, domestic, friends, driver community or societal level. Thus education, influence the driver's attitudes, intention and perceived action.

In Uganda for example being a developing country, many people are not educated yet a huge number of youths drop out of school and most of them find access into the transportation business as part of earning a livelihood. Many of them from being taxi conductors learn driving by observation, their apprenticeship therefore does not fully gather enough skills to drive though in a short period they are *graduated* to tax drivers either by themselves, friends who have taxis to drive, or relatives who own taxis. Such graduates without road licence and most times with limited knowledge of traffic rules, they always drive out of normal routes where they find no traffic police to ask for their licence, they breach traffic rules either intentionally or unknowingly, such as picking passengers off stages, parking in the road to offload-load passengers, over-speeding, honking and overtaking in traffic hesitations and they too never reach the park where most passengers gather to board to their respective destinations.

Instead they use too much fuel at few or no passengers at all, working under pressure, driving through hideouts and reduced charges. Such drivers suffer with work under-load due to little or no driving training, yet behind them is a long queue of personal and community

demands. However, the misfit is sometimes due to work overload; sometimes drivers work exceedingly for example most of them in Uganda have a routine driving schedule running from 4am to 1am or sometimes drive for three or four days consecutively without any rest (J.M. Mutyaba, personal communication April 12, 2010). Even at such sleepless nights' work, the earnings never satisfy their demands, family and relatives. Supporting evidence (Peltzer, 2008) indicates that commercial and public road transport drivers in African countries often work long hours and go to work exhausted. Driving for a sustained period can increase fatigue (Taylor and Dorn, 2006). Fatigue in general induces sub-optimal psychophysiological states which result into individual-work collapse (Sluiter, van der Beek, & Frings-Dresen, 1999). Erroneous gear choices transpire, with such practices inaccuracies damaging situational consciousness (e.g., poor judgement of breaking distance at traffic lights, or when timing overtaking manoeuvres) as a result of fatigue in drivers (Brown, 1994) will culminate into an accident.

Earlier findings concur with this study results that the terms and conditions of work for example the taxi/ vehicle ownership potentially affect the driver's intentions and perceived behaviour control. Taxi owners who disrespectfully handle drivers charge them into anger and aggression or depression. With such moods, in addition to challenging situational factors for instance, abusive passengers or defaulters the driver is left vulnerable to road accident involvement. Besides driver owners carefully drive catering for the passengers but mostly minding the vehicle's depreciation unlike the employed drivers who never mind say servicing and other maintenance fees, as such they hit potholes or speed drive, these predispose the driver to accidents. Other employed drivers work under very strict conditions such as demands to collect huge amounts of money, yet they wish to collect additional amount to the contracted pay, with such worse-worse is eminent and so accidents.

Worse-worse emerged as a central aspect in the results of the study. The concept represents drivers' behaviour characteristic of; accelerate speed in attempt to overtake other traffic in transit (Evans, 2004), manoeuvring flowing traffic, u-turning (Mebrahtu, 2002), abrupt starts and stops, untimely drop-off and picking of passengers among others. Worse-worse coupled with other driver-environment challenges, precipitate road accidents. However, some drivers hang on to worse-worse because it is thrilling to drive a 'flying'(very fast) taxi. Besides one who drives fastest to the drivers' community is the best driver.

The results as well concur with previous studies that stress highly contribute to driver-accident involvement. Stress to drivers is a combination of personal factors and the environment of operation. The psychological distress fuse with the social stressors – domestic and occupational; for example a driver with stressful life experiences (property/ land grabbing; loss of a loved one; divorced; infected with HIV/ AIDS; lacking/ inadequate basic needs- house, food, sex; victim of theft- shop robbery; competitive working environment) all these gravely cost the cognitive and emotional strength of driver. However, appraisal of any of the above listed aspects predominantly rests on particular drivers' psychological strength (beliefs, attitudes and personality), weight, and duration of the stressor. Appraisal refers to an individual's perception of an event which determines the intensity of stress as well as the consequent behavioural reactions (Smith, 1996). Frequent reactions to stress include but not limited to anxiety observed as fear, worry, apprehension, tension; anger that is commonly translated into frustration and aggression (Lajunen and Parker, 2001). Following the frustration-aggression hypothesis, when an individual's intension to accomplish a goal is stopped up an aggressive drive is provoked which induces behaviour to hurt the object or individual. This relates to driver-accident involvement, for example when he experiences marital disruption or otherwise.

Other drivers react to stress by coping with alcohol and drug use that leave them vulnerable to accidents. But some drivers only opt for alcohol as part of their lifestyle and it being a depressant it inhibits the bodily activity levels, which in part cause fatigue/ hunger over or even sleep while driving. Yet other drivers use other prescribed medication due to respective health conditions but some combine illicit drugs with prescribed medication. These circumstances predispose the driver to accident-involvement. For instance results indicate that while some drivers are addicted to alcohol use, others occasionally ingest it for recreational purposes yet some are on anti retroviral and mental illness medications. These impair their cognitive abilities, weaken the body and so the mind, to some are disoriented, coupled with the stress of competitive driving, crowded slow jam, other road users' destructive behaviour leave the driver exhausted and vulnerable to accidents.

Pertinently, as various studies acknowledge present results also signify alcohol as secondarily consumed due to other stressful life events of drivers but not in itself causing accidents. On the other hand, stimulants for example nicotine, often leave driver users euphoric, too alert, energetic, without sleep, enabling them prolonged hours of work, and vulnerable to fatigue and irritability. Yet hallucinogens such as marijuana, cause different effects to different driver users, such as dysphoria and lessened motivation. Nonetheless, depressants for instance alcohol, although make the user feel good they also slow the user's bodily functioning and so affect the cognitive abilities and general driver skills.

Economic conditions influence driver behaviour. A depressed economy existent in Uganda, potentially mounts social stress as well as driver stress. These affect the driver's attention, perception, reasoning, judgement and concentration while driving; as such compromise the driver's control over the vehicle. Notably poor economic status gives room to antisocial conducts such as theft. In the study results this is variously presented, i.e, some taxi drivers collaborate with thieves who may serve as conductors or drivers to rob the

passengers and also thieves who massacred as taxi drivers or armed staged robbery (Knowles, 2003) that interfere with the taxi activity all of which cause accidents.

The study results agree with previous studies that significant others (Peltzer, 2002) affect the driver into accident involvement. Holding that the basic value of an individual rests in his connectedness with others in context (ibid), drivers too are obliged to remain appealing to the family and extended connections imperatives. Besides, the self is approved through it are obliged to remain appealing to the family and extended connections imperatives. Besides, the self is approved through it being symbolically mediated, collaborative social interaction among people of a cultural community (Kitayama, Duffy & Uchida, 2007). Notwithstanding, the driver's self-constitutes - the psychological schema of self-regulation (ibid). Contextually, drivers stretch so much to balance the self and their social cultural environment (significant others). For instance, the driver works through worse-worse, extra hours, combining with other responsibilities in order to suffice such expectation. However some drivers are disappointed by the fundamental social support connectedness, even after investing 'so much' in them. When emotional supportiveness is denied from the respective others, it irresolute the driver's intentions and perceived behavioural control which relegates him to psychological distress and also accidents.

Another driver-accident involvement factor is witchcraft. The study results show that drivers believe that accidents are sometimes instigated by other extra-natural powers. This follows some vehicle owners who wish to accumulate much profit and or protect it against theft and drivers who wish to protect their jobs. However, such drivers' belief systems influence their perception of accident causality and so reaction which at times end them into accidents.

This study concurs with previous studies findings (Mebrahtu, 2002; Peltzer, 2002) i.e, inefficient governance affects traffic safety. In Uganda, corruption is deeply engraved in the taxi business. Evident traffic-corruption scenarios are usually unveiled in daily local newspaper publications; radio and television broadcasts. For instance in the monitor, (2011) “Taxi drivers have a habit of dropping money at the police road blocks whenever they see a traffic officer stopping them, traffic officers who accept bribes from taxi drivers have greatly contributed to rampant road accidents.” Thus far, with the compromised institutions, drivers almost naturally breach or violate traffic rules because they are certain that they will bribe the concerned officials and continue on unpunished. Such violations include but not limited to driving without a license (Young *et al*, 1997), driving beyond the required speed, taking excess passengers, not observing traffic lights. However, at times such drivers are faced with officials who do not accept bribes they fidget to undo the wrong when is sometimes too late and then end into a crash; for some such scenarios involve the traffic officer’s life. Therefore drivers are either trapped by the officials or during the process to escape the law they crash into accidents.

Regarding the study results, divergent from how it is done in buses and as it is done in Norway and other most European countries where passengers pay fixed transport charges as soon as they enter into a bus, for example in Norway this can be by cash, a prepaid physical digital card or a wired e-card, or an approved notification that authorizes a passenger to travel from a bus, this arrangement vary with that of taxis in Uganda. Conductors collect money from passengers while the taxi is in transit. Depending on the passengers’ bargaining power, they are often charged different amounts. Besides expending more collecting-changing charges time, this allows room for illegal cash notes exchanges and a possibility to charges-defaulters to also board. However, when they are asked to pay they racket up the driver-conductor crew or abscond. Sometimes scenarios of this nature involve passenger-taxi crew

abusive exchanges that heat up the driver's emotions. Infusing with other intra and or interpersonal attention destructing stressors; a road physical predicament for instance- a pothole, a crossing pedestrian/ animal, another reckless driver, children playing by the road, driver-accident involvement is liable

The physical environment as observed by various road safety studies (Mebrahtu, 2002; Peltzer, 2002) so the study results identified that this contributes to road traffic accidents. The nature of the road, such as the typology of Masaka-Kampala highway the main road in the study area; is characteristic of narrow width, meandering bends, potholes and sharp corners and slopes. Most of such points on the road always consume people's lives. Other conditions include but not limited to unturmacked, without traffic signs, and clear demarcations of pedestrians, cyclists, and abrupt staged road blocks. However research has also indicated that good but poorly designed roads account for road traffic accidents and in other circumstances drivers accelerate speed on good roads due to the road smoothness and others do so to compensate for the time lost while driving through potholes or manoeuvring tight jam. Such speed with unfriendly weather conditions for example, a slippery road and the poor mechanical conditions of the vehicle expose drivers to accidents.

5.2 Limitations

The study is limited by the sample and albeit IPA's provisos its small size. In prospect the study sample is composed of six taxi drivers who have ever been involved in road traffic accidents and are still serving as taxi drivers. Specifically it is worth noting that even though IPA method is currently accepting a one subject sample for a study, most study participants were not as information yielding as respondent one. So the study is predominantly represented by one respondent's lived experiences. The study topic is also a little ambitious that it has not been possible to present/ discuss all the collected data. Although IPA has

profoundly registered success in the scientific world, some of its main guiding principles e.g., epoche (Moustakas, 1994) remain abstractive to achieve in the true sense of Husserl's (in *ibid*) descriptions of the concept.

Besides as per the current study, the write-up is a product of interviewer-interviewee interaction plus analysis that was solely carried out by the interviewer (myself). Thus to understand the respondent's lived experience, I started with my own perception of the way things are; by seeing what was before, first and foremost, the observable with eyes and describing what I saw through own experience. Individual perceptions, memories, judgements, reflections, were core and figural in developing understanding of things and people (*ibid*, pg 94). Nonetheless humans are fond of responding to life questions with answers they believe are socially appealing other than the truthfulness of what rests in the core of consciousness or feelings. This indisputably prevails in the current study and so was analysed and discussed! As such future studies should address the current limitations.

5.3 Strength of the study

The cardinal strength of this study was being able to trace the targeted sample. It is not so often that accident survivors continue serving as taxi drivers. In addition regarding Phenomenological principles, scientific investigation is valid when the knowledge sought is arrived at through descriptions that make possible an understanding of the meanings and essences of experience" (Moustakas, 1994). Even though the current study sample is small, the results are plausibly representative of the taxi drivers' life world regarding accident involvement as well these agree with the various road traffic accident studies carried out from other African countries, Asia and Europe.

5.4 Implications and Recommendations

5.4.1 Community psychological interventions and praxis

The burden of road traffic accidents can be projected, ranked, with various suggestions to remedy the problem. However, world statistics, regional as well as police and news reports of road traffic accidents may not be enough in themselves to depend upon for appropriate understanding and interventions especially in developing countries where majority of road users' and drivers' behaviour that most often culminate into this health adversity are stringently knotted with their life world. Thriving on interventions that have been credible to the developed world may end into futility if all stakeholders are unconscious of the factors that intimately influence what may overtly be observed as precipitators of such accidents. In essence an all-inclusive road safety program based on multidisciplinary dexterous quantitative and qualitative research studies and findings should be the guiding principle to the country's amelioration of this health problem which is on increase in many low income and middle income countries.

Behavioural and cognitive interventions inclusive of community psychology principles should be employed to redress road accidents. These should be directed towards, standardised driver formal education; driving training and licensing; road safety education and sensitization should be provided to all road stakeholders i.e. other drivers, cyclists, pedestrians, and the general public. Information should be provided through refresher courses to drivers, conferences, local gatherings, billboards, posters, radios, newspapers, television, leaflets, staged drama movies and songs. In addition a standardised way of tracking drivers' history (psychosocial distress, prescribed and/or illicit drug use, criminal record, etc...) and laws should be put in place. Such regulations should also cater for phone use as well as driver involvement in radio talk shows while driving; seat belt use; sitting arrangement for example children with / without mothers should never sit next to the driver.

The existing traffic rules should be well implemented with additional traps for the officers who accept bribes or in any way that breach traffic rules. Pertinently officers should get salary remuneration to boost their income and motivation to execute their duty uncorrupted.

Government contribution in combating traffic accidents is fundamental thus should be guided by action research. Accordingly, suggestions include employing professionals for example human development qualified professionals to be part of other related recruits in formation of a multi-disciplinary team aiming at tracing and curbing the driver road traffic accident epidemiology as such propose preventive measures and/ or rehabilitate the accident victims with a well balanced approach respectively.

Community psychology guided research is suggested to be carried out so as to further investigate the nature of accident phenomena among taxi drivers and other road user in Uganda. This will enable appropriate knowledge based community education and information dissemination. The choice of research areas should also give due consideration to the various road users' life world outside the traffic arena since what may be overtly expressed on the road are indicators of rather worse conditions that if not such conditions alleviated road traffic accidents will persistently cause a health threats to Ugandans, Africa and the world over. Broad based studies employing action participatory research approaches (APR) are henceforth recommended. In essence an all-inclusive road safety program based on multidisciplinary dexterous quantitative and qualitative research findings should be the guiding principle to the country's amelioration of this health problem which is on increase in many low income and middle income countries.

5.5 Conclusion

Taxi service enhances development in the country and is a source of employment to the drivers which together better several individuals' lives and communities. Regrettably such achievements present with enduring risk to loss of lives that to the drivers who fall victims of accident incidents; the risk is fired up by their respective lived life experiences. The results of the current study denote, when the driver's life world- a composition of harsh realities of life intertwine with work hassles, these extend beyond the length and breadth of resilience reserves; that is individual driver factors, driver community factors and social/cultural factors affect each other which together erupt into road accidents and occasionally scape-goating the road. Categorically such factors include; age, formal education, driving training, driver-work stress, driver health status, domestic concerns, significant others, competitive driving / worse-worse, other road users, Impulsive pick and drop-off of passengers, theft, state of the road, state of vehicle among others. Ultimately I trust that results of this study are a benchmark and a ground breaking of understanding how psychosocial factors contribute to road traffic accidents among taxi drivers in Uganda.

REFERENCES

- Aberg, L. & Rimmo, P. A., (1998). Dimensions of aberrant driver behaviour. *Ergonomics*, 41, 39–56.
- Admasu, B., (2001). The Pattern of Road Transport in Adama: with Emphasis on Congestion and Traffic Accidents. A.A.U. (Thesis M.A. in Geography), Addis Ababa.
- Afukaar, F. K. (2003). Speed control in developing countries: Issues, challenges and opportunities in reducing road traffic injuries. *Injury Control and Safety Promotion*, Vol. 10, Issue 1-2, pp. 77-81. Afukaar, F. K., et al., (2008). Road traffic crashes in Ghana. In *Statistics 2007*.
- Ajzen, I. & Madden, T. J. (1986). Prediction of goal-directed behaviour: Attitudes, intentions and perceived behavioural control. *Journal of Experimental Social Psychology*, 22, 453-474.
- Ajzen, I., (1991). The theory of planned behaviour. *Organizational behaviour and human decision processes*, 50, 179-211.
- Ajzen, I., & Fishbein M. (2000). Attitudes and the attitude-behaviour relation: Reasoned and automatic processes. *European Review of Social Psychology*, 11, 1–33.
- Asogwa, S.E., (1992). Road Traffic Accidents in Nigeria: A review and a reappraisal: *Accidental Analysis and Prevention*, Vol: 24, No:2, pp.149-155.
- Beede, K. E. & Kass, S. J., (2006). Engrossed in conversation: the impact of cell phones on simulated driving performance. *Accident Analysis and Prevention*. 38(2), pp.415–421.

- Bener, A.&Jadaan, K.S., (1992). A perspective on road fatalities in Jeddah , Saudi Arabia, *Accidental Analysis and Prevention* , Vol:24, No:2, pp:143-148 .
- Bingham, C. R., Raghunathan, T., Shope, J. T. & Patil, S. M., (2006). The role of personality characteristics in young adult driving. *Traffic Injury Prevention*, 7 (4), pp. 328-334.
- Bishai D., Asiimwe B., Abbas S., (2008). Cost-effectiveness of traffic enforcement: case study from Uganda. Retrieved from <http://injuryprevention.com/>
- Blanchard, E.B., Hickling, E.J., Taylor, A.E., & Loos, W., (1995). Psychiatric morbidity associated with motor vehicle accidents. *Journal of Nervous and Mental Diseases*, 183, 495-504.
- Blander, J., West, R., and French, D. (1993). Behavioral Correlates of Individual Differences in Road-Traffic Crash Risk: An Examination of Methods and Findings. *Psychological Bulletin* . Vol. 113. No. 2, 279-294.
- Blockley, P. N. & Hartley, L. R. (1995). Aberrant driving behaviour. Errors and violations. *Ergonomics*, 38, pp. 1759-1771.
- Bogdan, R. C & Biklen, S. K. (2003). *Qualitative Research for Education: An introduction to Theories and. Methods* (4th ed.)
- Brown, S., & Bohnert, P. (1968). *Alcohol safety study: Drivers who die*. Waco, TX: Baylor University College of medicine.
- Brown, I. D., (1994). Driver fatigue. *Human Factors*, 36, pp. 298-314.

- 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.
- Bulmer, M. (2001). The ethics of social research. In N. Gilbert, (ed.) *Researching Social Life* London: Sage.
- Cantor, C. H., (2000). In Gordon, H., (2004). Psychiatry, the law and death on the roads. *Advances in Psychiatric Treatment*. Vol., 10, 439–445
- Carcary, W.B., Power, K.G., & Murray, F.A. (2001). The New Driver Project: Changing driving beliefs, attitudes and self-reported driving behaviour amongst young drivers through classroom-based pre- and post-driving test interventions. Scottish Executive Central Research Unit: Edinburgh, Scotland.
- Carsten, Q M. J., Tight, M. R., Southwell, M. T, & Plows, B. (1989). *Urban accidents: Why do they happen?* Basingstoke, England: Automobile Association Foundation for Road Safety Research.
- Charbotel, B., Chiron, M., Martin, J. L., & Bergeret, A. (2001). Work-related road crashes in France. *European Journal of Epidemiology*, 17(8), 773–778.
- Chen, L., Baker, S. P., Braver, E. R., & Li, G. (2000). Caring passengers as a risk factor for crashes fatal to 16 and 17/year old drivers. *Journal of Am. Med. Association*, 283 (12), pp. 1578-1582.
- Cremona, A., (1986). Mad drivers: psychiatric illness and driving performance. *British Journal of Hospital Medicine*, 35, 193–195

- Creswell, J. W., (1998). In Glesne, C., (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston, MA: Pearson.
- Daff, R., Cramphorn, B., Wilson, C. J., Neyan, J. (1991). *Pedestrian behaviour near signalized crossings (Sydney)*. Proceedings 16th ARRB Conference, part 4. Daily monitor , (2011). <http://allafrica.com/stories/201109070233.html>
- Donald, E. P., (2008). Qualitative interviewing as a moral enterprise. In N. Klaus, B. Svend, E. Claus, T. Lene, M. Peter, & K. Gerda, (Eds.), *A qualitative Stance: In memory of Steinar Kvale, 1938 – 2008*, (pp.189-202) . USA, Aarhus University Press.
- Douglas, (1986). *Risk acceptability according to the social sciences*. London: Routledge and Kegan Paul.
- Duxbury, L., & Higgins, C. (2001). *Work-life balance in the new millennium: Where are we? Where do we need to go?* Retrieved on March from: www.cprn.org/en/doc.cfm?doc=52
- Eatough, V., & Smith, J. A., (2006). In Lyons, E. & Coyle, A. (2007). *Analysing Qualitative data in psychology*. (Ed), London; Sage publications.
- Ehlers, A., Mayou R.A., & Bryant, B., (1998). Psychological predictors of chronic posttraumatic stress disorder after motor vehicle accidents. *Journal of Abnormal Psychology, 107*, 508-519.
- Elliott, M.A., & Sexton, B., (2003). Motorcyclists behaviour and accidents. Retrieved from <https://www.gov.uk/government/organisations/department-for-transport>

- Evans, L., (1990). The fraction of traffic fatalities attributable to alcohol. *Accident Analysis and Prevention*, 22, 587-602.
- Evans, D., & Norman, p., (1998). Understanding pedestrians' road crossing decisions: an application of the theory of planned behaviour.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behaviour: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., Ajzen, I. (1980). *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- French, J. R. P., Jr., Rodgers, and Cobb. S., (1974). Adjustment as person-environment fit pp.316-33in James, M.L., James, S.H., & French, J. R.P. Jr., (1980). Social support, occupational stress and health. *Journal of health and health behaviour*, vol, 21: pp, 202 218.
- Frone, M.R., Yardley, J.K. and Markle, K.S. (1997) 'Developing and testing an integrative model of work–family interface', *Journal of Vocational Behavior* 50: 145–67.
- Frone, M.R. (2002) 'Work–family balance', in J.C. Quick and L.E. Tetrick (eds) *Handbook of occupational health psychology*. Washington, DC: APA Press.
- Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston, MA Pearson.
- Gordon , C. & Hunt, M. (1998). The theory of planned behaviour applied to speeding, drink driving and seat-belt wearing. Paper presented at the road safety research, policing, education conference, wellington, New Zealand.

- Green , L. & Kreuter. M., (2005). *Health Promotion Planning: An Educational and Ecological Approach* (4 th Ed.). Mountain View , CA : Mayfield Publishers.
- Greenhaus, J.H. and Parasuraman, S. (1999) ‘Research on work, family, and gender’, in G.N. Powell (ed.) *Handbook of gender and work*. Thousand Oaks, CA: Sage.
- Gregory, I. (2003) *Ethics in Research*. London: Continuum.
- Haddon, W Jr. (1980). Advances in the epidemiology of injuries as a basis for public policy. *Public Health Rep* 95 (5), pp. 411–21.
- Hollnagel, E., (2004). *Barriers and accident prevention*. Ashgate publishing Ltd.
- Hardeman, W., Johnston, M., Johnston, D.W., Bonetti, B., Wareham, N.J. and Kinmonth, A.L., (2002). Application of the Theory of Planned Behaviour in behaviour change interventions: a systematic review. *Psychology and Health*, 17, 123–158.
- Hargarten, J.W., (2002). Principles of the Disease of Injury. Rosen's Emergency Medicine. J.A. Marx. St. Louis, Missouri, Mosby Inc. 1:821-828.
<http://genderandhealth.ca/en/modules/trauma/trauma-historical-perspective-01.jsp>
- Harris, M. (2000) Psychiatric conditions with relevance to fitness to drive. *Advances in Psychiatric Treatment*, 6, 261–269.
- Harry, H. & Michael, M. (1999). Psychosocial factors in the aetiology and prognosis of coronary heart disease: systematic review of prospective cohort studies. *BMJ*
- Hogg, M.A., & Dominic, A., (1988). *Social identifications: A psychology of intergroup relations and group processes*. London: Routledge.

- Hogg, M.A., Deborah J.T. & Katherine, M.W., (1995). "A tale of two theories: a critical comparison of identity theory with social identity theory." *Social psychology quarterly* 58:255-69.
- Howitt, D., (2010). *Introduction to qualitative methods in psychology*. Pearson education limited. Edinburgh gate, London.
- Ingham & Rolls,(1991). Passenger effects—Theoretical and methodological issues. In, *Papers presented at the International Conference on Traffic Safety*, January 1991, New Dehli.
- Iversen, H., & Rundmo, T. (2002). Personality, risky driving and accident involvement among Norwegian drivers. *Personality and Individual Differences*, 33, pp. 1251–1263.
- Jaramogi, P., (2012). In Daily Monitor newspaper publication, *five killed in Kampala-Masaka road accident*. Published on 23rd January 2012.
- Karasek and Theorell,1990) Karasek, R. A., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York, NY: Basic Books, Inc.).
- Karlaftis, M. G. & Golias, I. (2002). Effects of road geometry and traffic volumes on rural roadway accident rates. *Accident Analysis and Prevention*, 34, pp. 357–365.
- Kass, S. J., Cole, K. S. & Stanny, C. J. (2007). Effects of distraction and experience on situation awareness and simulated driving. *Transportation Research Part F:Traffic Psychology Behaviour*, 10 (4), pp. 321–329.

- Kitayama, S., Duffy, S., & Uchida, Y., (2007). Self as a cultural mode of being. In S. Kitayama & D. Cohen (Eds.). *Handbook of cultural psychology*, (pp.136-174). New York: The Guilford press.
- Knowles, J., (2003). *Accident Involvement of Stolen Cars in 1997 and 1998*. TRL Report 577. Crowthorne: Transport Research Laboratory
- Kolowski, S. J. & Rossiter, J. (2000) Driving in Somerset. *Psychiatric Bulletin*, 24, 304–306.
- Kvale, S. (1996) *Interviews: An introduction to Qualitative Research Interviewing*. Thousand Oaks, CA: Sage
- Kvale, S. & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing*. Thousand oaks' California, Sage publications.
- Lajunen, T., (2001;). Personality and accident liability: are extraversion, neuroticism and psychoticism related to traffic and occupational fatalities? *Personality and Individual Differences*. Volume 31, (8),1365–1373.
- Licoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. New bury Park, CA: Sage.
- Lund, I.O., & Rundmo, T. (2009). Cross-cultural comparisons of traffic safety, risk perception, attitudes and behaviour. *Safety Science*, 47, pp. 547-553.
- Lyons, E. & Coyle, A. (2007). *Analysing Qualitative data in psychology*. (Ed), London; Sage publications.
- Marottoli, R. A., Cooney, L. M., Wagner, R., *et al* (1994) Predictors of automobile crashes and moving violations among elderly drivers. *Annals of Internal Medicine*, 121, 842–846.

- Matthews, G., Tsuda, A., Xin, G., & Ozeki, Y., (1999). Individual differences in driver stress vulnerability in a Japanese sample. *Ergonomics*, 42(3), 401–415.
- McCall, George & Simmons, J.L., (1978). *Identities and interaction*. New York . Free Press.
- McGoldrick, A.E. (1990) "Stress and the bus driver in the UK transport industry", in *Work and Stress*. Vol. 4, No. 1.
- McKenna, P. (1998) Fitness to drive: A neuropsychological perspective. *Journal of Mental Health*, 7, 9–18.
- McKenna, F. P., Waylen, A. E., Burkes, M. E. (1998). Male and female drivers: How different are they? The University of Reading, AA Foundation for road Safety Research. Berkshire, United Kingdom.
- Mebrahtu, B., (2002). *Taxi traffic accidents in Addis Ababa: Causes, temporal and spatial variations, and consequences (Master's thesis)*. Available from <http://www.academia.edu/1141140/>
- Ministry of works and Transport, (2012). Road safety in Uganda.
- Mitchell, M., (1997). Death and injury on the road. In Mitchell. M (Eds), *The Aftermath of Road Accidents: Psychological, social and legal consequences of an everyday trauma* (P4). London: Routledge.
- Mizell, L., Joint, M. & Connell, D. (1987). *Aggressive driving: three studies*. Washington. A Foundation for Traffic safety.

- Morgan & Krueger, (1997). In Nelson and Prilleltensky. *Community psychology: In pursuit of liberation and well-being*. New York, Palgrave Macmillan.
- Moustakas, C.E., (1994). *Phenomenological research Methods*. Sage Publications, U. S.A.
- Murray, A., (1998). The home and school background of young drivers involved in traffic
- National Environment Management Authority (NEMA), (2006/07), *State of Environment Report for Uganda*, Kampala.
- National statistics, (2011). Reported Road Casualties in Great Britain: 2010 Annual Report. Retrieved from <http://www.dft.gov.uk/publications/strategic-framework-for-road-safety/> on 27th/3/2012
- National Transport Data Base (NTDB) (2000). In Leyland J., et al. Road safety activities in a road maintenance project: The case of the western Uganda road maintainance capacity building. Retrieved from <http://ntl.bts.gov/lib/12000/12100/12140/>
- Nelson, G., & Prilleltensky, I., (2005). *Community psychology: In pursuit of liberation and well-being*. New York, Palgrave Macmillan.
- Newnam, S., Watson, B., and Murry, W., (2004). Factors predicting intentions to speed in work and personal vehicle. *Transportation research part F*, 7(4-5) 287-300.
- Nordfjærn, T., (2011, p.188). Risk judgements, attitudes and behaviour in transport: Temporal geographical and cultural differences (Doctoral thesis, Norwegian university of science and technology, Trondheim Norway).

- Norris, F.H., Matthews, B.A., & Riad, J.K. (2000). Characterological, situational, and behavioural risk factors for motor vehicle accidents; a prospective study. *Accident Analysis and Prevention*, 32, 505-15.
- Odero, W., Garner, P., & Zwi, A., (1997). Road traffic injuries in developing countries: a comprehensive review of epidemiological studies. Retrieved April 10, 2010 from <http://www.bvsde.paho.org/bvsacd/cd53/road.pdf> .
- O'leary, Z., (2010). *The Essential guide to doing your research project*. Sage publications limited, London.
- Oliver, P., (2003). *The Student's Guide to Research Ethics*. Maidenhead: Open University Press .
- Parker, D., Manstead, A.,& Stradling, S.G., Reason, J.T., & Bexter, J., (1992). Intension to commit driving violations: an application of the theory of planned behaviour. *Journal of applied psychology*. 77(1), 94-101.
- Parker, D., Lajunen, T. & Summala, H., (2002). Anger and aggression among drivers in three European countries. *Accident Analysis and Prevention*, 34, 229–235.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage
- Planning unit, Masaka (2003). In Masaka District State of Environment Report, 2004
- Tanzarn. N., (2003). Intergrating gender into World Bank financed transport program. Road sector program support (RSPS).

- Peltzer, K. (2008) Road 'kill' factor. Road use behaviour in Africa. In Porter, B.E. (Ed.), *Traffic and transportation psychology*. Amsterdam: Elsevier Retrieved, April 1, 2010 from http://www.hsrc.ac.za/HSRC_Review_Article-131.phtml.
- Peter J. Legree, Tonia S. H., Psotka, J. and Daniel E. M., Gina J. Medsker, (2003). Traffic Crash Involvement: Experiential Driving Knowledge and Stressful Contextual Antecedents. *Journal of Applied Psychology*, Vol. 88, pp 15–26.
- Quine , L, Rutter, D.R, and Anorld, L., (1998). Predicting and understanding the safety of helmet use among school boy cyclists: A comparison of the theory of planned behaviour and the health belief model. *Psychology and health*, 13, 251-259.
- Redeimer & Tibshirani, (1997). In Teye-kwadjo, (2010). Risk perception, traffic attitudes and behaviour among pedestrians and commercial minibus drivers in Ghana: a case study of Manya Krobo district (Master thesis), Norwegian university of and technology, Trondheim Norway.
- Riley, A., & Peter, J.B., (1995). "Identities and self –verification in the small group." *Social psychology quarterly* 58:61-73.
- Richter, E.D. (1991). Fewer injuries but more deaths from road accidents during the Persian Gulf war. *Israeli Journal of Medical Science*, 27, 631-5.
- Robert. E, Constance T. F, David. L. R. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology* 38, 215-229.

- Rundmo, T. & Iversen, H. (2004). Risk perception and driving behaviour among adolescents in two Norwegian counties before and after a traffic safety campaign. *Safety Science*, 42, pp. 1-21.
- Rolls & Ingham, (1991). Passenger effects—Theoretical and methodological issues. In, *Papers presented at the International Conference on Traffic Safety*, January 1991, New Dehli.
- S. Bataaliwo (2012). Taxi expense. Uganda: WBS television, retrieved from *taxi driver expense uganda* http://www.youtube.com/watch?v=_mMaeatnXGQ
- Selzer, M. L., & Vinokur, A. (1974). Life events, subjective stress and traffic accidents. *American Journal of Psychiatry*, 13, 903-906
- Schram. R., (1968). The curse of the road. *East African Medical Journal* 45, pp358–363.
- Silverstone, T., (1988). The influence of psychiatric disease and its treatment in driving performance. *International Clinical Psychopharmacology*, (3) 59–66.
- Simsekoglu, Ö., & Lajunen, T., (2008). A comparison of seat belt use between work time and free time driving among Turkish taxi drivers. In: *Driver Behaviour and Training: Volume III*. Dorn, L. (ed.). Aldershot: Ashgate, p. 215-226. 12 p. (Human factors in road and rail transport).
- Sluiter, J. K., van der Beek, A. J., & Frings-Dresen, M. H. W. (1999). The influence of work characteristics on the need for recovery and experienced health: A study on coach drivers. *Ergonomics*, 42(4), 573-583.)

- Smith, et al., (1995). In E. Lyons & A. Coyle (Ed.), *Analysing qualitative data in psychology* (pp. 132 - 144). Oliver's Yard: Sage publication.
- Smith, J. A. (2008). *Qualitative psychology: A practical guide to research methods* (2nd edition). Sage publications Ltd, 1 Oliver's Yard, 55 City Road, London, EC1Y 1SP.
- Smith, A., Flowers, P., & Larkin, M., (2009). *Interpretive phenomenological analysis: Theory, Method and Research*. Sage publication limited, London.
- Stets, J., & Burke, P., (1996). "Gender, control, and interaction." *Social psychology Quarterly* 59:193-220.
- Stets, J. E. (1997). "Status and identity in marital interaction". *Social psychology quarterly* 60:185-217.
- Stets, J., & Burke, P., (2000). Identity theory and social identity theory. *Social psychology Quarterly*, Vol. 63, No.3, 2224-237.
- Taylor, A.H., & Dorn, L., (2006). Stress, fatigue, health, and risk of road traffic accidents among professional drivers: the contribution of physical inactivity. *Annual Review of Public Health*. Vol. 27: 371-391
- Tanzarn, N., (2003). Integrating gender into world bank financed transport programs: case study, Uganda. Road sector programme support (RSPS). Retrieved from <http://www4.worldbank.org/afr/ssatp/Resources/HTML/Gender-RG/Sourc>
- Teye-kwadjo, E., (2010). Risk perception, traffic attitudes and behaviour among pedestrians and commercial minibuss drivers in Ghana: a case study of Manya Krobo district (Master thesis), Norwegian university of and technology, Trondheim Norway.

- Turner, John C., Hogg, Michael. A., Oakes, Penelope, A., Reicher, Stephen, D., Wetherell, (1987). *Rediscovering the social group: A social categorization theory*. New York. Basil Blackwell.
- Yasar, E. (2007). Sociological study on the course of the traffic system and the traffic accidents. *International Journal of Human Sciences*, vol,4.
- Yagil, D., (2000). Beliefs, motives, and situational factors related to pedestrians' self reported signal-controlled crossings. *Transportation research part F* 3(1), 1-13.
- Young, D., Peck, R. & Helander, C. (1997). Estimating the exposure and fatal crash rates of suspended/revoked and unlicensed drivers in California. *Accident Analysis and Prevention*, 29, 17–23.
- Yin, R. K., (2011). *Qualitative research from start to finish*. Guilford press, New York.
- Uganda Bureau of Statics (2012). Projected population 2012.
- Uganda crime report, (2010). Annual crime and traffic/ road safety report - 2010. Retrieved [http://www.upf.go.ug/Reports/Annual%20Report%202010%20Final%20\(Launch\).pdf](http://www.upf.go.ug/Reports/Annual%20Report%202010%20Final%20(Launch).pdf) on 31/3/2012
- Uganda National Road Authority (UNRA)., (2012). The state of Uganda roads. 1st Parag. Retrieved from <http://urssiuganda.webs.com/thestateofroads.htm>.
- Waylen, A. E., McKenna, F. P. (2008). Risky attitudes towards road use in pre-drivers. *Accident Analysis and Prevention*, 40, pp. 905-911.
- Wertz, F.J., Charmz, K., McMullen, L.M., Josselson, R., Anderson, R., and McSpadden, E., (2011). *Five Ways of Doing Qualitative Analysis: Phenomenological Psychology*,

Grounded Theory, Discourse Analysis, Narrative Research, and Intuitive Inquiry.
New York Guilford Press, 72 spring street.

Wieczorek, W.F. (1995). *DWI offenders and alcohol-related crashes*. Retrieved from
<http://www.druglibrary.org/schaffer/Misc/driving/s9p3.htm>

Willig, C., (2008). *Introducing qualitative research in psychology: adventures in theory and method*. Open University press, England.)

World bank, (2011). Sub-Saharan Africa Transport Policy Program-SSATP annual meeting
2010. Retrieved from www.worldbank.org/afr/ssatp on 1st/4/2012

World Health Organisation, and World Bank (2004). World report on road traffic injury and
prevention.

WHO, (2009). Global status report on road safety. Retrieved from
http://www.who.int/violence_injury_prevention/road_safety_status/2009/en/index.html
on 19th/03/2012

WHO, (2012). Global Plan for the Decade of Action for Road Safety 2011-2020 Retrieved
from http://www.who.int/roadsafety/decade_of_action/plan/en/index.html on 29th
/03/2012.

Zuckerman, M., (1994). *Behavioural expressions and biosocial bases of sensation seeking*.
New York. Cambridge press.

APPENDICES

APPENDIX I: LETTER OF ETHICAL CLEARANCE FROM NSD

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES



Harald Hårfagres gate 29
N-5007 Bergen
Norway
Tel: +47-55 58 21 17
Fax: +47-55 58 96 50
nsd@nsd.uib.no
www.nsd.uib.no
Org.nr. 985 321 884

Berit Overå Johannesen
Psykologisk institutt
NTNU
Dragvoll
7491 TRONDHEIM

Vår dato: 14.06.2010

Vår ref: 24491 / 2 / RKH

Deres dato:

Deres ref:

KVITTERING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 30.05.2010. Meldingen gjelder prosjektet:

24491

Traffic Safety: A Psychosocial Explanation of Causes of Road Traffic Accidents in Uganda
NTNU, ved institusjonens overste leder
Berit Overå Johannesen
Hellen Nnajjuma

Behandlingsansvarlig
Daglig ansvarlig
Student

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, vedlagte prosjektvurdering - kommentarer samt personopplysningsloven/-helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/forsk_stud/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://www.nsd.uib.no/personvern/prosjektoversikt.jsp>.

Personvernombudet vil ved prosjektets avslutning, 31.08.2011, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen


Bjørn Henrichsen


Ragnhild Kise Haugland

Kontaktperson: Ragnhild Kise Haugland tlf: 55 58 83 34
Vedlegg: Prosjektvurdering
Kopi: Hellen Nnajjuma, Moholt Allé 4-23, 7050 TRONDHEIM

Avdelingskontorer / District Offices:
OSLO: NSD, Universitetet i Oslo, Postboks 1055 Blindern, 0316 Oslo. Tel: +47-22 85 52 11. nsd@uio.no
TRONDHEIM: NSD, Norges teknisk-naturvitenskapelige universitet, 7491 Trondheim. Tel: +47-73 59 19 07. kyrre.svarva@svt.ntnu.no
TROMSØ: NSD, SVF, Universitetet i Tromsø, 9037 Tromsø. Tel: +47-77 64 43 36. nsdmas@sv.uit.no

**APPENDIX II: INTRODUCTORY LETTER
INTRODUCTION OF MS. HELLEN NNAJJUMA FOR FIELD DATA
COLLECTION IN UGANDA.**

This letter serves to introduce to you **Hellen Nnjjuma** a student of MPhil. in Human Development at the Norwegian University of Science and Technology (NTNU), Trondheim, Norway.

As part of the course the student will do an independent research project under the supervision of senior staff. As traffic safety is an important area the following topic was chosen:

Traffic safety: road traffic accidents among taxi drivers in Uganda in the view of taxi drivers.

The study will employ interviews of taxi drivers, who have been involved in traffic accidents in order to learn more about their view on traffic safety and traffic accidents. The participation in the study is voluntary and the participant can withdraw during the study. The interviews will be tape recorded and transcribed. The data will be anonymous as name and specific characteristics will be changed, so that it is not possible to recognize the individual informant. Only the student and the supervisor will have access to the data material, which will be destroyed after the project is finished.

In case of further questions please contact

Hellen Nnjjuma: TelephoneXXXX Mail XXXXXXXXXX

Your cooperation will be appreciated.

Sincerely,

Berit Johannesen, Supervisor

Associate professor, PhD

(Berit.Johannesen@SVT.NTNU.NO)

APPENDIX III: INFORMED CONSENT STATEMENT

RESEARCH TOPIC - Road Traffic Accidents in Uganda in view of Taxi Drivers in Masaka District.

I hereby invite you to take part in a research study about the possible causes of road accidents involving taxi drivers in Masaka district. This study is being conducted by Hellen Nnajjuma, a student of Mphil in Human Development at The Norwegian University of Science and Technology.

Purpose of Study

The main purpose of this study is to explore the role of personal factors, work related factors, and environmental factors in cases of traffic accidents involving taxi drivers in Masaka district. I hope to interview at least six taxi drivers aged between 25 and 50 years of age who have ever experienced road traffic accidents while driving.

Procedure

The procedure for this study will be interviewing. I will use an interview guide to collect demographic information at the start of the interview and the guide will also serve as a point of reference for follow up questions throughout the interview. The interviews will be audio-recorded, transcribed verbatim, and translated from Luganda into English. Throughout the interview you have the right not to answer any questions that you feel make you uncomfortable.

The findings of the study will help me complete my university academic program at NTNU. They will also provide useful insight needed to implement preventive strategies to road traffic accidents in Uganda. The project will be completed and the collected data will be anonymised by August 31st, 2011.

Confidentiality

The researcher will keep your information confidential. The interview tapes will have numbers and carry no names. After the tapes have been transcribed, they will be destroyed. It is voluntary to participate in the study and if you do not wish to be interviewed it will not have any consequences on you. You can also choose to withdraw from the interview at any

time you please without having to justify it and with no consequences. If you withdraw from the study your data will be destroyed upon your request.

Contact information

For further questions and clarity, you may contact the researcher, Hellen Nnajjuma.

Phone- 0772654441/ 0772303480 , [e-mail- nnajhel@yahoo.co.uk](mailto:nnajhel@yahoo.co.uk)

You can also contact my supervisor, Dr. Berit O. Johannesen at berit.johannesen@svt.ntnu.no

CONSENT TO PARTICIPATE

I have been informed of the interview study about the possible causes of road accidents and have been given a chance to ask questions. I consent to be interviewed.

Participant's name

Participant's signature

Date.....

APPENDIX IV: INTERVIEW GUIDE

Road Traffic Accidents in Uganda in view of Taxi Drivers in Masaka District.

This guide will mostly be used to collect demographic information at the start of the interview and after the researcher agreeing with the respondent on focus areas of the narrative, it will be a point of reference to fill important areas that may not have been addressed by the respondent in the narrative.

Section A. (Demographic information).

1. How old are you
2. What is your marital status?
3. What is your education level?
4. Did you receiving driving training? From where?
5. Which taxi stage do you operate from?
6. How many hours of the day do you work?
7. For how long have you served as a taxi driver?

Section B. (Driver personal factors)

8. How many accidents have you been involved in?
9. How serious/ fatal was the accident?
10. In your opinion what do you think could have caused that accident?
11. How would you describe yourself as a driver and as a person?
12. How was your life in the period of the accident(s)

Section C. (Work factors)

13. Are you the taxi owner or it is owned by your “Boss” (if so how many are they e.g from the real owner to the one whom you directly collaborate with)?
14. How is your relationship to your boss. What about to your fellow workers?
15. Can you describe an ordinary working day? (probe: park number, UTODA charges, other charges that may be involved)
16. How do you regularly get your customers/passengers?(probe: park, on the road, hire,)
17. How does your work relate with other family or community responsibilities?
18. How satisfied are you with your earning?

Section D. (Environment Factors)

19. On which road do you do your routine work? (probe: conditions- traffic hesitations, tarmac/ dusty, sharp corners etc)
20. Tell me about the condition of the vehicle, topography, or traffic daily capacity
21. Etc.

Debriefing and ending of the interview.